
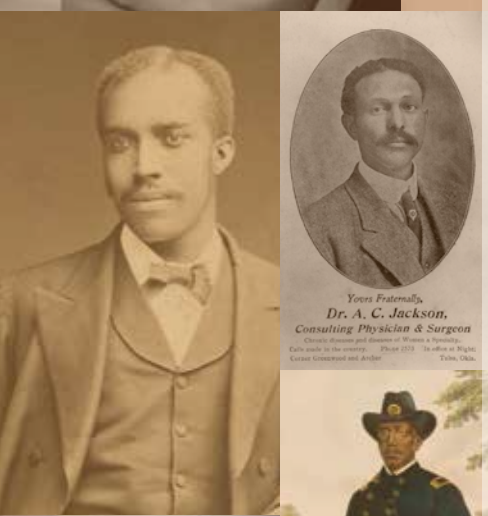

Black Surgeons and Surgery *in America*

Editor: Don K. Nakayama, MD, MBA, FACS

Principal contributors:

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Dedication

To Lucy, Betsey, Anarcha, and 11 other women unknown to history who endured, without anesthesia, J. Marion Sims' surgical attempts at operative closure of postpartum vaginal fistulas, to the benefit and relief of women of all races.

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Foreword

The story of Black surgeons and surgery in America parallels the historical arc of Black America, beginning with slavery to the present day. The Reverend Cotton Mather, credited with the introduction of inoculation against smallpox in colonial Boston, learned the technique from a man named Onesimus, whom he had enslaved. J. Marion Sims devised his successful surgical technique to close postpartum vaginal fistulae after years of human experimentation on enslaved women. Enslaved persons on plantations were "treated" by their owners because white physicians would not care for them, but only examined them to confirm they were fit for work.

Slavery and longstanding racial discrimination of free Black people lie at the root of the racial inequities in health care, which persist to this day. In nearly all instances, Black people were denied admission to hospitals through the end of the 19th century. When someone fell ill, they were cared for at home by other family members until they recovered or died. Remedies were obtained from outpatient infirmaries. Those who had no one to care for them were abandoned in sickrooms at almshouses, which became the first public hospitals.

There were few Black physicians in this era. The first with formal training, James Durham, was an enslaved person of the late 17th century whose owner, a Philadelphia physician, trained him to be his assistant. James McCune Smith was the first Black person with a formal medical school education, earning his baccalaureate and medical degrees in Glasgow in the 1830s.

David Jones Peck was the first Black resident to receive a medical degree from an American medical school, graduating from Rush Medical College in 1847. Like many of the first Black medical graduates, Peck was an active abolitionist and nationalist. The foremost physician proponent of Black nationalism was Martin Delany, who was educated in medicine by white abolitionist physicians in Pittsburgh. In 1851 he had the distinction of being among the first three Black students admitted to Harvard Medical School, only to be unjustly expelled weeks after classes started by a vote of the faculty that included such prominent names in American medical history as Henry Jacob Bigelow and Oliver Wendell Holmes.

The handful of Black people trained in medicine and surgery needed a place to practice, and the Black community needed a place to receive care. Daniel Hale Williams, the first Black Fellow of the American College of Surgeons, founded the first Black-owned hospital in the U.S., the Provident Hospital in Chicago, in 1891. It was followed by the Frederick Douglass Hospital in Philadelphia, established by Nathan Mossell in 1895. These hospitals were organized by physicians and community organizations throughout the country, from urban centers like Detroit to small towns in the South like the all-Black community of Mound Bayou in the Mississippi Delta because white institutions largely refused to care for these patients.

Large public hospitals for Black people were founded in Washington, D.C., where the Freedmen's Hospital (1865) arose from the Contraband Hospital in the rural northwestern sector of the district; Kansas City, where the City Hospital No. 2 (1919), a "hand-me-down" public hospital, was bequeathed to the city's Black community when a new facility was constructed for whites; and in St. Louis, where a new 700-bed public hospital was built by the city in part because of the extraordinary vision and civic leadership of its eponymous namesake, Homer G. Phillips (1937). The hospitals became important training sites for generations of Black physicians, among them LaSalle Leffall, Jr., who trained in St. Louis and later became the first Black president of the American College of Surgeons (2005–2006).

All of these hospitals, however, were chronically insolvent. Some received generous support from such notable philanthropists as Rockefeller, Rosenwald, and Duke, but none had a solid financial footing. The system of Black hospitals

and 15 medical schools for the education of Black physicians (of which only Howard and Meharry would survive the unevenly applied reforms instituted by the Flexner Report of 1910) created what historian Victoria Gamble described as a "poorly financed Black medical ghetto" where Black Americans were consigned to medical care that was, in the words of surgeon and civil rights leader Louis Wright, "separate but not equal."

Louis Wright, the second Black Fellow of the American College of Surgeons (1934) and first Black director of surgery at the Harlem Hospital (1941), was the longtime chair of the Board of Directors of the NAACP (1934). As the leader of the nation's foremost civil rights organization, he made discrimination in health care one of the organization's signal civil rights priorities, with full integration of the nation's hospitals and medical schools as its primary goal. The NAACP Legal Defense and Education Fund led by Thurgood Marshall won judgments against racial discrimination in public education (*Brown vs. Board of Education of Topeka*, 1954) and health care (*Simkins vs. Moses H. Cone Memorial Hospital*, 1963) that led to the passage of the 1964 Civil Rights Act and the 1965 Social Security Amendments (familiarly the Medicare Act) that made unconstitutional racial discrimination in all U.S. public institutions. In Chicago, in March 1966, reflecting this focus on racial discrimination in health care, Dr. Martin Luther King is quoted as having said, "Of all the forms of inequality, injustice in health care is the most shocking and inhumane."

If this were the best of all worlds, the tale would end there, America would have taken notice, and Black people would enjoy full access to hospitals, medical schools, and the full benefits of American health care. Epidemiological and public health data, however, tell a different story. Persistent disparities in health outcomes continue for Black America, with health indices that fall short of that of the rest of the country in nearly every parameter. Fundamental racial differences remain, based on social and economic realities that cannot be erased through judicial decisions and legislative acts.

How American surgeons respond to the challenge will determine whether we are worthy heirs to those who practiced medicine as enslaved people; struggled against institutionalized racism to earn medical degrees, sometimes leaving the US for the privilege; served as surgeons to the Union Army in the Civil War; practiced under the extreme strictures of Jim Crow, at great personal cost; voluntarily became targets as they lent their names to landmark civil rights cases during the hottest years of the movement; and devoted their lives to their patients despite the inflexible hardship of racial discrimination.

Throughout the history of Black America, there have been surgeons who have distinguished themselves as the highest example of their profession. Daniel Hale Williams founded the first Black hospital, was the first Black Fellow of the American College of Surgeons as a member of its founding membership and led the establishment of a network of Black hospitals in communities throughout the nation. Alexander Augusta was the first Black person commissioned as surgeon to the Union Army and was instrumental in the founding of the surgical section of the National Medical Association. Matilda Arabella Evans established a hospital and served the Black community of Columbia, SC, her entire life. Vivien Thomas, frustrated in his life's goal of becoming a physician because of his race and the economic realities of the Crash of 1929 and the Great Depression, devised surgical operations for the palliation of Tetralogy of Fallot and transposition of the great arteries that made his white colleagues at Vanderbilt and Johns Hopkins world famous.

Charles Drew was a leader in academic surgery as chair at Howard University, and an innovative leader outside of surgery as the director of the first blood banks of the American Red Cross, having developed techniques that allowed large scale blood banking. John Norman, Jr., collaborated in the development of mechanical left ventricular assist devices for heart failure, and Patricia Bath proved the concept of laser phacoemulsion for cataract surgery. Haile Debas, who served as chair, Dean, and Chancellor of the University of California,

San Francisco, was an exemplary surgeon-scientist, and was the first Black surgeon elected President of the American Surgical Association. These individuals contributed to medical science at the highest levels.

American surgery owes its moral compass in racial issues in the 20th and current century to extraordinary Black surgeon leaders who served as presidents of the American College of Surgeons: LaSalle Leffall, Claude Organ, and L.D. Britt. Others, Asa Yancey, Hughenna Gauntlett, and W. Lynn Weaver among them, continue to inspire with stories of having overcome profound adversity.

What risks being overlooked by landmark historical events and the lives and achievements of important figures in American surgery are the patients themselves. They faced centuries of health neglect, where the only health care many received was a cursory check to make sure they were fit to work in fields. Escaping to the industrial North in the Great Migration, Black people were subject to the infectious disease and poor hygiene of overcrowded slums. European immigrants left urban tenements to move into the American mainstream, leaving largely Black urban ghettos with inadequate health resources, served by large public hospitals where white medical and surgical trainees gained experience on black patients that was, in turn, applied in white communities and suburbs.

The Black patients who have suffered the consequences of generations of racial discrimination are exemplified by the story of the enslaved women used by J. Marion Sims to conduct his experiments in operative closure of vaginal fistulae. They withstood his procedures without anesthesia, bound by the hope of relief from a dreadful condition and a lack of agency over their own bodies. They had no choice but to submit to his procedures. It is through their sacrifice that Sims devised his breakthrough operation, a successful remedy that he took from rural Alabama to lucrative practices in New York and on the European continent. He left behind an untold number of enslaved women upon whom he would not perform his procedure, once perfected.

It is therefore appropriate that the present volume is dedicated to Lucy, Betsey, Anarcha, and eleven other women whose names are unknown to history who endured J. Marion Sims' surgical attempts at operative closure of postpartum fistulae, to the benefit and relief of women of all races.

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Preface

The current scholarship on racial disparities in health care studies the myriad of factors that create differential outcomes: biological differences in pathology and therapeutics; barriers to access to diagnostic and preventative services; and discriminatory social, economic, and political factors that are deleterious to the health of a given population. Surgeon-investigators have documented race-based disparities in access to surgical services and outcomes, such as renal transplants and heart surgery.

In 2020, J. Wayne Meredith, MD, FACS, President of the American College of Surgeons (ACS), made racial equity in surgical care a priority of the organization. A taskforce adopted a wide-ranging strategy that included the following priorities: to construct a racially just and inclusive environment and a culturally competent and diverse surgical workforce; to support public health research and initiatives into racial disparities; and to advocate for corrective action through legislative reform.

Among the aims was to document the history of Black surgeons and surgery in America. The goal was to give the general reader an introduction to the historical background of the issues that underlie the racial inequities in surgical care and the important personalities in the history of American surgery who addressed them. From the academic literature and sources within the College archives, there was enough material to begin a collection of articles that, when reorganized as chapters, would create a book of the events and surgeons that had a significant impact on the surgical care of Black Americans.

The first part of the book covers the country's history in three sections: slavery, Civil War, and Reconstruction; the Jim Crow era; and the civil rights movement of the mid-20th century. For each there is an introductory subsection of one to three chapters to provide historical context. For example, for the first section on surgery under slavery, Peter J. Kernahan wrote about Black medical practitioners from the colonial period through the Civil War, including the story of Onesimus, who taught the man who had enslaved him, the Puritan Reverend Cotton Mather of the Massachusetts Bay Colony, the technique of inoculation against smallpox sometime in the first decades of the 1700s, long before the Declaration of Independence. Vivian McAlister describes the important role of Canada as a refuge from slavery where Blacks could obtain a medical education and freely practice medicine.

Following the introductory chapters are short biographies that feature surgeons who figured prominently in that era. Choosing which to include was straightforward for such surgeons as Alexander T. Augusta, Daniel Hale Williams, and Louis T. Wright. Others were chosen because their lives reflect the time in which they lived. Examples include Martin Delany, whose Black nationalism was sparked by his unjust expulsion from Harvard Medical School as one of its first three Black medical students; Matilda Arabella Evans, who established hospitals in South Carolina under the strictures of Jim Crow; and the flamboyant Theodore Roosevelt Mason Howard, whose entrepreneurial opportunism initiated the first civil rights organization in the Mississippi Delta region and whose employee, Medgar Evers, would have a profound impact of American history. After the chapters on affirmative action, there is a profile of Levi Watkins, Jr., the great champion of recruitment of Black students into medical schools.

Each section ends with a vignette that provides insight into the period from a different perspective. The first section ends with a chapter on J. Marion Sims's experiments on the surgical closure of vaginal fistulas on enslaved women. The section on Jim Crow finishes with Rudolph Matas's studies on what he considered the unique pathology of Blacks that illustrates how the medical establishment supported concepts of racial inferiority. The section on the civil rights era ends with a final chapter on the Harlem assassination attempt on Martin Luther King, Jr. The story shows that one of the unexpected results of the "separate but equal" system of hospital care was that an inner-city public

facility like Harlem Hospital was uniquely capable of providing lifesaving surgery for the type of violent injury that nearly killed King.

The second part of the book has short biographies of other prominent surgeons of the 20th and current centuries. Its first section presents leaders in American surgery. There can be no argument about the inclusion of Charles Drew, LaSalle Leffall, Jr., Claude Organ, Jr., Asa Yancey, and L.D. Britt. Of the many Black surgeons who might have been included for their significant leadership in the field, Wayne A. I. Frederick was selected because of his position as president of Howard University, one of the most important educational institutions of the country's racial history. W. Lynn Weaver represented a generation of Black chairs of surgery with roots in the tumultuous era of integration in the post-Jim Crow South. Hughenna Gauntlett, the first Black woman to be certified by the American Board of Surgery, led by example and heralded the entry of Black women into the surgical mainstream.

The next section chooses the stories of Black surgeon-scientists, innovators, and trailblazers, though the list again only scratches the surface, given the achievements of the current generation of Black investigators. It begins with the iconic Vivien Thomas, the great innovator in cardiac surgery whose lifelong association with the department of surgery at Johns Hopkins became the stuff of Hollywood legend. John Norman (cardiac assist devices) and Patricia Bath (laser phacoemulsification for cataract surgery) would be included in any compendium. Andrea Hays's three-time failure to get a training position in pediatric surgery illustrates how racial bias continues to be a problem in the 21st century.

The closing section tells stories of Black and white colleagues working together to try to correct racial injustices, called *allyship* in the current lexicon. It includes stories of Louis Wright and Henry Cave working to integrate the ACS; Ira Ferguson, Sr., helping Asa Yancey strengthen residency training programs at the Tuskegee VA hospital and the Hughes Spaulding Pavilion; and Lynn Weaver and Martin Dalton getting the department of surgery at the Morehouse School of Medicine at Grady Hospital on its feet. Their partnerships exemplify the best of surgical professionalism and collegiality embodied by the ACS motto, "To serve all with skill and fidelity."

Educational opportunity is a refrain throughout the book. The parents of the profiled surgeons were often teachers (e.g., Wright, Drew, Norman, Watkins, Britt, Hayes). To give their children opportunity, they crossed the Mason-Dixon Line (Delany), escaped to Canada (the Buxton Mission School graduates), or moved to another community where the schools were better (Gauntlett, Frederick). They were products of segregated public schools in cities (Drew, Britt) and small towns (Kountz, Leffall, Organ) of the American South. The father of Nathan Mossell fought and for won the right for his children to attend previously all-white schools in upstate New York. L.D. Britt, MD, MPH, FACS, former president of the ACS, was unapologetic about his education in segregated public schools in Norfolk, VA.

> *And I don't regret it one day. The teachers were good, and they gave me a good foundation. The focus was on you doing well. There was no safety net, and so the way to do well is through education. And the teachers took a vested interest in you, almost like they were a second mother or uncle. … The emphasis was education, from the beginning of the day to the end of the day. And with my mother being a schoolteacher, my aunts and cousins being schoolteachers, I had a rich environment.*

The final section reflects on the persistent challenges of affirmative action and achieving racial balances in medical school classes, as well as racial disparities in health outcomes. Fundamental differences persist despite the legislative successes of the Civil Rights Act of 1964, the Social Security Amendments of 1965, and the half-century of administrative reforms that followed their passage.

For racial equity in medical education, this means reframing the qualifications of being selected for medical school and redefining the skills necessary

to practice medicine. For health disparities, public health scholarship has moved away from doctor-patient interactions and hospital-based care to the broader social, economic, and political factors that impact population health and manifest in differential outcomes of medical care. This expansion of scope may seem drastic and outside the traditional boundaries of the clinical practice of surgery. The ACS, however, has long recognized that the well-being of surgical patients is linked to the health of society. Committees and programs of the College address health policy, advocacy, volunteerism, and global surgery. Surgeons address the issues of racism, environmental degradation, and social inequity through the activities of the College and explore strategies for their amelioration to the benefit of surgical patients.

Racial inequities in health care are the legacy of four centuries of American racial history: slavery and the Southern plantation system; antebellum Black Codes; the Civil War, Reconstruction, and Jim Crow; the civil rights movement of the 20th century; and the Great Society and its aftermath. These pages describe how surgeons faced the daunting challenges of each era with heroism, sometimes at the cost of their lives. How the surgical community responds to racial issues of the current century is a test that will determine whether we are worthy to be their surgical descendants.

Don K. Nakayama
April 30, 2021

Acknowledgments

Patricia Turner, MD, MBA, FACS, Executive Director-Elect of the ACS, was Director of Member Services for the ACS when this project was first pitched to her in 2019. She supported the production of the book from its inception and provided financial support to secure reproduction rights for the photographs and figures used in the work. She arranged for its publication through the ACS Division of Integrated Communications. Patricia also gave the present editor the independence to organize the project, and he hopes the product is worthy of the trust given him.

L.D. Britt gave his encouragement to this project, an important endorsement that made the book even more meaningful. Similarly, Andrea Hayes, the editor's section chief and boss at the University of North Carolina at Chapel Hill, showed interest and allowed him time to devote to the book and clerical support to support its execution. She also contributed an article on Hughenna Gauntlett, the first Black woman certified by the American Board of Surgery. She wrote the article during her residency, and her coauthor was her program director, Claude Organ, MD, FACS. His name as a contributor to this book does it great honor.

Early on, Peter J. Kernahan volunteered his services to the book. That a historian of his stature and ability (he has a doctorate in history) chose to be involved was reassuring that the project had importance and validity. The quality of his scholarship will be immediately obvious. One of the editor's biggest problems was having the rest of the collection approach the quality of Peter's writing and research.

Eddie Cornwell trained under LaSalle Leffall and was mentored by Claude Organ, the leading Black surgeons of the late 20th century. Cornwell graciously allowed us to reprint his profiles of these giants of American surgery, both of which had been published elsewhere. He also contributed his biography of Asa Yancey, who is under-recognized for his contributions to surgery for Hirschsprung's disease, for his leadership in providing resident training for Black surgeons, and as a community leader in his home city of Atlanta. Eddie's respect and affection for these men comes through in his writing.

Meghan Kennedy, Archivist for the College, served as administrative and production coordinator for the book. She traced the entities that possessed reproduction rights and arranged for the necessary permissions and payment. She ferreted out where to get images of sufficient resolution for decent reproduction, including some that were difficult to obtain. We could not determine the provenance for many photos that therefore could not be used. Throughout, she maintained her typical "can-do" disposition that the present writer enjoyed during history-related projects and programs of the History and Archives Committee of the College, including the famous "field trip" to the Ether Dome.

Members of the History and Archives Committee of the ACS and its History of Surgery online community provided a chance to test some of the drafts of several of the chapters. Their positive responses, criticisms, and corrections provided important feedback and confirmed that the compendium was a worthwhile project to pursue.

Lastly, the writer wants to thank his wife, Natalie, who endured his rising at 4 a.m. to secure a couple of hours of all-important "protected time" each day to devote to writing and editing this book.

– D.K.N.

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Black Surgeons and Surgery *in America*

Surgery under Slavery

Pioneer Black Physicians from Colonial Times to the Civil War

Peter J. Kernahan, MD, PhD, FACS

This chapter examines the lives of some of the pioneering Black physicians in the United States, from the Colonial era to the Civil War. Not intended to be a comprehensive list, it concentrates on a few selected individuals who were among the first to break a barrier. Inspiring in their own right, the stories also demonstrate the deep roots of racism in the history of the medical profession and the nation. Consequently, the pioneers' professional as well as personal lives were intimately connected to the struggles of Black America for abolition and full citizenship.

As this book is a history of surgeons, we should also recognize that none of these antebellum physicians were "surgeons" in the modern sense. This does not diminish them. Before the 1870s, all American doctors were generalists—a source of professional pride. Full-time surgical specialists only begin to appear in the largest cities in the last decades of the 19th century.[1]

Any study of this period must also acknowledge the incompleteness of the historical record. For several individuals, the available primary sources are often fragmentary and contradictory. Any claims of priority need to be considered in this context and not become a diversion from the larger story.

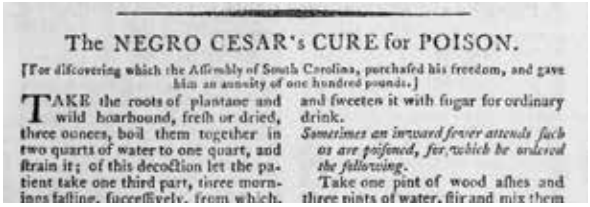
A Healing Tradition

Enslaved Africans brought their own medical traditions, which then became one of four broad healing traditions in North America. Joining the African tradition were those of the indigenous nations, European folk medicine, and European learned medicine.

This African knowledge was continued, adapted, and passed down from generation to generation.[2,3] It incorporated an intellectual framework for understanding health and disease, root and herbal treatments, conjuring, and midwifery. In fact, medical care on the plantations often began with self-treatment. A conjuring healer, for example, could reach those illnesses thought to be caused by enchantment or an evil spirit in a way that white medicine could not.[4] As historians Herbert Covey and Sandra Fett, among others, have argued, these healing practices also became acts of resistance on the part of the enslaved against the brutality of slavery.[2,5]

The two worlds of healing, Black and white, existed in parallel but could meet and transfer knowledge. On some plantations, a reliable healer could be given supervision of the health care of the enslaved, and trusted midwives saw to the care of both white and Black women.[4] Herbal remedies

occasionally came to the attention of regular physicians and entered the pharmacopeia. For example, a treatment for snakebite gained a healer known only as Caesar both emancipation and an annual pension of £100 from the South Carolina Assembly.[6] Published as "The Negro Caesar's Cure for Poison" in *Massachusetts Magazine* in 1792, it is the earliest known medical publication citing an African American (Figure 1).[7]



The NEGRO CESAR's CURE for POISON.

[For discovering which the Assembly of South Carolina, purchased his freedom, and gave him an annuity of one hundred pounds.]

TAKE the roots of plantane and wild hoarhound, fresh or dried, three ounces, boil them together in two quarts of water to one quart, and strain it; of this decoction let the patient take one third part, three mornings falling, successively, from which and sweeten it with sugar for ordinary drink.

Sometimes an inward fever attends such as are poisoned, for which be ordered the following.

Take one pint of wood ashes and three pints of water, stir and mix them

Figure 1

Inoculation is the most widely known example of knowledge transferred between healing traditions. When confronted with the highly feared and endemic yaws, plantation owners deferred to African medical authority and allowed unsupervised treatment, including inoculation.[8] Sometime between 1706 and 1716, the Reverend Cotton Mather learned of smallpox inoculation from Onesimus, an enslaved West African. When smallpox came to Boston in 1721, a vitriolic debate over the practice of inoculation began between Mather and Dr. William Douglass, the colony's only European-educated physician. Significantly, both incorporated African medical testimony into their arguments—Mather accepting it at face value, Douglass questioning its reliability and safety.[8]

Pioneer Practitioners in the Colonial Era and Early Republic

Medical education was informal in the colonial period and well into the 19th century. Most physicians trained through apprenticeship or preceptorship, perhaps followed by two terms of lectures at a medical school. Medical licensure, where it had been present, largely lapsed in the Jacksonian era (c. 1820–1840). Even before that, licensure only identified the physician as such—there were rarely restrictions on any individual practicing medicine. Restrictive licensing would be introduced state by state and progressively tighten from the 1870s to the 1920s. A series of reforms in medical education over the same period (epitomized by the Flexner Report), in conjunction with licensing, created the medical profession as we understand it today.

Primus: A New England practitioner (Late 18th Century)

That enslaved persons assisted their masters in their trade or profession is well-established. Doctors and their assistants were no exception, and a few names have survived in the historical record.[3,9] For example, a man known only as Primus, enslaved to Dr. Alexander Wolcott of Windsor, CT, acted as both bodyguard and assistant, preparing medications and nursing patients. Subsequently emancipated by Wolcott (some sources say upon Wolcott's death), Primus went on to develop a "considerable" practice in his county, with patients of both races.[10,11] Among a Black population of approximately 757,000 (698,000 enslaved; 59,000 free) at the time of the Revolution, there would have been many others with a local reputation for medical skill.

John Durham: The first trained physician (1762–unknown)

In New Holland, Lucas Santomee, a Dutch-trained physician, is known to have practiced in the 1660s.[12] Better documented is James Durham (also Derham or Deram), often considered the first African American to have been trained in and to practice orthodox medicine. He established a successful practice in New Orleans between 1783 and 1802. But for his interaction with Benjamin Rush, his life would probably have been lost to history. Even so, the paucity of evidence led one historian to conclude that "the story of James Derham [in New Orleans] is a myth."[13] Subsequent papers by Wynes and Plummer, from which this sketch is drawn, confirm earlier accounts of Durham's extraordinary career, although Wynes observes that some aspects may have become exaggerated over the years.[14,15]

Durham was born enslaved in Philadelphia in 1762. As a child he was taught to read and write before being transferred to a physician, Dr. John A. Kearsley, who trained him as an assistant. A Loyalist, Kearsley died in prison in 1776, and Durham soon became enslaved to George West, a surgeon in the British Army. West continued Durham's medical apprenticeship. After a regimental defeat by the Spanish at Pensacola in 1781, West sold Durham to Dr. Robert Dow of New Orleans, then under Spanish rule. By all accounts a relatively humane man, Dow made Durham his assistant and emancipated him two years later, becoming his professional patron. New Orleans was comparatively open to free people of color, and Durham's practice blossomed. By 1788, he reported an annual income of $3,000, a substantial sum at the time.

Established professionally, he visited Philadelphia that year and met Benjamin Rush. By his own account very impressed with the young man, Rush introduced him to the medical, academic, and abolitionist elite (they overlapped considerably). A public letter from Rush to fellow abolitionists in London provides the only contemporaneous description of Durham and his life. Introductions and letters like these were also part of an effort by abolitionists to refute claims of Black inferiority.[14] On Durham's return to New Orleans, the two began an intermittent correspondence that lasted until 1802. In 1789, Rush presented Durham's paper on a diphtheria outbreak to the College of Physicians.

Durham suffered a reversal of fortune in 1801 when the Spanish administration made a medical degree a requirement for practice. Durham (Deram in Spanish records) received a limited exemption allowing him to treat throat diseases, but he had already begun considering a move to Philadelphia. Unfortunately, at this point he disappears from the historical record, and his subsequent life and date of death are unknown. His story thus also serves as an example of the fragility and incompleteness of the historical record when we look beyond the lives of the powerful.

Antebellum Physicians (1820–1860)

Despite the many barriers, a number of African Americans obtained medical qualifications before the Civil War. Gaps in the historical record make a precise count difficult and beyond the scope of this chapter. Physician-historian Robert Slawson has positively identified twenty-three African Americans who graduated from medical school before the Civil War.[16] Several others were either denied a degree, did not complete medical school, or practiced without attending medical school. To these can be added 16 Americo-Liberians who also graduated from U.S. medical schools during the period.[17] The lives of all of those individuals, perhaps 50 or so in total, are remarkable. All came of age at a time of rising racial tension, bitter debates over slavery, and, even in the North, restrictions on the free Black population.[18] Unsurprisingly, all became involved, in one way or another, with abolition politics and the status of Blacks in American society.

James McCune Smith: The first medical school graduate (1813–1865)

In 1837, James McCune Smith became the first Black American to graduate from medical school (Figure 2). Refused admission in the United States because of his race, he attended the University of Glasgow, where he received a BA (1835), an MA (1836), and an MD (1837). In addition to building a successful medical practice, he became the leading Black intellectual of his time and, in Henry Louis Gates Jr.'s words, "the African American tradition's first man of letters."[19]

Despite extensive research, some of McCune Smith's family history is still incomplete.[20] Born in New York City in 1813, McCune Smith was the son of, in his own description, a "self-emancipated bond-woman" originally from Charleston, SC. Even less is known about his father. Although McCune Smith described him as a New York merchant on his admission to university, some writers speculate that his father may have been his mother's master.[19] Existing records provide no information, and McCune Smith perhaps never knew his father.[20] If legally enslaved at birth, McCune Smith became

Figure 2

free with the enactment of New York State's Emancipation Act on July 4, 1827.

As a child, McCune Smith attended the African Free School No. 2. Founded by abolitionists, the school produced a number of distinguished graduates, including the famous Shakespearean actor Ira Aldridge. At age 11, McCune Smith delivered a speech on abolition to the visiting Marquis de Lafayette. This marked a precocious start to a literary as well as medical career. During his teens, he continued his education while apprenticing as a blacksmith, with tools in one hand and a Latin grammar in the other, according to a contemporary.[21] A gifted linguist, he became fluent in Greek, Latin, and French and proficient in German, Spanish, Italian, and Hebrew.[19]

Denied admission to Columbia and Geneva (New York) medical colleges because of his race, with the help of Black leaders in New York City, he was able to attend Glasgow University, where he would graduate "at or near the top" of his classes.[19] After graduation he spent a few months in Paris, then the leading medical center in Europe. Returning to New York City as something of a celebrity, he developed a successful medical practice treating patients of both races.[21] McCune Smith became the first Black American to publish in a medical journal.

But it was as an innovative writer, editor, and radical abolitionist that he fully made his name. He used his pen along with his medical and statistical training to refute claims of Black inferiority, phrenology, and homeopathy, becoming an important contributor to the American anthropological literature.[22] According to one historian, "refuting racially biased statistics was his passion."[21] Senator John C. Calhoun, a leading apologist for slavery, was one target.[9] Because of his scientific reputation, McCune Smith became the first African American to be invited to join the prestigious American Geographical Society. The less broad-minded New York Academy of Medicine denied him admission, despite the support of two eminent white physicians.[23]

From the 1840s until his death, McCune Smith fought vigorously by word and political action for abolition and as an advocate of universal male and female suffrage.[24–26] Frederick Douglass, in fact, lauded McCune Smith as having been his strongest Black supporter as he began his own work.[27] McCune Smith did all this while continuing an active medical practice. The toll must have been immense, and he died of congestive heart failure in 1865, at age 52. Prominent in his lifetime, he was soon largely lost to public memory.[19,28] Only in the last few decades has his reputation been restored by historians of race, medicine, and literature. Reflecting this, in 2018 the New York Academy of Medicine awarded McCune Smith a posthumous fellowship, and in 2021 his alma mater, the University of Glasgow, opened the £90 million James McCune Smith Learning Hub.[29,30]

John Brown and Samuel Ford McGill: First in U.S. medical schools

Paradoxically, many of the first Black Americans to obtain a formal medical education were sponsored by white philanthropists who hoped to see their beneficiaries leave the United States. Notable among this group of Black Americans are John Brown, the first to attend a U.S. medical school; Samuel Ford McGill, the first to graduate from a U.S. medical school; and David Kearney McDonogh, credited as America's first Black eye specialist. Support came either through the American Colonization Society (AColS) and state colonization societies or, in McDonogh's case, from a wealthy individual. The societies sponsored at least 16 students between 1828 and 1860,[17] a significant proportion of all Black medical students in the period. The students' experiences reflected the tension between paternalistic white philanthropy, racism, controversial colonization schemes, and Black self-determination.

Founded in 1816, the AColS and its state subsidiaries accommodated a broad range of white interests and motives, united by a belief in gradual emancipation and concomitant emigration.[31] In 1821, the AColS established the colony of Liberia. Several state colonization societies also established their own colonies in the same region. One of the

practices of the societies was to educate promising individuals who would go to Liberia as teachers, missionaries, and physicians. By the Civil War, approximately 11,000 African Americans had emigrated, half of whom were emancipated slaves.

The death rate was staggering. Approximately half of the settlers who emigrated between 1821 and 1843 died, usually within the first year.[31] The toll included four of the white physicians sent to the colony between 1827 and 1829.[17] Their deaths convinced the AColS to sponsor the training of Black physicians in the belief, despite all evidence to the contrary, that Black Americans would be more resistant to African diseases.[17,32]

John Brown: The first to attend a U.S. medical school (1803–1840)

One of those students, John Brown, although often overlooked, became the first Black American to attend a regular medical school. Brown was born free in Connecticut and, after private tutoring with a clergyman while a servant to another family, moved to New York in 1824. There he studied medicine under two preceptors and attended lectures at the College of Physicians and Surgeons, as was the custom of the time. Sponsored by the AColS and formally admitted to the college, he attended classes from 1829–1832 and applied for a medical degree in 1832.[32]

By this time, Brown had decided not to settle in Liberia. The new president of the college held a deep belief in Black inferiority and adamantly opposed granting a degree to any Black student who did not pledge to go immediately to Liberia.[32] Brown, like others at the time, could still be recognized as a doctor without a degree. But, unable to establish a successful practice, he spent most of his career as a school teacher.[33]

Samuel Ford McGill: The first Black graduate of a U.S. medical school (1815–1871)

Undaunted, the AColS sponsored several other students in the early 1830s. The plan foundered on opposition from white students and some faculty, and the reluctance of American-raised students, like Brown, to go to Liberia.[17] Subsequently, the Society had greater success by only supporting students raised in Liberia and by concentrating on three rural New England schools—Dartmouth, Bowdoin, and the Berkshire Medical Institute.[17]

Thus, under the auspices of the Maryland State Colonization Society (MSCS), Liberian-raised Samuel Ford McGill became the first Black student to graduate from a U.S. medical school. McGill had been born in Baltimore in 1815 into a free family that then migrated to the Maryland in Liberia colony in 1825.[34] Mentored by James Hall, the white governor and physician, the young McGill chose medicine as a career. Using the connections of both his father and Hall, McGill obtained support from the MSCS through Moses Sheppard, an influential MSCS member and Quaker merchant. Sheppard arranged for McGill to attend the Columbian Medical College in Baltimore, and McGill began his studies there in November 1836.[35]

In his letters, Sheppard had tried to prepare the young man for the realities of race relations in the United States.[35] Sheppard warned that he would not be addressed as "Mr. McGill" and would need to "appear as a servant" in college. Events bore out this grim advice. Fellow students soon objected to the presence of a "Negro boy." When the faculty pushed back, the students reframed their objections as concerns about their career prospects in the South if "Mr. McGill" remained their classmate.[35] With this change in tone, the faculty—entirely dependent on tuition revenues, like all medical faculty of the time—bowed to student demands, and McGill's education in Baltimore ended.

Through his contacts in New England, Sheppard arranged for McGill to continue his studies privately with Dr. Edward Phelps, a faculty member in the University of Vermont's medical department. When he resigned from Vermont, Phelps arranged for McGill to enter Dartmouth's medical school. To forestall the type of protest seen in Baltimore, his faculty sponsor there introduced McGill to the class as an African, requiring McGill to create a backstory to explain his fluent English. (Further showing the mutability of identity, on the

other side of the Atlantic, Africans characterized the colonists, regardless of skin color, as "white."[35]) As a foreign visitor, McGill could receive an acceptance usually denied to Black Americans.[35,36]

McGill had a successful time at Dartmouth. Apparently considered the best anatomist in his class,[37] he graduated with honors in June 1839.[36] After a visit with Sheppard, he returned to Liberia in December of that year. There he served as colonial physician. It had always been planned that he would prepare young men for entry into U.S. medical schools,[38] and one of his trainees, Dempsey R. Fletcher, graduated from Dartmouth in 1847.[17,36] Subsequently, McGill went into business with his brothers and served a term as governor of Maryland in Liberia. A prominent member of society, he died in Monrovia in 1871.[36] Although emigration was controversial and dangerous, McGill felt that it had given him financial success and social standing not obtainable in the United States.[39]

The Civil War brought an end to the AColS' sponsorship of medical education. At least 16 students received training under its auspices, including Michael Delany's Harvard classmates Isaac Snowden and Daniel Laing, who completed their respective educations in England and at Dartmouth (see below). The Society's revenues, however, had begun to decline even before the beginning of hostilities, precluding further support.[17] After the war, emancipation and Reconstruction appeared to offer brighter prospects for Black Americans than a program of emigration that had always been strongly opposed by the free Black community.

David Kearney McDonogh: The first from slavery to specialist (1821–1893)

David McDonogh has been described as America's first Black eye specialist.[40] As with John Brown and Samuel McGill, his education illustrates the tensions inherent in the colonization scheme.

David McDonogh was born an enslaved person on the plantation of John McDonogh, New Orleans's wealthiest merchant and plantation owner.[41] Known as a shrewd and hard-headed businessman, John McDonogh developed a scheme by which his enslaved workers could earn wages and gradually buy their freedom. He was an active member of the AColS. For McDonogh, like the Society's other sponsors, emigration to Liberia was the end point of emancipation.[31]

In 1838, he sent two promising young, enslaved men, David and Washington McDonogh (all unrelated), north to attend Lafayette College in Easton, PA, with the plan that, after manumission at graduation, they would settle in Liberia. Some older sources attribute this to a bet the elder McDonogh allegedly made with another slave holder, who argued that Blacks could not become educated.[42]

In fact, the young men had been educated from an early age—in defiance of state law—although McDonogh disingenuously professed ignorance of how they had obtained their schooling.[41] He described the young David McDonogh as of "a high, proud, brave, and aspiring disposition" and saw him, with tempering, as a potential Madison for Liberia.[41] A college contemporary recalled him as "lithe, graceful, and handsome … [and] exceedingly well-mannered."[43]

While they were in the North, McDonogh placed the pair under the guardianship of Walter Lowrie of the New York City-based Presbyterian Board of Foreign Missions.[41] Against his wishes, Lowrie emancipated the young men soon after their arrival in the North. Their time at Lafayette, where they lived and received instruction separately from other students, presented a number of challenges.[41] Washington McDonogh left the college as planned in 1842. David McDonogh stayed for a six-year course, graduating in 1844.

After Lafayette, Washington McDonogh emigrated to Liberia to teach and minister, along with his mother and 78 others from the McDonogh plantations.[33] David McDonogh took a different path, one he successfully negotiated using a combination of calculated acquiescence, diplomacy, and pressure toward his white benefactors.[44] As early as 1841, he had begun a preceptorship with

a local physician in Easton, PA. At that time, he remained enthusiastic about going to Liberia "with the Holy Bible in one hand and my box of medicine in the other," as he told Lowrie.[45] By graduation in 1844, however, he had decided to continue his medical studies and remain in the United States, precipitating a clash with his former enslaver and Lowrie. Like John Brown, David McDonogh was not alone in his refusal to emigrate.

Initially rejected by all of the New York medical schools, McDonogh secured a preceptorship—through Lowrie—with Dr. John Kearney Rodgers, a prominent New York City physician and faculty member at the College of Physicians and Surgeons. With Rodgers's intercession, he attended classes there. Although apparently denied a degree, he went on to a successful practice that included an appointment to the New York Eye and Ear Infirmary, which Rodgers had founded.[33] McDonogh was much in demand as a consultant.[46] In apparent tribute to his mentor, he adopted "Kearney" as his middle name. McDonogh later received a degree from the Eclectic Medical College of New York in 1875, where he taught for a number of years.[32]

Like other Black physicians of the period, McDonogh became actively involved in abolitionist, Black philanthropic, and civil rights activities.[41] Unlike his contemporary David Peck (see next entry), he enjoyed a long and successful medical career. In 1898, New York City's first fully integrated hospital, the short-lived McDonough [sic] Memorial, was named in his honor.[33] As Mullins writes, in the end, "it was the slave who eventually triumphed over the master."[44(p36)]

David Jones Peck: The first Black U.S. resident to receive a U.S. degree (1826–1855)

David Jones Peck is often considered the first Black graduate of a U.S. medical school (Rush 1847).[47] Although Samuel Ford McGill graduated in 1839,[36] Peck probably remains the first Black U.S. resident to receive a degree from a U.S. medical school. Peck's life demonstrates how inextricable the ties were between pioneer Black physicians and the struggle for emancipation and full citizenship.

Born into a free Black family in 1826 or 1827, Peck grew up in Carlisle, PA, and later in Pittsburgh. His father, John Peck, a successful business man, was active in the Underground Railroad and the abolitionist movement. John Peck knew many of its leading figures, including William Lloyd Garrison and Martin Delany, with the latter becoming a friend and mentor to his son.[47]

Following local schooling, where he organized the Juvenile Anti-Slavery Society,[48] David Jones Peck attended the Oberlin Collegiate Institute from 1841–1844 and then studied medicine in Chicago with Daniel Brainard, the abolitionist president of Rush Medical College. Accepted by a vote of the student body, he completed the required two terms at Rush and received his MD in 1847.[47]

That August, Peck joined Frederick Douglass, Garrison, and Delany on an antislavery lecture tour in Ohio. The young Peck became more than an observer. When Douglass, a vigorous speaker, lost his voice on the tour, Peck helped "fill up the gap at the meetings."[49]

After the tour, Peck moved to Philadelphia and opened a practice as physician and surgeon with an office on Lombard Street.[50] This was in the heart of Philadelphia's free Black community, an area that had been subjected to a series of riots by white mobs between 1838 and 1842.[51] By 1847, the free Black population of Philadelphia was approximately 20,000.[52]

Little is known about Peck's life and practice in Philadelphia.[47] In February 1848, he was ordered to leave a sale of medical books at the Messrs. Thomas and Sons auction house because of his color. As the *Pennsylvania Freeman* reported, the auctioneer's excuse—that he feared offending a Southerner who was present—"instead of mitigating, only aggravates the offence. Can sordidness and servility be any excuse for such ill-bred brutality!"[53]

Peck remained active in abolitionist politics. He attended the Philadelphia Anti-Slavery Convention in October of 1848 and was appointed to a committee to prepare an address to the "colored citizens" of Philadelphia on the theme of "Equality,

Brotherly Love, and Liberty." He opened the proceedings with two others by singing the abolitionist hymn "I Hear the Cry of Millions [Song for the Times]."[54]

I hear the cry of millions, of millions, of millions,

I hear the cry of millions, of millions in bonds;

Oh! set the captive free, set him free, set him free,

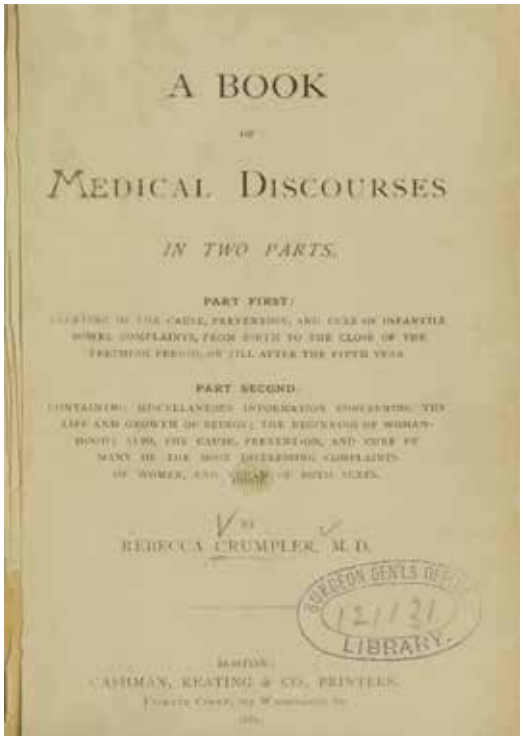
Oh! set the captive free from his chains.[55]

He joined Frederick Douglass in a meeting on May 29, 1849, condemning an attempt by the American Colonization Society to raise funds in England for its "inhumane and anti-christian [sic] scheme" of promoting resettlement of free Blacks in Liberia. Rallying British abolitionists to oppose the Society's activities, the meeting resolved that "we can never separate ourselves from the three millions of our fellow men in slavery, but remain and aid as far as lies within our power in knocking the fetters from their limbs."[56] Peck's views on emigration, however, would evolve over the next few years.

Despite his credentials and prominence, Peck was unable to establish a thriving practice and left Philadelphia in 1850. Although Peck apparently had plans to move to California, his old friend and mentor, Martin Delany, persuaded him to try Central America.[47] Delany, in his own intellectual progress towards Black nationalism, saw Nicaragua as a favorable site for Black settlement and advancement.[57] At a time when many free Blacks were pessimistic about the possibility of racial progress in the United States, Peck and Delany were not alone in envisioning a "Colored Republic" in Nicaragua.[58] The recently enacted Fugitive Slave Act, which threatened the safety of free Blacks even in the North, may also have been a motivation for Peck.[47]

Shortly after his arrival in 1852 in San Juan del Norte (Greytown), on Nicaragua's eastern coast, Peck was appointed port physician.[47] He subsequently arranged for the election of Delany, in absentia, as mayor of Greytown and military commander of the Mosquito Coast.[48] Delany himself, however, would never travel to Nicaragua.[59]

Records of Peck's activities after 1852 remained lost for many years, with speculation that he might have returned to the United States.[47] In 2010, a correspondent drew Michael Harris's attention to Charles William Doubleday's 1886 *Reminiscences of the "Filibuster" War in Nicaragua.*[60] Doubleday, an English-born adventurer, recounted meeting Peck in the spring of 1855 during a Nicaraguan civil war. Peck, serving as a surgeon with the Democratic forces, accompanied Captain Doubleday on an inspection of forward posts. An enemy gunner spotted the pair, and Peck was killed by a single cannon shot.[61] At only 28 or 29 years of age, it was indeed, in Harris's words, "a dream denied."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OF
MEDICAL DISCOURSES
IN TWO PARTS.
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Figure 3

Rebecca Davis Lee Crumpler: The first woman graduate (1831–1895)

Rebecca Davis Lee Crumpler has the distinction of being the first African American woman to graduate from medical school. Much of the information about her life comes from the introduction to her 1883 book, *A Book of Medical Discourses*—an advice manual for young mothers

(Figure 3). The details of her life differ among authors, and it was not until the late twentieth century that she was identified as the first Black woman medical graduate, a distinction that had previously been held by Rebecca Cole, an 1867 graduate of Women's Medical College of Pennsylvania.[62]

Born in Delaware, Rebecca Davis was raised by her aunt in Pennsylvania. Davis attributed her early interest in medicine and healing to this "kind aunt whose usefulness with the sick was continually sought."[63] At about age 20, she moved to Charlestown, MA, and for eight years worked as a nurse for eight physicians. During this time she married Wyatt Lee, adopting his surname as customary.

Recommended by the physicians she worked with, she entered the New England Female Medical College, one of the original constituents of Boston University's medical school. At that time, of the United States' 54,543 physicians, only 300 were women.[62] Her first husband died in 1863 while she was in medical school. She graduated with an MD in 1864, despite some concern on the part of the faculty about her preparation. After practicing in Boston for a short time, she then traveled in "the British Dominion" to further her education.[63] In Saint John, New Brunswick, she married her second husband, Arthur Crumpler, who had escaped from slavery in Virginia, and added his surname.[64]

Crumpler returned to the United States at the end of the Civil War and went, with her husband, as a medical missionary to Richmond, VA. There, with the support of General Orlando Brown of the Freedman's Bureau, Crumpler and other Black physicians provided care to the liberated Black population. By most accounts she encountered significant racism and sexism in Richmond.[65] The couple returned to Boston in 1869, where she opened a practice and her husband worked as a porter.[66,67] Like many pioneering women physicians, she focused her practice on women and children, retiring to Hyde Park, MA, in 1880. *A Book of Medical Discourses* is thought to be the only book written by a Black female doctor in the 19th century and the first medical text by an African American author.[65,68]

With her graduation, Crumpler also became the first of a very select group. In the ensuing years, Black women interested in medical careers faced the dual burdens of discrimination for both race and gender. A recent thorough study identified only 180 individual Black women who received MDs between 1864 and 1941.[69]

The Civil War Service of Black Physicians

In his study, Slawson positively identified 13 Black physicians who served during the Civil War: three as commissioned medical officers, nine as acting assistant surgeons, and one, Martin Robison Delany, with an infantry commission.[16] The commissioned surgeons were Alexander Thomas Augusta (see below); David O McCord (Medical College of Ohio, 1854), who had the unique distinction of serving initially with a white regiment;[16] and John van Surly Degrasse, Bowdoin's first Black graduate (1849) and the first Black member of a state medical society (Massachusetts).

The acting assistant surgeons were Anderson Ruffin Abbott (Toronto, 1867); Benjamin A. Boseman (Bowdoin, 1864), who would have a prominent postwar political career in South Carolina;[70] Cortland van Rensselar Creed, Yale's first Black graduate (1857) and a former student of French surgeon Velpeau; William B. Ellis (Dartmouth, 1859); Joseph D. Harris (attended Western Reserve, 1864);[71] William B. Powell, Jr. (Unknown—possibly England);[72] Charles Burleigh Purvis (Western Reserve, 1865); John T. Rapier, Jr. (Iowa College of Physicians and Surgeons, 1863); and Alpheus W. Tucker (Iowa P&S, 1865). Space precludes a discussion of all of the remarkable individuals who are profiled by Slawson.[16] Anderson Ruffin Abbott appears in Chapter 2. Mention will be made here of Alexander Augusta and Martin Delany, although the latter did not serve as a surgeon during the war.

Alexander Thomas Augusta (1825–1890)

Of the commissioned medical officers, Alexander Thomas Augusta is distinguished as the first Black American to be commissioned a major in the U.S. Army.[16] Augusta was born into a free Black family in Norfolk, VA, in 1825.[73] After learning to read and write in defiance of state law, he supported himself as a barber. Denied admission to the University of Pennsylvania medical school, Augusta married in Baltimore in 1847 and moved, first to California and then to Toronto. There, Augusta established a successful apothecary shop before gaining his bachelor of medicine degree in 1856. Described as a brilliant student, Augusta established a thriving practice and became a prominent citizen. His accomplished wife ran a successful millinery shop.[74] Augusta volunteered for service in the Union Army and, after some hesitation, was accepted and commissioned as a major on April 14, 1863.[73]

Wearing the uniform of a U.S. Army major did not protect Augusta from the racism of the day. Assaulted by a mob at a railroad station in Baltimore, he did not back down but called on the provost marshal for support. Thrown off a streetcar in Washington, DC, he pursued the matter, which ended with a law desegregating public transport in the capital. When Augusta was assigned to the 7th U.S. Colored Infantry, his white assistant surgeons protested. Here, Augusta was less successful in combating racism; the War Department reassigned him, first to heading a hospital for Black soldiers and then to examining Black recruits in Baltimore. Following the war, he worked for the Freedmen's Bureau, commanding the Lincoln Hospital in Savannah, GA. In 1868, Augusta became the professor of anatomy at the new Howard University, making him the first Black medical school faculty member in the nation. Attempts to integrate the DC medical society and the AMA failed, and he helped found the Medico-Chirurgical Society, the first Black medical society. After Augusta's death in 1890, he became the first African American to be buried in Arlington National Cemetery.[73]

Martin Robison Delany (1812–1885)

Commissioned as an infantry major during the Civil War, Martin Robison Delany was one of the leading Black intellectuals of the middle 19th century and the era's most prominent proponent of Black Nationalism and Pan-Africanism.[48,75] Born in what is now West Virginia, he grew up in Pennsylvania and, at 19, apprenticed with Dr. Andrew McDowell, a white abolitionist. Delany did not resume his medical studies until 1850, when he was admitted to Harvard Medical School with two other Black students: Daniel Lang and Isaac Snowden, both sponsored by the Massachusetts Colonization Society. In the ensuing controversy, which split the student body, the faculty decided to allow the three to complete the first year but denied them a second year.[76,77] From then on, Delany practiced medicine intermittently, in both the United States and Canada, to support his family and further his life's work—the advancement of Black Americans.

It is for this work that Delany is remembered. He edited and published the first African American newspaper. He collaborated for a time with Frederick Douglass on his newspaper, *The North Star*, before they fell out. He explored the Niger Valley as a site for colonization, obtaining prominence in Great Britain and the United States.[48,78] He wrote major works on the condition of Black America and on ethnography.[59] He proposed recruiting a corps of Black soldiers during the Civil War to Lincoln and was commissioned a major one day after meeting Secretary of War Stanton. Two months later, at the war's end, he joined the Freedmen's Bureau in South Carolina, leaving the army in 1868. Unhappily, his subsequent involvement in South Carolina politics eventually led to political isolation and financial ruin.[48] Debilitated in mind and body, Delany died in Wilberforce, OH, in 1885.[48]

Despite the best efforts of the handful of Black physicians like Augusta and Delany who served during the Civil War, the medical care of Black soldiers often left much to be desired. As historian Margaret Humphreys writes in her study of the health of Black soldiers: "it took exceptional

bravery and resolution [on the part of the physicians] to brook the army's racism and the barriers to practice it created. And, as yet, the number of black physicians in America was far too small to meet the army's needs."[71]

Conclusion

This chapter has touched on the lives of several pioneering physicians from the Colonial era to the Civil War. Their stories, and those of their fellow practitioners, show how closely their medical careers were tied to the larger struggles for abolition and equality. They persevered against great odds and led the way for others.

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Legends

1. The Negro Caesar's Cure for Poison. From *Massachusetts Magazine, or, Monthly Museum of Knowledge and Rational Entertainment*. Public domain.

2. Patrick H. Reason, James McCune Smith, ca. 1850, engraving. Portrait File (PR 052), New-York Historical Society, 74638.

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Surgery under Slavery section photo: Library of Congress, Prints & Photographs Division, FSA/OWI Collection, LC-USF34-017955-C.

Canada, Incubator of Black American Surgeons

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Canada was a haven for Blacks escaping the antebellum American South by way of the Underground Railroad. Sterling Allen Brown, professor of poetry at Howard University in the mid-20th century, noted that Canaan, the promised land of African American spirituals (*"I'm on my way…up to Canaan land!"*), stood for Canada, the land that promised freedom and a land of opportunity free from racial discrimination.[1]

Such was the case for many Blacks who became prominent figures in U.S. medicine and surgery. Some were born to Black Americans who escaped to Canada; others were free Blacks who went there to escape racist laws and social strictures in the United States. Several got their primary schooling at the remarkable Buxton Mission School, the first racially integrated school in North America. Canadian medical schools accepted Black Americans who were denied entry into schools in the United States.

Here are biographical profiles of several prominent Black surgeons who were educated or practiced in Canada during their careers. Elsewhere in this book are full chapters devoted to others with strong ties to Canada, including Martin Robison Delany (1812–1885; Chapter 5), Alexander Augusta (1825–1890; Chapter 4), Nathan Mossell (1856–1946; Chapter 11), and Charles Drew (1904–1950; Chapter 21).

Okah Tubbee

Perhaps the first Black person to practice medicine in Canada was Okah Tubbee (1810 or 1811–?), the fascinating subject of a book written by Angela Pulley Hudson of Texas A&M University[2] and a hagiography by Tubbee's wife, recently edited by Daniel Littlefield, Jr., of the University of Arkansas, Little Rock.[3]

A self-taught musician and exceptional entertainer, Tubbee performed throughout the United States while claiming an Indian identity to hide his enslaved childhood in Natchez, MS. He was born William McCarey, the youngest child in a household of enslaved persons, young and adult, some of them his half-siblings. Under the terms of their owner's will at his death, all were freed except young William, who was to remain under the ownership of the other children in the home. He was regularly whipped and beaten, first by his putative mother, then by a blacksmith under whom he was apprenticed.

He absconded from the smithy and worked odd jobs up and down the Mississippi. A natural showman, he had a street act imitating bird calls and whistling popular tunes, a performance he took to New Orleans. Once his half-siblings freed him in 1839, he became a popular stage performer. One impresario wanted to promote his performances but had misgivings about his race. Hudson wrote of the promoter's qualms, "It did not 'seem exactly proper for a negro [sic] to appear on the stage'"[2] in a South still unsettled by the Nat Turner revolt (1831). It was decided that William would perform as a Choctaw Indian with the adopted name Okah Tubbee ("oak tub," in crude pidgin). With a new identity, he married Lucy, a devout Mormon woman of Anglo-American parentage who also claimed Indian heritage. The two wandered the United States, Okah providing musical entertainment and Lucy proselytizing her sect of Mormonism.

Throughout his travelling life, Tubbee had a sideline practicing medicine. He claimed to have been an assistant to a U.S. Army surgeon, who had been stationed in Natchez.[3] As his identity as an Indian matured, he set himself up as an Indian medicine man and sold cures for a variety of diseases. He had settled into a medical practice in Missouri when a man who knew of his slave past in Mississippi threatened to expose him as a charlatan. Even though Tubbee had been manumitted, the man's extortions and the recently passed Fugitive Slave Act (1850) chased Tubbee and his family into Upper Canada.

In Toronto, he continued his career as native healer, physician, and musician. In a newspaper advertisement, Tubbee proudly wrote that he had:

> *…succeeded in curing cases that had withstood for years the efforts of the best practitioners. … [Rheumatic] affections, spinal and nervous affections, toothache, scrofula, piles, cancer, tetter, sore eyes, dyspepsia, white selling, bronchitis, asthma and phthisic, female diseases, general debility, neuralgia, fits, gravel, chills and fever, diarrhoea, &c.*[3]

A movement to rid Upper Canada of quacks and patent medicine caught up with Tubbee. In 1854 he was accused of defrauding a Grey County family of $10. The Medical Board of Upper Canada challenged his lack of credentials. Two years later, his history disappears without further trace.

Littlefield writes that Tubbee's story reveals "often terrifying glimpses into the social condition of the non-white population in the Old South."[3] Enslaved by both to his original white owner and later by his free Black half-siblings, he took advantage of being able "to pass" as an Indian. He thus gained a measure of freedom by concealing his Black identity.[3]

The Buxton Mission School

The Buxton Mission School was established by Rev. William King (1812–1895) in Buxton, Ontario, a story chronicled by Fred Landon of the Western University in London, ON.[4] Unique in that it offered a classical education to Black students and accepted both Black and white students, the school had a remarkable group of six Black graduates in its inaugural class, all of whom completed university and had successful professional careers.

King, an Irish immigrant, married into a Southern American family. He inherited 15 enslaved persons when his wife died in 1846. Because of state laws against manumission, King took them to Canada in 1848, effectively freeing them. With other abolitionists in the Free Presbyterian Church of Canada, King established the Elgin Association, an organization devoted to the resettlement of refugees from America.

The Elgin Association obtained land near Chatham, then a rural area in Kent County in Southwestern Ontario and a terminus of the Underground Railroad. The refugees brought into Canada by King formed the nucleus of the settlement. New arrivals were given the chance to obtain up to 50 acres of land at $2.50 an acre, payable in ten annual installments. In just three years, the settlement grew to 75 families and 400 inhabitants; in 1857 it had 200 families and a population of 800, with a sawmill, a brickyard, a pearl ash factory, a blacksmith, a carpenter, shoe shops, and a good general store.

Figure 1

The two schools at the Buxton settlement—one for boys, the other for girls—grew quickly, with a combined enrollment of 140 (Figure 1). King believed that Black children deserved a standard classical education, and not just vocational training. The Buxton Mission School quickly developed a reputation for excellence. In 1850, an act of the provincial Parliament ended the practice of segregating schools by race and religion. Within two years, the Buxton Mission School became the first racially integrated public school in North America.[5]

There were six Black students in King's first class of 1850, four of whom became physicians. Anderson Abbott, Jerome Riley, and John Rapier served in the Civil War as surgeons under Alexander Augusta at Freedmen's Hospital in Washington—a connection between Buxton and Freedmen's Hospital not widely recognized in American history. Richard Johnson (c. 1840–?) attended medical school at Edinburgh University and became a missionary in Africa. The other two graduates also became prominent Canadians. Thomas Stringer built churches and schools in Ontario and in Mississippi, where in 1869 he became its first Black state senator. Alfred Lafferty graduated from the University of Toronto and became a well-known lawyer and educator.

Anderson R. Abbott

Abbott (1837–1913, Figure 2), was Canada's first native-born Black physician, whose history was chronicled by Catherine Slaney, his great-granddaughter.[5] His father, Wilson Ruffin Abbott, was a prosperous free Black of mixed-race parentage who was a merchant and landowner in Mobile, AL. After a serious injury, he was nursed to health by Ellen Toyer, a Black woman who was an indentured servant. Out of gratitude, Wilson paid her obligation and married her. He also paid for the freedom of Ellen's sisters.

Figure 2

Despite his business success, Wilson and his wife had to register with the state and post a monetary bond with two white men "of good standing."[5] In public they had to wear an armband to verify that the bond had been posted. Black Codes, laws that restricted the movement and activities of free Blacks, became more severe after the Nat Turner uprising of 1831. Among them were prohibitions against assembly in groups, bearing arms, free speech, and testimony against whites in court. These strictures against the liberty of Blacks failed to allay the fears of the white community. Blacks were regularly the targets of racial violence. Successful Blacks like Wilson Abbott, whose financial station approached those of prosperous whites, were a particular target.

Blacks were also prohibited from learning to read and write. With an infant son and their lives in danger, Wilson Abbott and his family migrated north. After a brief stay in New York City, the Abbott family emigrated to Canada, settling in Toronto in 1835. With his experience buying and selling land, Wilson once again prospered.

Canada had banned the importation of slaves since 1793, and slavery had long since disappeared from the country when the Abbotts arrived. Racism was still present, but in essence, Black Canadians freely participated in society. Later Abbott wrote:

> *I do not claim that there is no race prejudice in Canada. In Toronto, at least it is innocuous. There are no indications of it in our churches, schools, societies, hotels, and places of public resort. … Afro-Americans in Toronto are just entitled to the respectful treatment they receive for several reasons. They are and always have been loyal, peaceful, and law-abiding. By providence and industry, they have secured homes and educated their children, who are employed as tradesmen, mechanics, laborers; some are in the service of government and a few are following professional pursuits, besides the usual quota of waiters, barbers, restaurant and boarding-house keepers.*[5]

Wilson and Ellen moved to Buxton to enroll their children in the Buxton Mission School. After graduation, young Anderson completed his studies at the Toronto Academy of Knox College as one of its first three Black students. After two years in the preparatory department at Oberlin College in Ohio, Abbott enrolled in University College in Toronto to study chemistry. He then studied medicine at the Trinity Medical College, also in Toronto.[5]

During his study of medicine, Anderson Abbott met Alexander Augusta, who was in practice in the city and had preceded him at Trinity. At Augusta's suggestion, Abbott, licensed but yet to receive his medical degree, applied for and received a commission as captain and acting assistant surgeon to the Union Army in 1863.

Abbott was stationed in Washington, D.C., on Augusta's staff at the Contraband Hospital, which in 1865 would become Freedmen's Hospital under the Freedmen's Bureau.[6] After Augusta stepped down from the position in 1864, Abbott served as the Contraband Hospital's executive officer and surgeon-in-charge.[7]

Despite his position and his officer's uniform, Abbott still was subjected to racist attacks. He and Augusta's wife were accosted in July 1863 at the New York train depot just days before the

draft riots that killed hundreds of Black men. Just months later, Abbott and Augusta attended a White House reception where they were warmly received by President and Mrs. Lincoln. Anderson was among the surgeons who sat vigil in the President's final moments. Later, Mrs. Lincoln sent Abbott a plaid shawl that the President had worn at his first inauguration as a personal memento.[7]

Abbott worked for the Freedman's Bureau after the war before returning to Canada in 1866, still just 29 years old. He received his degree in medicine from the University of Toronto in 1867 and in 1869 became a member of the College of Physicians and Surgeons of Ontario. He practiced in Chatham, ON, where he was the first Black person in Canada to be appointed coroner. He was active in the racial equality movement and led the integration of schools in the community.

Abbott lived in both the United States and Canada. In 1894, he was appointed surgeon-in-chief of Provident Hospital in Chicago, succeeding its founder, Daniel Hale Williams, and serving until 1897. Abbott died in Toronto in 1913.[7]

Jerome R. Riley

Born in Detroit, Riley (1840–1929, Figure 3) was only four years old when his family moved to Buxton, where he attended the Buxton Mission School. Riley attended Knox College at the University of Toronto with Abbott, his Buxton classmate. After passing the examination in medicine with the Upper Canada Medical Board in 1861, Riley set up practice in Chatham.[8]

Abbott convinced Riley to join the Union Army as a contract surgeon in 1864, and later to join Abbott's surgical staff at Freedmen's Hospital. After the war, Riley decided to complete a degree in medicine in the United States. He went to the Chicago Medical College (the forerunner of the Northwestern University School of Medicine) but only stayed for one year (1869). Augusta, now on the faculty at the just-organized medical department at Howard University, convinced Riley to transfer to the new medical school, where he received his degree in 1873.[9]

Figure 3

Riley went to Pine Bluff, AR, for four years, where he was its county physician and coroner. Unlike most Blacks in the Reconstruction South, who were members of the Republican party, Riley was an active Democrat and served as a delegate to the state's constitutional convention of 1874. He relocated to Washington, DC, where in addition to his practice he remained involved in politics as president of the Democratic party in the city and serving two terms as head of the William J. Bryan Colored Democratic Club. He also had an appointment as a watchman to the U.S. Senate, a function now performed by the U.S. Capitol Police.

A prolific writer, in 1897 Riley wrote a popular book, *The Philosophy of Negro Suffrage*. In it he discusses how American Blacks, just emancipated from slavery, can best assume a place among the major white political parties on equal footing.[10] An example of the political independence he sought, Riley was a member of the National Negro Anti-Expansion, Anti-Imperialist, Anti-Trust, and Anti-Lynching League, a group formed in opposition to U.S. wars against Spain (1898) and the Philippines (1899–1902). He died at age 89 in New York City on New Year's Eve, 1929.

John H. Rapier, Jr.

John H. Rapier, Jr. (1835–1865, Figure 4), was a member of the remarkable Thomas-Rapier family, the subject of a book by John Hope Franklin of Duke University and Loren Schweninger of the University of North Carolina at Greensboro. The matriarch of the Thomas-Rapier family was Sally Thomas, an enslaved woman whose grandsons included John Jr. and his brother James T. Rapier, who became the second Black U.S. congressional representative from the Reconstruction South. Another line of her offspring was from her union with John Catron, one of the seven Supreme Court justices in the majority in the Dred Scott decision (1857). Catron and Sally Thomas's son was James Thomas, who was born enslaved but, after he was freed, became wealthy speculating in real estate in St. Louis.[11]

Figure 4

John Rapier, Jr., was born in Florence, AL, where John H. Rapier, Sr.—his father and a freed slave—ran a profitable barber shop. John Jr. and his two brothers were sent to Chatham to board with their uncle Henry Thomas and attend the Buxton Mission School.[12] Despite his modest financial success. John Sr. resented the social strictures of the South and the lack of opportunity for his children. He encouraged his sons to seek opportunities elsewhere. Thwarted by racism in every corner of the United States, John Sr. was convinced that emigration the only feasible route to liberty.[12]

John Jr. shared his father's view of the racial climate in the United States. In 1854, the younger Rapier wrote to the American Colonization Society, the organization that sponsored Black emigration to Liberia, but received no reply. Like many Black Americans determined to leave the country, Rapier looked to Central America and the Caribbean as potential havens.[11]

He heard of the exploits of William Walker, a soldier of fortune who was trying to establish his own private colony in Central America, allegedly fighting for the freedom of the native people of Nicaragua. Rapier visited his uncle James Thomas in Nashville and showed him a news clipping of Walker's adventures.

Thomas and Walker were boyhood friends despite their racial difference. Even though Thomas had made a comfortable living as a barber since being freed in 1851, he and Rapier decided to join Walker in Nicaragua. Once they got there, however, they soon recognized Walker's despotism and discovered his plans to reintroduce slavery in the lands under his control. Both of them quit the expedition after only a few months.[13]

Rapier became the secretary to Walker's associate Parker French, who was responsible for recruiting and fundraising for Walker's schemes in the U.S. The two parted ways in Minnesota, where Rapier became a freelance journalist for newspapers in the area. He wrote scores of articles on civil rights issues, such as the absence of schools for Black children despite the taxes Blacks paid, and federal officials not accepting homestead applications from Blacks.

Rapier then left Minnesota to seek better social and professional opportunities in the Caribbean. He first went to Haiti, where slaves had rebelled

in 1791 and established a Black republic in 1804. Black Americans saw the country as a place where they might live in freedom. However, few of the 7,000 to 10,000 Black Americans who went there stayed, unable to surmount the cultural and language barriers and finding poverty and living conditions even more dire than in the U.S. South.[14]

Rapier travelled on to Jamaica, where he apprenticed himself to a dentist. Unable to make ends meet, he decided to return to the United States and seek a career in medicine. He attended Oberlin College for a year before applying to the medical department of the University of Michigan. With his light skin and recent travels in the Caribbean, Rapier represented himself as being of mixed race and a native of Jamaica, hoping to avoid the racism that might meet a free Black from the United States. But the ruse did not protect him from racial harassment by the all-white and male student body. Embittered, he left Michigan and received his medical degree from the College of Physicians and Surgeons of Keokuk (IA) in 1864.[15]

Degree in hand, Rapier applied for a position as a medical officer in the U.S. Army, this time emphasizing his upbringing in Alabama and status as a free Black. He was assigned to Alexander Augusta's staff at the Contraband and Freedmen's Hospitals.[6]

Rapier died in Washington sometime in 1865 from unknown causes at just 30 years old, a tragic illustration of an intelligent, energetic man frustrated at every turn by the strictures of a racist society.

W. Henry Fitzbutler

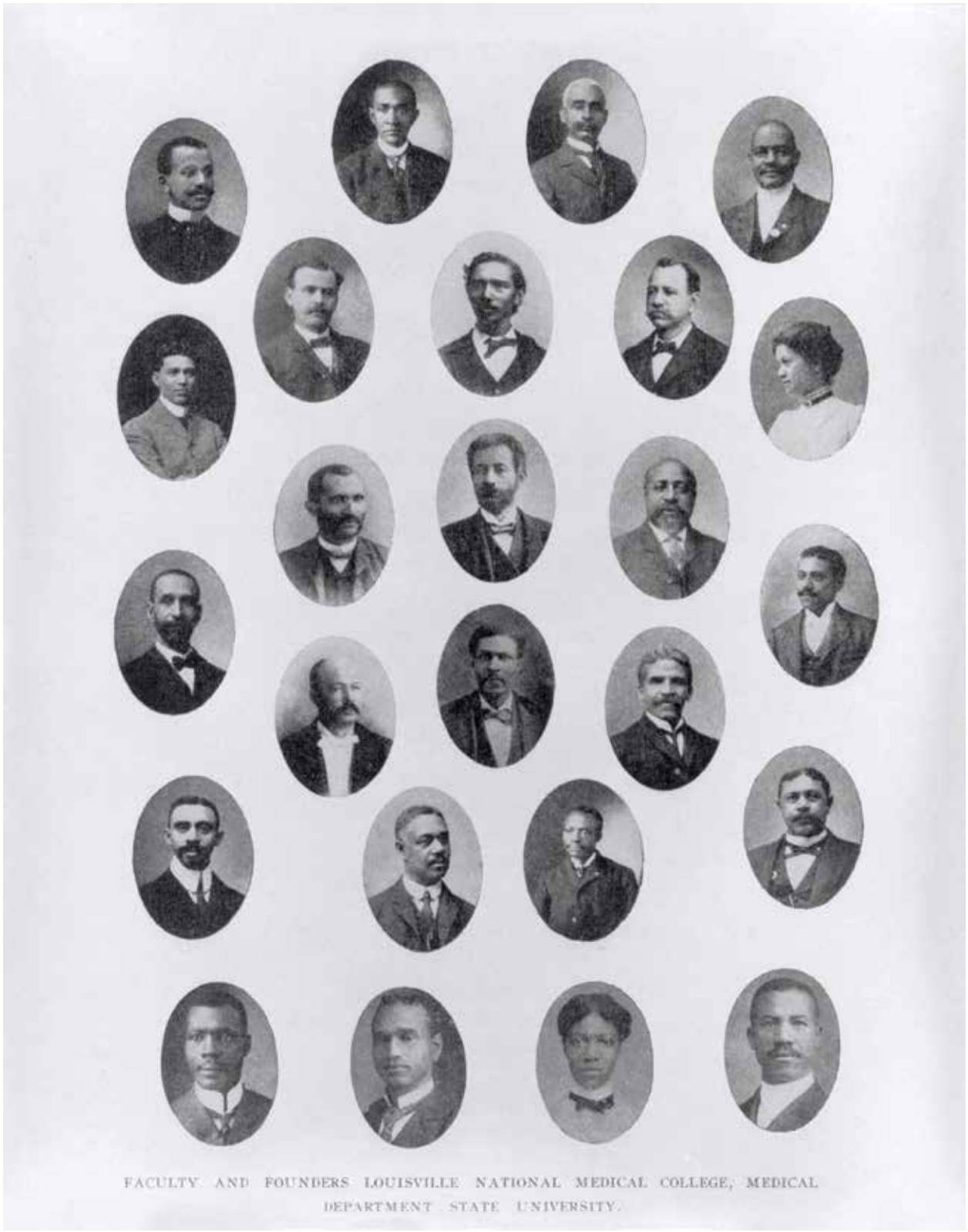
W. Henry Fitzbutler (1837?–1901) founded the Louisville National Medical College in 1888, the first Black proprietary medical school in the country. In addition to his role of dean and professor of surgery and *materia medica* at his institution, he was a vigorous public advocate of education and other causes relevant to Blacks in Kentucky, contributions that were reviewed by W. Montague Cobb, professor of anatomy at Howard University and longtime editor of the *Journal of the National Medical Association (JNMA)*.[16]

Fitzbutler's enslaved father worked as a coachman; his mother was an indentured servant from England. They escaped by way of the Underground Railroad to Essex County, Ontario, where Henry was born. Christened William Henry Butler, he later added "Fitz" to his last name—perhaps to hide a name that denoted servility[16]—and dropped his first name, because "Bill" was too common.[17] An outstanding student, he showed an early interest in medicine and took a medical preceptorship with Daniel Pearson, a local physician and a former enslaved person who had an extensive medical library.[18]

To pay for his further education, Fitzbutler worked on a farm, taught school, and cleared land. He used his earnings to attend Adrian College in Michigan, followed by medical school at the Detroit Medical College (1869, soon after the school's founding in 1868). After one year, he transferred to the medical department at the University of Michigan—the same school where, a decade previously, John Rapier had been dismissed because of his race—becoming the school's first Black graduate in medicine in 1872.

He settled in Louisville as Kentucky's first Black physician. Fitzbutler became known as a good practitioner but ran afoul of a clique of white men that acted as unofficial overseers of Black commerce and public affairs for Blacks in the city. "Few colored people sought business or notable positions without consulting these 'intermediators,'" Cobb wrote.[17] In setting up his practice without the explicit approval of the group, Fitzbutler's stay in Louisville was predicted to be short-lived.

But he held fast. In 1873, Fitzbutler was named to a commission charged with reviewing the education of Black children in the state. He was named the group's chair, a position that no one wanted because of the dangerous issues that might be discussed. The actions of the commission resulted in the great improvement of education of Black children. Fitzbutler was a consistent opponent to the establishment of separate schools for Blacks. To publicize his political views, he was a writer and editor for two Black-owned newspapers



FACULTY AND FOUNDERS LOUISVILLE NATIONAL MEDICAL COLLEGE, MEDICAL DEPARTMENT STATE UNIVERSITY.

Figure 5

in Louisville, *The Weekly Planet* and the *Ohio Falls Gazette* (1879), the latter being the first Black periodical to achieve long-term success in the city.

Barred because of his race from any of the hospitals in the city and from attending lectures at the medical school at the University, Fitzbutler and two other physicians, W.A. Burney and Rufus Conrad, decided to open a medical school open to all students, Black and white. In 1888, the Kentucky legislature granted them a charter for the Louisville National Medical College (Figure 5; Fitzbutler is center, third row). They had begun teaching students as early as 1886, anticipating passage of the act, so the College's first class was ready to receive their degrees in medicine in 1889.

Fitzbutler was the school's inaugural dean and professor of surgery and *materia medica*. The Kentucky Board of Health certified the school in 1891 and "declared [it] to be a regular legal medical college, commended to Kentucky and the world."[17] In 1895, Fitzbutler opened the Auxiliary Hospital, a proprietary eight-bed facility connected to the school, as a site to train medical students and nurses. His wife, Sarah Helen Fitzbutler, was also a physician and served as superintendent of the nursing school.

Fitzbutler continued as dean until his death in 1901, succeeded by his partner in founding the school, W.A. Burney. The school and its tiny inpatient facility were likely foundering at the time of Fitzbutler's death, unable to keep pace with advances in medical education, science, and technology. Without access to adequate numbers of inpatients, and with nonexistent study spaces and a poor library, the school was one of the schools that Abraham Flexner recommended closing in his report to the Carnegie Foundation for the Advancement of Teaching in 1910.[20,21] Of the 29 students graduating from 1903–1911, only 11 passed the state board exams.[17] The school closed in 1912.

To honor Fitzbutler's life in promoting medical education, two undergraduate medical student associations are now named for him: Fitzbutler College at the University of Louisville School of Medicine, and Fitzbutler House at the University of Michigan Medical School.

Charles V. Roman

Charles Roman (1864–1934, Figure 6) was the inaugural professor of ophthalmology and otolaryngology at Meharry Medical College and the first editor of the *JNMA*. Known as well for being a Sunday school teacher as for being a figure in Black medical world, he was a national leader in the African Methodist Episcopal Church. A lengthy obituary on Roman, written by Cobb, provided most of the facts in this section.[22] Roman's history of the Meharry Medical College included several anecdotes from his own life that are retold here.[23]

Born in Williamsport, PA, young Charles, only eight, moved with his parents to Hamilton, ON. He befriended "an eccentric root doctor"[22] who gave the lad a few pennies for his help gathering herbs for his nostrums and poultices. Charles soon decided he had picked up enough knowledge to offer therapies on his own. A young man with diarrhea took him up on his offer. Charles mixed up a concoction and gave it to the young man, which immediately stopped the flux but caused other symptoms that sent the patient to a trained physician. The doctor both admonished and encouraged young Charles, predicting, "You'll be a doctor someday."[22]

Roman received his secondary education at the Hamilton Collegiate Institute as its first Black student. He finished the four-year curriculum in two. Inspired by one of his instructors to become a teacher in the American South, Roman took his first position at Hopkinsville, deep in the tobacco-growing region of rural Kentucky. Teaching school suited him, and he soon took another position as principal in a public school in Columbia, TN.

Roman never gave up his ambitions in medicine, however, and made plans to return to Canada and medical school at McGill University. In Tennessee, he learned of the medical department of the Central Tennessee College (CTC) and decided to take his degree there. (The CTC's medical school was renamed the Meharry Medical College in

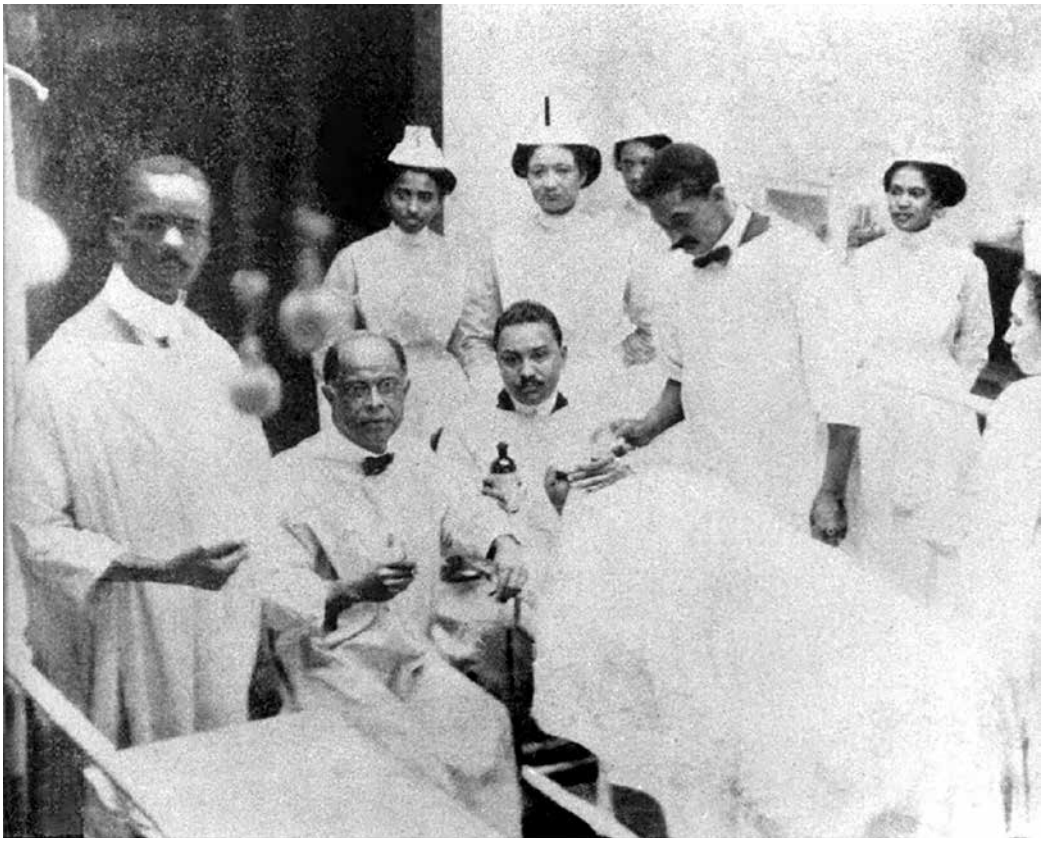


Figure 6

1910, and we will refer to it as such throughout.[23]) To support himself during his studies, he won a teaching position in the Nashville public schools, a highly publicized post that had attracted a pool of 100 white and 70 Black applicants.

After graduation from Meharry in 1890, Roman ran a solo practice in Clarksville, TN, then joined the practice of another Meharry alumnus in Dallas. In 1899, he attended a postgraduate clinic held at Provident Hospital in Chicago, where he formed an immediate friendship with its founder, Daniel Hale Williams. At their first meeting, Williams invited Roman to his office, where he had just met with George Hubbard, president of the CTC and dean of Meharry. Hubbard wanted Williams, then the nation's foremost Black surgeon, to invigorate the school by holding clinics in Nashville.

At first, Williams was disinclined to commit to the project. He asked Roman for his opinion on the proposal. What Roman said to Williams was not recorded, but when their conversation ended, Williams wrote to Hubbard and accepted the invitation.[23] During Williams's first visit in 1899, the visiting surgeon did four operations by lamplight in a makeshift two-room facility in the basement of the building where R. F. Boyd, one of the professors at Meharry, had his office. Williams's clinics grew to be seven- to ten-day sessions that included surgery and demonstrations, hugely popular events that also attracted white doctors.[24]

At the end of the visit, Williams asked Hubbard about Roman by name, greatly increasing Roman's stature in the dean's office at Meharry. When Roman returned to Nashville for the 1903 meeting of the National Medical Association, Hubbard took him aside and offered him an appointment at Meharry as its inaugural professor of ophthalmology and otolaryngology. Roman had planned on practicing in a bigger city, such as New York or Chicago, or perhaps staying in Dallas. Hubbard said:

I will not be responsible for taking a man away from what you have here. I can only say, I have never been able to get a competent white man to teach this subject and you are the only colored man I know that can do it.[23]

Hubbard got his man, and Roman became the founding chair of the department of ophthalmology and otolaryngology in 1904, a post he would hold until 1931.

Roman was also elected president of the National Medical Association in 1903. At the end of his term in 1904, he was named "journalist" of the organization and was later the JNMA's inaugural editor-in-chief.[25]

Roman was active in the civic life of Nashville and served as director of the Peoples Saving Bank and Trust Company, a Black-owned bank that served the local Black community. A leader in the African Methodist Episcopal church, in 1911 he was one of five lay representatives to the decennial Methodist Ecumenical Conference. His lectures at Meharry—philosophical as well as medical—earned him the title, "the Sage of Meharry."[23]

Alfred S. Shadd

Alfred Shadd (1870–1915, Figure 7) came from a family of Black activists in Ontario, and his story is told by Colin Thomson of the University of Lethbridge in Alberta.[26] After he graduated from the Buxton School, Shadd remained there as a teacher. He began medical studies at the University of Toronto but ran short of money. To earn cash, he taught school in Kinistino, some 90 miles northeast of Saskatoon in the region of the North-West Territories that would later become the province of Saskatchewan.

Shadd returned to medical school to graduate with honors in 1898. He returned to his adopted home in Kinistino as a doctor, caring for patients throughout the Carrot River valley. In 1904, he moved to nearby Melfort, where he had a pharmacy. Shadd abandoned his plans for further studies in Europe and settled for good in the town. He was active at all levels of civic life, founding a hospital, serving as Saskatchewan's first coroner and holding positions on the Kinistino town council and school board. An amateur farmer, he was one of the founders of the local agricultural society and of an elevator company. He unsuccessfully sought higher office in the territorial government as a member of the Conservative Party.

Figure 7

Shadd died of appendicitis of 45. A local paper wrote of him, "No drive was too long; no night too dark; no trail too rough to deter the doctor when the call for assistance came."[26]

Wilson R. Abbott

Wilson Abbott (1873–1938) was born in Chatham when his father, Anderson Abbott, practiced there. Like his father, Wilson received his early education at the Buxton Mission School. The younger Abbott went on to the University of Toronto, where he received a degree in pharmacy. The Abbott family moved to Chicago when Wilson's father was appointed surgeon-in-chief and superintendent of Provident Hospital in 1894.

After earning a baccalaureate from Cornell University, Abbott received his medical degree from the University of Illinois, where he taught chemistry and biology in the medical department.

He published several papers on clinical topics such as vaccination and liver abscesses due to appendicitis.

Abbott was clinical director of the Chicago Tuberculosis Institute, where he advocated for therapeutic pneumothorax and devised a method to safely induce bilateral pneumothorax. During the World War I, Abbott joined the U.S. Army and was assigned as chief of staff, with the rank of major, at the veteran's tuberculosis hospital at Fort Bayard, New Mexico. After his return to civilian practice, Abbott became chief of staff and chairman of the medical executive board of the Henrotin Hospital in Chicago.[27]

John Douglas Graham Salmon

Douglas Salmon (1923–2005, Figure 8) is considered Canada's first Black surgeon of the modern era. His life was memorialized by Philip Mascoll, a writer with the *Toronto Star*,[28] and on the University Health Network of Toronto website.[29]

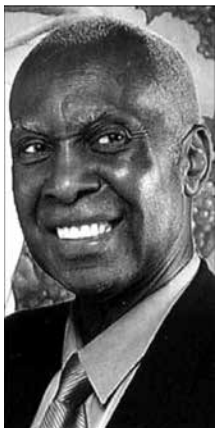


Figure 8

A product of Toronto's Jamaican immigrant community, Salmon was born to a veteran of the Boer War and a nurse with the Black Cross (a medical organization started by Marcus Garvey, the charismatic advocate of Black nationalism and pan-Africanism in the 1910s–1930s). His parents died when Salmon, the youngest of six children, was only six years old. Raised by his aunt, he was strong-willed from early childhood. He rebelled at being tracked toward industrial labor at his school and aspired toward higher education.

Salmon entered the Toronto Conservatory of Music to study piano. When he and some friends were denied admission to the Palais Royale, an entertainment venue in Toronto famous for hosting jazz greats such as Earl Hines and Duke Ellington, he led a protest that led to Ellington switching his performance to one that allowed Blacks to attend. The campaign convinced Toronto's mayor to ban racial discrimination at public events.[29]

Salmon's piano teacher encouraged him to attend night school so he could matriculate at the University of Toronto; he did, graduating with honors in physiology and biochemistry in 1951. He entered medical school as one of only four Black students and later became class president. He received his degree in medicine at the university in 1955. During medical school, he and his band continued to entertain at functions throughout Toronto.

After an internship in Toronto, Salmon took a residency in surgery in Detroit. He received an offer to join a practice in the United States, but Salmon instead chose to return to Toronto with his new wife, a nurse with the Victorian Order of Nurses. He built a successful practice at the Centenary Hospital in Scarborough, ON, where he specialized in bariatric surgery and became surgeon-in-chief at the facility. He was a Fellow of the Royal College of Physicians and Surgeons of Canada and of the American College of Surgeons.[29]

Salmon received the African Canadian Achievement Award of Excellence in Medicine in 1994. After his death in 2005, his family established the John Douglas Graham Salmon Award for Black Medical Students at the University of Toronto.[28]

Conclusion

Canada was a haven for American Blacks escaping the antebellum South. Blacks in Canada had educational opportunities not available to them in the United States, notably at the remarkable Buxton Mission School and the century-and-a-half tradition of racially integrated medical education at the University of Toronto.

But racial barriers still existed. Black physicians weren't expected to be more than "a country doctor." As late as 1960, Salmon still had to seek postgraduate training in surgery across the border in the United States.

With the same energy they exerted to overcome educational barriers in medicine, Canada-educated Black surgeons started hospitals (Fitzbutler, Mossell) and medical schools (Fitzbutler) open to Blacks. They were active in racial politics at all levels and types, from membership on local councils and committees (Abbott, Sr.; Shadd) to conventional national politics (Riley), quixotic campaigns for Black nationalism (Delany), and international misadventures in Nicaragua (Rapier).

Combating racism continues in Canadian medical education today. The 2020 medical class valedictorian at the University of Toronto was a Black woman, Chika Oriuwa.[30] Its entering class of 2024 has 24 Blacks among its 260 students.

Note: Dr. Catherine Slaney, a co-author of this chapter, is Anderson Abbott's great-granddaughter and Wilson Abbott's grandniece.

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Legends

1. Buxton Mission School. Buxton National Historic Site and Museum.

2. Alexander R. Abbott. Oblate Sisters of Providence.

3. Jerome R. Riley. Public domain.

4. John H. Rapier, Jr. Anne Straith Jamieson Fonds, Archives and Special Collections, Western Libraries, Western University, London, Canada.

5. Faculty and Founders of the Louisville National Medical College Hospital. National Library of Medicine. Henry Fitzbutler is center, third row from top.

6. Charles V. Roman (seated), about to perform the first operation at the George W. Hubbard Hospital, 1910. Meharry Medical College Archives.

7. Alfred S. Shadd. The Melfort & District Museum, Melfort, SK.

8. Douglas Salmon. Toronto *Star*.

James McCune Smith: Medical Doctor, Anti-Slavery Leader, and Prominent Intellectual

Petros C. Karakousis, MD

Figure 1

No man in this country more thoroughly understands the whole struggle between freedom and slavery, than does Dr. Smith, and his heart is as broad as his understanding.[1]

—Frederick Douglass

Largely overlooked by historians, Dr. James McCune Smith (1813–1865, Figure 1) played a major role in the struggle for racial equality in antebellum America. As the first professionally trained Black physician in the United States, McCune Smith served as the medical director of New York City's Colored Orphan Asylum for more than 20 years, caring for hundreds of poor children until it was burned down by an angry mob in 1863.

In addition to being a first-rate physician, McCune Smith was a leading abolitionist and preeminent essayist, drawing on his training in medicine and statistics to debunk common misconceptions about race, intelligence, medicine, and myriad social constructs. Well ahead of his time, he envisioned a society based on the unity of the human race,

in which "...the colored people will act just like any other men placed in their circumstances, and therefore will attain high influence in the destiny of our common country."[2]

Early Years and Medical Training

McCune Smith was born on April 18, 1813, to Lavinia, a self-emancipated bondwoman who had been an enslaved woman in Charleston, South Carolina and moved to New York City. The identity of his father, who by most accounts was white, remains controversial. In personal letters, McCune Smith states he came from "doubtful parentage" and acknowledges having "kindred in a southern state, some of them slaveholders, others' [sic] slaves," suggesting that his father enslaved people.[2] His medical school application listed his father as Samuel Smith, a New York merchant, but this may have been fabricated to meet enrollment requirements.

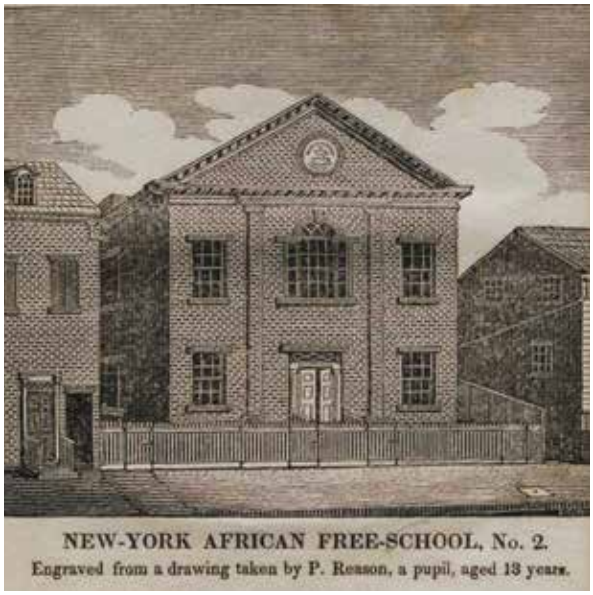

Figure 2

McCune Smith was educated at African Free School No. 2 in New York City (Figure 2). Founded in 1787 by members of the New York Manumission Society, including Alexander Hamilton and John Jay, the school's mission was to provide education to children of the enslaved and free people of color. As the top student of his class, McCune Smith was selected by the headmaster, Charles Andrews, to deliver the welcome address to one of the most venerated public figures of the time: the Marquis de Lafayette. The French aristocrat and Revolutionary War hero was also a member of the New York Manumission Society and was visiting the school during his final tour of the U.S. in 1824-1825. In a speech addressed to Lafayette and given before 450 schoolmates, the 11-year-old McCune Smith expressed

> *...sincere and respectful gratitude to you for the condescension you have manifested this day in visiting this institution, which is one of the noblest specimens of New York philanthropy. ...and while it will be our pleasure to remember the great deeds you have done for America, it will be our delight also to cherish the memory of General Lafayette as a friend to African emancipation, and as a member of this institution.*[2]

McCune Smith was officially freed from bondage at the age of 14 years. The New York State Gradual Emancipation act of 1799 granted freedom to all male children born to mothers who were enslaved after July 4, 1799, but only after serving their masters until the age of 28 years. A subsequent abolition law passed in 1817 effectively terminated slavery among state residents on July 4, 1827. On this occasion, McCune Smith felt instantly transformed, having lived in the "gloom of midnight, dark and seemingly hopeless, dark and seemingly rayless," and suddenly facing the "joyful light of day."[2]

Under the tutelage of the headmaster, McCune Smith learned spelling, penmanship, grammar, geography, and astronomy, but, perhaps most invaluably, the conviction that Blacks were as smart and capable as everyone else, and that the higher walks of life were within their reach. During his studies, McCune Smith labored six days a week as a blacksmith to earn a living, leading one of his friends to remark that he was always "at a forge with the bellows handle in one hand and a Latin grammar in the other."[2]

After graduating from the African Free School with honors in 1828, McCune Smith was tutored further by Rev. Peter C. Williams, Jr., also a graduate of the African Free School and the second Black priest to be ordained in the Episcopal Church. Williams, who is widely recognized as having helped hundreds of Black students during his life, taught Latin to McCune Smith and encouraged him to apply to medical school. However, McCune Smith was denied entry to U.S. medical schools based solely on his race. Drawing on his connections in Scotland, Rev. Williams secured admission for McCune Smith at the University of Glasgow, the prestigious institution that had produced such luminaries as James Watt, the engineer and mathematician, and Adam Smith, the renowned moral philosopher and economist. Rev. Williams and other benefactors from the African Free School provided McCune Smith with money for the overseas trip and his medical education.

McCune Smith's arrival in the United Kingdom shortly preceded the Parliamentary Slavery Abolition Act of 1833, which expanded the jurisdiction of the Slave Trade Act of 1807 and outlawed the purchase or ownership of slaves throughout the British Empire. Upon disembarking in Liverpool, McCune Smith became acutely aware of the boundless possibilities awaiting him, remarking in his journal, "I could embrace the soil on which I now live, since it yields...a greater amount of rational liberty than is secured to man in any other portion of the globe."[3]

McCune Smith's departure from New York City proved to be timely, as racial tensions were running high there, culminating in a three-day riot in July 1834, in which mobs fearful of racial equality destroyed the home and church of Rev. Williams and set fire to the African Free School.

A charter member of the Glasgow Emancipation Society, McCune Smith quickly earned a reputation among his white peers as a brilliant and dedicated scholar. He studied a variety of disciplines for his bachelor and master of arts degrees, ranging from Latin and Greek to moral philosophy and practical astronomy. His medical school requirements included courses in anatomy, chemistry, medical procedures and practices, midwifery, surgery, and botany.

At the Royal Infirmary, McCune Smith completed a 12-month clinical clerkship led by renowned epidemiologist Robert Perry. After spending several months doing clinical work in Paris, McCune Smith took a two-hour oral exam before the medical school faculty and passed with honors.

Apropos of his later writing and political activism, McCune Smith was also a beneficiary of Scottish Enlightenment philosophy, which emphasized empiricism and inductive reasoning, and valued virtue and practical benefit for the individual and society as a whole. During his years in the University, he experienced an unparalleled sense of academic and social equality. The only documented instance in which he faced differential treatment on the basis of his skin color came upon the return voyage to New York, when the American Captain Bigley of the *Canonicus* insisted that McCune Smith travel in steerage. Only after the intercession of his white friends and colleagues at the Glasgow Emancipation Society was he allowed to sail home as a cabin passenger.

Within a few years of his return to the U.S., McCune Smith married Malvina Barnet, who was a recent graduate of Rutgers Female Institute, the first chartered women's college in New York City, and the daughter of one of the most esteemed Black families in New York City. Together, they made a home near his medical practice and had 11 children, five of whom survived into adulthood.

Physician and Medical Scholar

Upon his return to New York in 1837, McCune Smith was received as a celebrity by the leaders of the city's 16,000 Blacks. He immediately established a general medical practice and pharmacy on West Broadway, advertising his services in the *Colored American*. These included "Bleeding, Tooth-drawing, Cupping, and Leeching."[4] In addition to treating the area's Black patients, McCune Smith also cared for poor patients of all races. His reputation as an

Figure 3

outstanding physician spread quickly, earning him the respect of leading white physicians and scientists of the metropolitan community.

In December 1846, McCune Smith was unanimously appointed physician to the Colored Orphan Asylum (Figure 3), which was founded by two Quaker women in 1834 to provide housing and care for impoverished Black orphans, many of whom were abused, neglected, or abandoned. Despite his best efforts to improve the health of these children by administering vaccinations against smallpox, reducing overcrowding, and improving ventilation, roughly one in every 20 children died from measles, smallpox, or tuberculosis during that period.

McCune Smith's lofty reputation as a brilliant and dedicated physician did little to prevent him from encountering frequent and often flagrant episodes of discrimination. When he was denied use of the rail service and forced to walk seven miles to and from work, the directors of the Asylum intervened on his behalf and hired a private conveyance. He continued to care for the children at the Asylum until it was destroyed on July 13, 1863, during New York City's Draft Riots (Figure 4). Indignant at a new Congressional law mandating the drafting of young men to fight in the Civil War—and by the clause effectively exempting wealthier men, who could afford to hire a substitute or could pay the $300 (more than $6,600 in today's currency) commutation fee—the working-class rioters quickly turned on the city's Black residents, accusing them of stealing their jobs and accepting lower wages. Apart from the Civil War, the Draft Riots remain the largest racially motivated insurrection in American history and forced President Abraham Lincoln to divert several regiments of militia and volunteer troops after the Battle of Gettysburg in order to quell the violence and take control of the city. Fearing for his family's safety, McCune Smith was forced to move his residence and medical practice to Brooklyn.

McCune Smith distinguished himself from his peers by his scholarly approach to medicine. In 1840, he prepared the first case report by an American Black physician, entitled, "Case of ptyalism with fatal termination." John Watson, an Irish-born surgeon at New York Hospital and consultant on the case, was asked to read the report before the New York Medical and Surgical Society in place of McCune Smith, who was barred from presenting "lest it interfere with the harmony of the young institution."[3]

The report highlights the case of a woman receiving calomel (mercurous chloride) pills, a commonly used laxative at the time. She presented with severe ileocecal pain, which may have been appendicitis or ovarian pain; tongue swelling and 'ptyalism' (profuse salivation), likely due to mercury-induced swelling of the salivary glands; and stomatitis. Following standard medical practices for such afflictions, McCune Smith and Watson blistered the nape of her neck, applied leeches to the submandibular region, and induced bleeding of the tongue through deep longitudinal incisions, which reduced the swelling of the patient's tongue and lips.[3] Notwithstanding the potential iatrogenic harm he may have caused by prescribing a powder containing mercury, and his inability to pinpoint the medical diagnosis prior to the patient's ultimate demise several weeks later, McCune Smith demonstrated an avid willingness to learn from his futile therapies and to disseminate the knowledge gained from this case throughout the broader medical community.

In 1844, McCune Smith published the first medical scientific paper by a Black American physician, a case series in the *New York Journal of Medicine* describing five women with amenorrhea related to opium use and the restoration of regular menses upon discontinuation of opium.[3] Drawing on his Glasgow education in scientific method

Figure 4

and statistics, he also reviewed and re-analyzed the primary medical records of New York orphanages and published an article refuting an earlier report, which had claimed that homeopathic treatments improved childhood mortality rates.

In his writings and in numerous lectures to the general public and to science students, McCune Smith used human skulls, anatomic drawings, and statistical analysis to disprove prevailing phrenological claims that the intellectual capacities of a person could be deduced by measuring the dimensions of the cranium. In response to pro-slavery arguments based on the 1840 census, which reported higher insanity and mortality rates among free Blacks of the North relative to enslaved Blacks in the South, McCune Smith pointed out that annual mortality rates do not reflect longevity without correcting for age, and he constructed statistical tables showing that Northern Blacks were in fact living longer, achieving scholastically on par with whites, and attending church more, while also suffering less from insanity than their enslaved Southern counterparts.

Abolitionist and Intellectual

Having established a highly successful clinical practice, McCune Smith was "not content with obtaining personal financial security, [and] devoted a considerable portion of his time to the cause of his people."[5] In the same year he returned from Scotland, he joined William Lloyd Garrison's American Anti-Slavery Society, a precursor to the Liberty Party, which was the first political party specifically committed to ending slavery through nonviolent means. However, by the mid-1840s, he had become disillusioned with the Liberty Party—whose members advocated for "disunion" from the federal government and the creation of a utopian society free of slavery—since he believed they did not share his definition of freedom or his vision of true racial equality. He coined the term "Garrisonism" to describe the disparaging paternalism displayed by wealthy whites who expected Blacks to feel grateful to them while doing very little to actually champion their rights or improve their condition.

In 1846, Gerrit Smith, a wealthy white abolitionist from Peterboro, New York, and founder of the Liberty Party, donated roughly 40 acres of land in the Adirondacks to each of 3,000 poor New York state Blacks, including many members of the African Free School. The intention was to adapt the Jeffersonian ideal of the independent yeoman farmer and establish a thriving Black community, named "Timbuctoo" after Timbuktu, the city in West Africa that most Westerners of the time thought was a myth. Among other benefits, Timbuctoo would allow recipients to become self-sufficient without confronting overt racial prejudice and would enable them to obtain suffrage, as New York state law at the time required Black residents to hold $250 of freehold property in order to vote.

As a prominent member of New York's abolitionist movement, McCune Smith was asked to serve as the principal trustee to distribute deeds to the recipients. This settlement was well in line with his own convictions, because, unlike other activists of the time who advocated for emigration of American Blacks to Canada, Liberia, and the West Indies, McCune Smith believed that the only way to overturn slavery and achieve racial equality was for Blacks to forge change from within the system, without leaving the country of their birth. He did not view the Constitution as a pro-slavery document, as did Garrison and other members of the Liberty Party, but rather as a natural offspring of the Declaration of Independence, which proclaims that all men are created equal and are endowed with certain unalienable rights.

The political events of the 1850s served to radicalize McCune Smith and many of his fellow abolitionists, and they officially adopted the use of force to achieve their desired reforms. Congress passed the Fugitive Slave Law as part of the Compromise of 1850, brokered by Senator Henry Clay to reconcile the interests of Southern slaveholders with those of Northern Free Soilers. Designed to appease the growing secessionist sentiment in the South, the law sanctioned the kidnapping and enslavement of freed Blacks, sparking a decline in New York City's Black population. Subsequently, the Kansas-Nebraska

Act of 1854 repealed the Missouri Compromise of 1820, opening the northern territories to slavery. Finally, in the infamous Dred Scott decision of 1857, the U.S. Supreme Court ruled 7-2 against Scott, who had brought forth a lawsuit for his family's freedom on the grounds that they had lived for four years in the free state of Illinois and the Wisconsin Territory, with the justices declaring that Blacks did not share citizenship rights and therefore could not sue in federal court.

Undeterred by the ultimately unsuccessful experiment of Timbuctoo, McCune Smith and Gerrit Smith joined forces with Douglass and white abolitionist John Brown to cofound the Radical Abolition Party. The Party espoused righteous violence to achieve its stated goals of ending the sin of slavery and bringing to fruition a Biblically preordained society of morals.

In June 1855, as the first Black American to chair a national political convention, McCune Smith gave a moving keynote address to the inaugural gathering of the Radical Abolitionists in Syracuse, New York, in which he maintained that the party's members were "God's disciples, destined to carry out God's plan...until all the soil [in the country] shall be consecrated to human freedom."[8]

In case there was any ambiguity as to the meaning of this call to action, John Brown, quoting Hebrews 9:22, reminded the delegates that "without shedding of blood there is no remission of sin," and proceeded to collect 60 dollars for the purchase of muskets, pistols, and bayonets to fight slaveholders in the Bleeding Kansas conflicts.[1]

The espousal of violent means to achieve their goals proved to be the undoing of the Radical Abolitionists, culminating in Brown's ill-fated raid on the federal arsenal at Harpers Ferry to liberate enslaved persons in 1859, an event that sent Brown to his execution and Gerrit Smith to the insane asylum. Although the Radical Abolition Party won few votes and never elected a candidate to office, the friendship forged between these two white and two Black men represented an unprecedented interracial allegiance that foreshadowed the Civil War.

For McCune Smith, emancipation was only a first step toward his ideal of the "eternal equality of the Human race." In order for Blacks to achieve social status equal to whites', he believed that first, "the heart of the whites must be changed, thoroughly, entirely, permanently changed."[1] According to him, this change of heart could only come about if whites understood what it was like to be Black, and this formed the motivation for much of his subsequent writing.

Douglass, who considered McCune Smith the most important Black influence on his life, asked him to write the introduction to his book, *My Bondage and My Freedom*, published in 1855. In addition, Douglass invited McCune Smith to become the New York correspondent of his new newspaper, *Frederick Douglass' Paper*, in which McCune Smith was given free rein to write on any topic of his choosing.

In a departure from the conventional dispassionate style of his scientific works, McCune Smith's often witty and ironic short pieces for Douglass's paper were in the form of letters directly addressing Douglass and signed with the pseudonym "Communipaw," an interracial community of Africans, Lenape Indians, and Dutch settlers in New Jersey that had served as a literary inspiration for Washington Irving. In these essays, McCune Smith highlighted the examples of successful interracial and integrated communities around the world, lampooned hypocritical "anti-slavery reformers," and exhorted solidarity and self-help among Blacks, most of whom face different oppression based on geographical location and skin tone.

Although many whites and Blacks, including Douglass, used the standard of the day to support Republican Party candidates in the late 1850s, McCune Smith argued in his essay "Horoscope" that, judged by the higher standard of "human brotherhood,"[2] Republican candidates such as Horace Greeley outwardly opposing the spread of slavery but nevertheless "...avowed, in coarse terms, his belief in the inferiority of the negro to the white man, and his disgust at the idea of social commingling with his black brother."[2]

Some of McCune Smith's essays extolled the virtues of prominent Blacks, such as Aaron Roberts, a former enslaved person who, without formal training, became a systems design engineer and invented an apparatus that allowed firefighters to expel water at the flames of tall buildings. However, while many prominent Black luminaries (including Douglass) wished to highlight the lives and achievements of distinguished Black members of society in their publications, McCune Smith believed it was not necessary to seek approbation by the established white cultural authority in order to advocate for the ideals of racial freedom and equality for all Blacks.

Rather than adhere to the writing conventions of white intellectuals, in his later years, McCune Smith's essays turned more subjective while avoiding the sentimentalism that was common for the time. He began experimenting with Black dialect and fragmented narrative long before these literary techniques became fashionable. In a series of 10 biographical portraits entitled "Heads of the Colored People," he described nameless Black working-class men and women as they were, with all their virtues and their vices, using their profession as a window into their character.

While Douglass and others argued that menial labor debased the status of Blacks in society, McCune Smith believed that manual work required enormous intellectual skill and energy and that the line between artist and artisan was often blurred, as in the case of the whitewasher, who, "with brush fastened at the end of a ten foot pole, strikes the lofty ceiling with swift and even strokes, and draws parallels as perfect some 60 or 70 feet long, without break or wave or scratch of any kind."[2] He held the self-made man in high esteem and portrayed the downtrodden of society as often more enlightened and virtuous than the rich and famous.

In "The Boot-Black," McCune Smith lauds the simple shoe-shiner, who rises from slavery and, through hard work and moral virtue, is able to purchase a "fine property in sight of the manor" and raise a daughter who is "well skilled in English, French, Drawing, and Music, and supports herself by teaching a private school of her own."[2]

Far from being an artless laborer lacking grit, McCune Smith's washerwoman gracefully carries out her work to the syncopated beat, "Dunk! Dunk!" while displaying great strength and determination as her hand and wrist "... swell up with knotted muscles and bursting veins...and [her] eye and brow [are] chiseled out for stern resolve and high thought."[2]

In "The Destiny of the People of Color," McCune Smith anticipated the profound influence that Blacks would have on American culture in the 20th century, including in music, literature, and the performing arts.[2] Although he became less active in his medical profession in the early 1860s due to a deteriorating heart condition, McCune Smith remained the heart and soul of New York's Black community, and the back room behind his medical office continued to serve as the "rallying center," which was "visited daily by men, young and old [who] held discussions and debates on all topics of the day."[4]

Until his death, McCune Smith vigorously advocated for Black rights and continued to organize conventions in New York City and Philadelphia to promote the education of Blacks, to repeal the New York State Black suffrage restriction, and to overturn the apprenticeship programs enacted in many Southern states after the Emancipation Proclamation of 1863, arguing they were merely a form of serfdom and incompatible with racial equality.

On November 17, 1865, seven months after Robert E. Lee's surrender to Ulysses S. Grant at Appomattox, Virginia, essentially ending the American Civil War, McCune Smith died of heart failure at the age of 52 years.

The Legacy

Several factors may explain why McCune Smith, a prominent physician, abolitionist, and intellectual, is not as widely recognized as some of his peers. He lacked the charisma and oratorical skills of Douglass. McCune Smith's preferred medium—the

essay, published primarily in Black newspapers of the time—lacked the readership and longevity of Douglass's autobiographical books.

According to Dr. John Stauffer, professor of African and African American Studies at Harvard University, McCune Smith was "well ahead of his time and he did not pander to the general public."[6] His erudite style and frequent use of foreign words was out of reach for many, including Douglass, who often did not grasp their meaning.

It is likely that McCune Smith's descendants, who were lighter in skin tone, followed the centuries-old practice of living and marrying "on the white side of the color line"[2] in order to escape racial prejudice. In an interesting twist of fate, only recently did Greta Blau, McCune Smith's great-great-great-granddaughter, make the connection with her ancestor while writing a term paper on the Colored Orphan Asylum for an African American history course at Hunter College. She initially wondered whether this was the same man whose name was inscribed in the family Bible belonging to her 90-year-old grandmother. Her first response was, "But he was Black. I'm white."[7] After a slow process of checking censuses and cemetery records, when Blau got the last piece of information confirming her ancestry, she felt "disbelief, pride, excitement, confusion—it was like I had won the lottery."[8]

On a cold and rainy spring day in 2005, Blau visited Brooklyn's Cypress Hill Cemetery, the site of McCune Smith's grave, but was dismayed to discover only an old and nameless stone, lying face down in the turf of the family plot. In 2010, 145 years after his death, McCune Smith's descendants gathered at the site of his grave to dedicate a new tombstone in his honor. In the words of Greta Blau, "James McCune Smith is a name that every American ought to know, but few do."[2]

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Alexander Thomas Augusta: Surgeon to the Union Army, Teacher and Human Rights Activist

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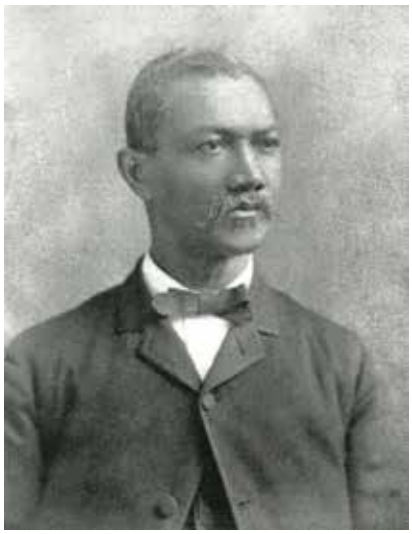


Figure 1

Commissioned surgeon of colored volunteers, April 4, 1863, with the rank of Major. Commissioned regimental surgeon on the 7th Regiment of U.S. Colored Troops, October 2, 1863. Brevet Lieutenant Colonel of Volunteers, March 13, 1865, for faithful and meritorious services—mustered out October 13, 1866.[1]

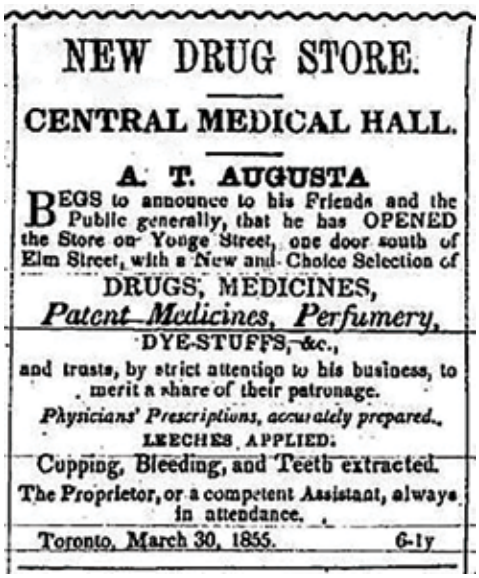
So reads the tombstone of Alexander Thomas Augusta (1825–1890, Figure 1), the first Black surgeon commissioned in the Union Army during the Civil War and the first Black officer-rank soldier to be buried at Arlington National Cemetery. He was also instrumental in founding the institutions that later became the hospital and medical college of Howard University, as well as the National Medical Association.

Education and Early Medical Career

Augusta was born a free man on March 8, 1825, in Norfolk, VA. "He obtained his early education by stealth from [Episcopalian] Bishop Daniel Payne, as it was then against the law to teach colored persons."[2] wrote W. Montague Cobb, professor of anatomy at Howard University and former editor of the *Journal of the National Medical Association*. (Bishop Payne later became the inaugural president of Wilberforce University in 1856.) During his apprenticeship to a barber, Augusta developed an interest in medicine. He moved to Baltimore in the 1840s, where he began studying medicine under private tutors while he supported himself by cutting hair. His ambitions took him to

Philadelphia, where he served an apprenticeship in medicine. He caught the attention of William Gibson, professor of surgery at the University of Pennsylvania, who allowed him to study in his office. Augusta, however, was denied admission to medical school at Penn.[3]

Newly married, Augusta moved to California during the Gold Rush and made money as a barber. After three years he returned to Philadelphia, where he was frustrated in his goal of admission to medical school there and in Chicago. He looked instead to Canada, where he gained an acceptance to the Trinity Medical College of the University of Toronto. He received his Bachelor of Medicine degree, with full honors, in 1856.[3]



NEW DRUG STORE.

CENTRAL MEDICAL HALL.

A. T. AUGUSTA

BEGS to announce to his Friends and the Public generally, that he has OPENED the Store on Yonge Street, one door south of Elm Street, with a New and Choice Selection of

DRUGS, MEDICINES,

Patent Medicines, Perfumery,

DYE-STUFFS, &c.,

and trusts, by strict attention to his business, to merit a share of their patronage.

Physicians' Prescriptions, accurately prepared.

LEECHES APPLIED.

Cupping, Bleeding, and Teeth extracted.

The Proprietor, or a competent Assistant, always in attendance.

Toronto, March 30, 1855. 6-1y

Figure 2

Augusta made a life for himself and his wife in Toronto, a city known for its racial tolerance, where self-exiled Black Americans with ambition could prosper. He established a practice and served as director of the university hospital, as well as physician to an almshouse in the city. To supplement his income, he opened an apothecary where he advertised the sale of "Patent Medicines, Perfumery, Dye Stuffs, etc." (Figure 2).[4] His wife was one of the few women in the city to have her own business—a dressmaking shop on York Street specializing in the latest patterns from London and Paris. Active in Toronto's Black community, Augusta was president of the Association for the Education of the Colored People of Canada, a group that secured funds and supplies for Black schools.[4]

Army Commission

When the Civil War broke out, Augusta was eager to serve the Union as a surgeon. In 1862, he went to Washington, DC, to take the examination for the volunteer medical service but was denied because of his race. The Emancipation Proclamation went into effect in January of 1863 and called for the enlistment of Blacks into the Union Army. Augusta petitioned both President Lincoln and Secretary of War Edwin Stanton, requesting appointment as a surgeon to one of the newly formed Black regiments. The Army Medical Board rejected his application because of his race and the fact that his Canadian residency made him British subject.[3] Augusta convinced the board that he was only in Canada because he had trained there, and he still held U.S. citizenship. On April 14, 1863, at age 38, the Union Army appointed Augusta surgeon to the Seventh U.S. Colored Infantry, the first Black surgeon to receive a medical commission (Figure 3).[3]

Augusta was assigned to Camp Barker, then a rural military installation of one-story structures and tents in northwest Washington, DC, that housed 40,000 emancipated slaves who had been taken from Confederate landowners as confiscated "property," or "contraband." Its dilapidated medical facility was known as the Contraband Hospital, which later was renamed the Freedmen's Hospital, the forerunner to today's Howard University Hospital.[5,6]

Until then, the hospital had been under the exclusive directorship of white surgeons. Augusta arrived in May 1863 as surgeon-in-charge of the Contraband Hospital. A Black executive officer caused a crisis among the white Army staff surgeons who could not reconcile themselves to a Black superior. James J. Ferree, a white contract surgeon at one of the DC Contraband Camps, wrote in a letter of protest to the secretary of war:

Knowing that Dr. Augusta ranked as major and that I ranked only as Captain, I felt at a loss as to assign to duty an officer who ranked me. I referred him to Dr C.B. Webster Surgeon in charge of the Contraband Camp Hospital who being a contract surgeon was embarrassed by the same consideration.[1]

Figure 3

Augusta thus needed surgeons he could count on. As executive officer of the facility, he recruited Black contract surgeons to the hospital, giving them commissions as Union officers: Anderson Abbott (his protégé in Toronto), John Rapier, Jr., William Powell, Jr., William Ellis, Charles Purvis, and Alpheus Tucker.[7]

Augusta was reassigned to Camp Stanton, MD, as senior surgeon in February 1864. Even though the soldiers of the Seventh U.S. Colored Infantry were entirely Black, the medical officers—until Augusta's arrival—were white. Once more, racism regarding the legitimacy of his commission followed him to his new post. Two more white surgeons under his command wrote to President Lincoln, informing him of their "surprise" upon reporting to the regiment to find that the senior surgeon was a "Negro."

But we cannot in any cause, willingly compromise what we consider a proper self-respect; nor do we deem that the interests of either the country or of the colored race, can demand this of us. Such degradation, we believe to be involved in our voluntarily continuing in the service, as subordinate to a colored officer. We therefore most respectively, yet earnestly request that this unexpected, unusual, and most unpleasant relationship in which we have been placed, may in some way be terminated.[2]

Augusta's commanding officer had a different opinion of Augusta. In an order granting Augusta an eight-day leave on January 20, 1864, Brigadier General William Birney wrote that "Surgeon Augusta has worked indefatigably" during his time at the Contraband Hospital.[1]

Incident on a Trolley

En route to testify in a court martial on February 1, 1864, Augusta was delayed when a trolley car conductor denied him a seat inside the car because of this race and tried to make him stand in the open area of the carriage. Documenting the reason for his lateness in a letter to the judge advocate, Augusta wrote:

I have the honor to report that I have been obstructed in getting to the court this morning by the conductor of Car No. 32 of the 14th Street line of the city railway. …I...hailed the car at the corner of 14th and I Streets. It...stopped in front of me and when I attempted to enter, the conductor pulled me back and informed me that I must ride on the front...as it was against the rules for colored persons to ride inside. I told him I would not ride on the front, and he said I should not ride at all. He then ejected me from the platform, and at the same time gave orders to the driver to go on. I have therefore been compelled to walk the distance in the mud and rain and have also been delayed in my attendance upon the court.[1]

Augusta also wrote a letter to the assistant secretary of war:

> *Sir, I have the honor to report your request of this date to forward to the Department an account of the outrage committed upon me by the Conductor of Car No. 32 of the City Railway Co., last week, has been received, and the following are the facts connected therewith: I had been summoned to attend a Court Martial as a witness in the case of Private [Taylor], who was charged with causing the death of a colored man last August, the said colored man having died in the hospital of which I was at the time in charge. I started from my lodgings at the corner of 14th and I Streets, on the morning of February 1st, for the purpose of proceeding to the hospital in order to obtain some notes relative to the case. As my time was short and it was raining very hard at the time, I hailed the car which was passing just as I came out of the door, and it was stopped for me; but as I was in the act of entering, the conductor informed me that I would have to ride on the front with the driver.*
>
> *I told him I would not and asked him [if] I could not ride inside. He stated that it was against the rules for colored persons to ride inside. I attempted to enter the car, and he pulled me out and ejected me from the platform. The consequence was I had to walk the whole distance through rain and mud and was considerably detained past the hour for my attendance at Court. On my arrival, I reported the case to the Court and the President, Col. J. H. Willets informed me that I must make my statement in writing. On the next morning I handed in my written statement and was informed on the adjournment of the Court that action had been taken in the matter, by forwarding my statement to the Adjutant General. There are persons living in the neighborhood who saw the transaction and who can corroborate my assertions. Trusting that something may speedily be done to remedy such evils as those we are now forced to submit to.*[1]

Augusta and his experience with the trolley conductor led to the official integration of Washington's trolleys. Civil War historian James McPherson of Princeton University wrote:

> *Augusta's letter added a strong impetus to Sumner's anti-segregation drive. Sumner read it into the Congressional Globe, and introduced a resolution instructing the senate District of Columbia Committee to frame a law barring street car discrimination in the District.*[8]

The incident was also described by Augusta's mentee, Anderson Abbott:

> *One day [Augusta] being in a hurry to reach the court martial before which he had been summoned as an important witness boarded one of the Pen[n] Ave. Cars. The conductor at once proceeded to put him off. On reaching the Court, he made an explanation why he was late. The Judge Advocate ordered him to submit his statement in writing so he wrote a letter to Senator Sumner of Massachusetts who read it in the Senate.*
>
> *At that time, Washington was not a municipality [;] it was a district entirely under government control. The question was debated in the Senate and an agitation was set on foot for the Abolishment of proscription. Separate cars were established for a time but finally the restriction was done away with altogether. And now the colored people of Washington enjoy the privilege of riding in the street when and where they like.*[1]

Unequal Pay

As with many Black volunteers in the Union Army, Augusta had great difficulty collecting the salary commensurate with his rank. The paymaster in Baltimore, MD, insisted that Augusta should be paid $7 per month, the level of an enlisted Black soldier (the amount paid to a white private was $13) and far less than the $169 paid to a surgeon holding the rank of major.

Augusta rejected the paycheck and fought for a salary level of an officer of his rank, which members of the famed 54th and 55th Massachusetts Colored Infantry did when they discovered their pay was a little more than half what was received by white troops. Augusta took his cause to Senator Henry Wilson (R-MA), chair of the committee on military affairs and a leading opponent of slavery. Wilson wrote a letter of protest to Secretary of War

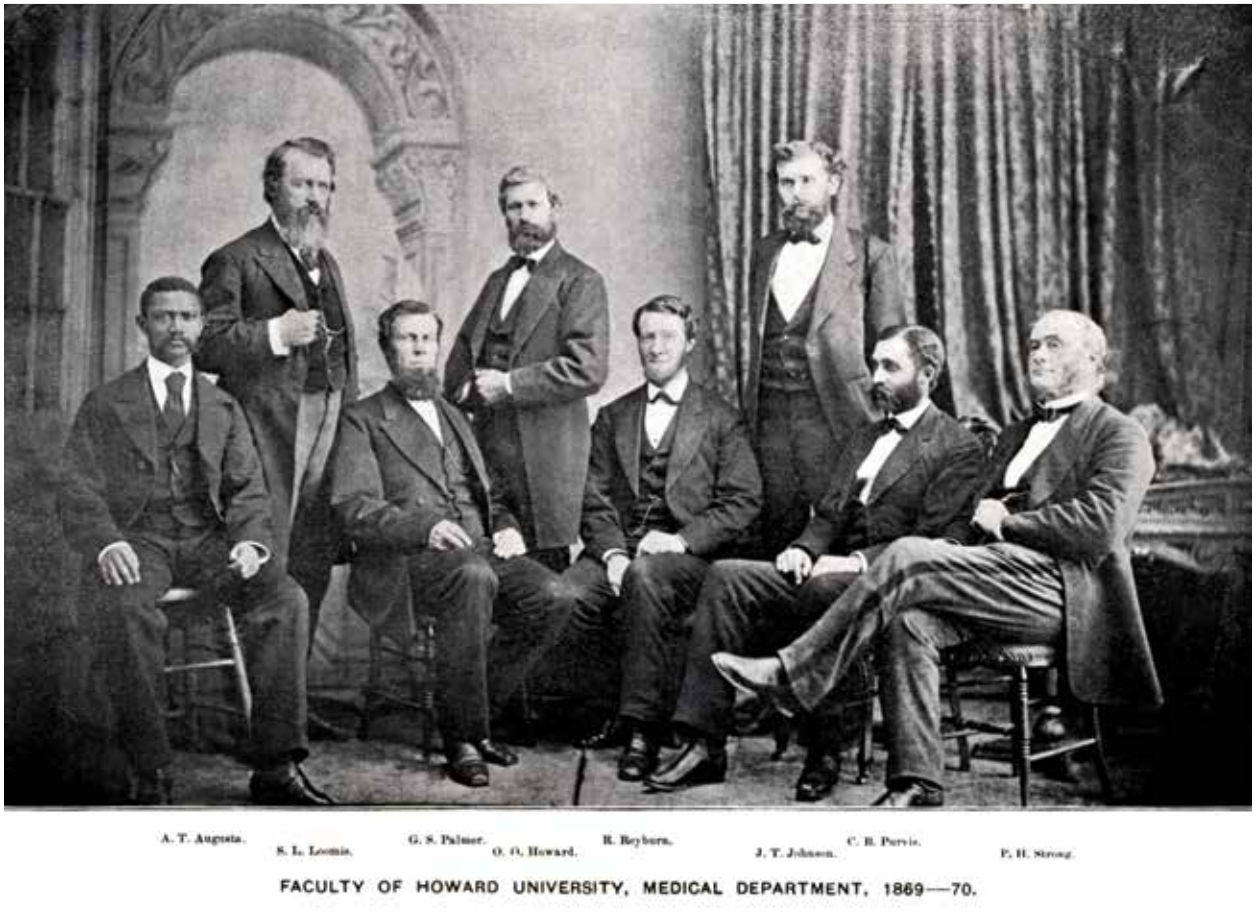


Figure 4

Edwin M. Stanton, who ordered the paymaster general to correct the situation. Major Augusta had to wait until June 1864 for Congress to establish equal pay for U.S. soldiers regardless of race.[4]

Less than a month before the war ended, Augusta received the brevet rank of lieutenant colonel, making him the highest-ranking Black officer in the Civil War. With the end of hostilities, he began work under the medical division of the Bureau of Refugees, Freedmen, and Abandoned Lands as an assistant surgeon, responsible for the Freedmen's Hospital in Savannah, GA.[3]

Howard and the National Medical Society

Augusta was mustered out of the army in October 1866 and returned to Washington. In September 1868, he was appointed to the inaugural five-member medical department of Howard University as a demonstrator of anatomy, the first African American to hold a faculty position at a medical school in the United States (Figure 4). When the university faced financial collapse brought on by the Panic of 1873, he was one of only three faculty members to stay on staff. Reductions in payroll continued to plague the fledgling medical school, but he held on until 1877, when he resigned after being asked to step down as professor of anatomy and take the position in *materia medica* instead.[9]

Augusta's practice in Washington was hampered by his exclusion from the all-white Medical Society of the District of Columbia (MSDC). Its bylaws prohibited its members from consulting with any physician outside its membership. In effect, Black physicians were excluded from practicing in the city. When several of Augusta's patients were taken over by MSDC doctors, he had no way to protest, as he was not a member of the association. Two of his colleagues from his days at the Contraband

Hospital, Charles Purvis and Alpheus Tucker, also had patients taken from them by MSDC members.[2] They appealed to the American Medical Association (AMA). The organization refused to intervene on the grounds that the national organization did not interfere with the affairs of its local societies, nearly all of which were racially restricted.[4]

Augusta wrote a letter to Senator Charles Sumner (R-MA) in protest. In 1870, Sumner introduced Senate bill 511 to repeal the charter of the MSDC on the basis of its discriminatory practices against Black physicians, citing Augusta's experience as evidence. Sumner introduced his bill four times; each time, it was passed over.[10]

An interracial group of white and Black physicians associated with Howard formed in 1870 a racially integrated rival group, the National Medical Society (NMS). Robert Reyburn, the white professor of surgery at Howard and surgeon-in-chief at Freedmen's Hospital, was named president; Augusta served as one of the association's two vice presidents.[4]

The AMA held its annual meeting in Washington that year, so Augusta and the NMS used the opportunity to protest the legitimacy of the MSDC. The NMS applied for admission to the national AMA to have equal footing as the rival group. They were soundly defeated by Southern delegates on the basis of the perceived right of professional organizations to set their policies, and by a handful of Northerners who were reluctant to create disharmony within the organization, including Nathan Smith Davis, a highly influential charter member of the AMA and later the inaugural editor of the *Journal of the American Medical Association*.[11]

The result of the AMA's decision to allow one of its societies to exclude Blacks from its membership was that it legitimized the practice throughout the South. Each year, Reyburn, Augusta, and their supporters in the NMS continued to apply for recognition by the AMA. Each year, the national organization rejected their application, denying that racism played into its decision but preserving the right of its local societies to discriminate on the basis of race. This policy was maintained by the AMA long into the 20th century, allowing racial exclusion in the powerful organization to persist until the Civil Rights Act of 1964.[11]

Augusta did not become a member of the Medico-Chirurgical Society of the District of Columbia when it was organized as the first all-Black medical society in 1884. Even after the new association was formed, Augusta continued to apply for admission into the MSDC out of a belief that the racial barrier eventually would be lifted and there would not be a need for a segregated society.[10]

Death and Legacy

Augusta died on December 21, 1890, at age 65, and he was buried in Section One of Arlington National Cemetery with full military honors. Augusta is primarily remembered today for being the first Black surgeon in the Union Army and the first Black officer-rank soldier to be buried at Arlington Cemetery.

The inscription on his headstone, reprinted at the beginning or his chapter, has space only for the barest facts and dates of his military career, without acknowledging his place as a pioneer in U.S. military history. In the words of a National Archives workshop, "throughout his life, Dr. Alexander T. Augusta demonstrated the talent, courage and character to overcome racial barriers. He never allowed racism to go unredressed, and he was a model to all Americans for his perseverance and determination in the pursuit of equity."

Augusta was seen by friends and foes as a fighter and champion for the rights of Black Americans. M. Dalyce Newby wrote:

> *In his admiration of his mentor and colleague, Dr. Alexander T. Augusta, Abbott at the same time questioned the actions of Augusta when Augusta openly challenged a system which suppressed the advancement of his race. Augusta had worked hard for his position in society, and although of Afro-American heritage and darker skinned than Abbott,*

he still insisted his freedom, not condescension or favour, should give him the rights accorded to any other free citizen in the United States. He did not hesitate to challenge those who stood in his way.[1]

Acknowledgments

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Martin Robison Delany, Harvard Medical Student and Black Nationalist

Don K. Nakayama, MD, MBA, FACS

In 1851, Martin Robison Delany (1812–1885, Figure 1), the pioneering proponent of Black nationalism, was one of the first three Black students admitted to the Harvard Medical School. They stayed just one term—less than two months—and never graduated. Oliver Wendell Holmes, Sr., dean of the school, succumbed to pressure from white students and faculty and expelled them. The affair was an unjust blow that confirmed to Delany that America would never accommodate his ambitions in life because he was Black.

Figure 1

He concluded that Blacks could only achieve their full potential in a country and society of their own making. Until then he had been a partner with Frederick Douglass in his publication, *The North Star*, in which they advanced Douglass's philosophy of Black self-help and biracial integration. Frustrated with their lack of progress, Delany broke with Douglass in 1849. The Fugitive Slave Law (1850), the Kansas-Nebraska Act (1854), and the Dred Scott decision (1857) canonized racism in the U.S. and confirmed a reality that he experienced directly during his brief stay at Harvard.

The crest of Delany's Black nationalism lasted only one decade, from 1852–1862. The Civil War restored his optimism for a country where Blacks would be equal participants. He received a commission as major in the Union Army, the first Black to command a Black regiment. After the war, he took a conciliatory and integrationist position toward the South, a conversion that conflicted with his previous political positions. He ran for office in South Carolina, became a judge, and decamped from the anti-slavery and pro-Black Republican party (then known as the "Radicals") to align with Southern Democrats (the conservatives of the time).

Delany's story, long overlooked, resurfaced with the rise of the civil rights movement in the 1950s

and 1960s and the contemporaneous development of academic disciplines in Black studies and Black history. He was seen as the ideological precursor of Bishop Henry McNeal Turner, Marcus Garvey, Malcolm X, and the Black Power movement of the late 1960s and 1970s. Delany's unapologetic opposition to white America continues to echo in today's Black Lives Matter movement. Yet his alliance with white Southern Democrats after the war defies easy explanation and continues to vex historians today.

A 1971 biography of Delany written by Victor Ullman was part of his historical rediscovery.[1] Tunde Adeleke, a historian at Iowa State University, gives additional information on Delany's later conversion to integration with the white South.[2] Louis Rosenfeld, a pathologist at the New York University, wrote on Delany's deep disappointment in his rejection from medical school.[3] The synopsis that follows draws from their writings.

Early Life and Education

Delany, a grandson of African princes on both his father's and mother's sides, was born to a free mother and a father who was once enslaved in Charles Town, then in Virginia and today in the far eastern panhandle of West Virginia. Even though they were free Blacks, his family remained subject to Black Codes, state laws that restricted where they lived and travelled and what kind of work they were allowed to do. They had to register every three years to renew certificates of freedom and were denied the right to vote.

As in all slave states, in Virginia it was a crime to educate Blacks, both slave and free. In 1822, the Delany children were discovered "'playing school'" in violation of the law.[4] To avoid arrest, Delany's mother took her children across the Mason-Dixon Line into Pennsylvania and settled in Chambersburg.[4]

Hungry for an education, in 1831, the 19-year-old Delany left on foot for Pittsburgh, where he was taken in by the local progressive Black community. He was taught in a church basement school founded by Reverend Lewis Woodson (1806-1878). When he founded the school, Woodson believed in racial assimilation through education, Christian rectitude, industry, thrift, and temperance. But the poverty of Blacks and their disfranchisement changed his thinking. Woodson began to advocate for separate Black communities independent of whites—at first rural towns in Ohio and Canada, but later a separate Black nation in the British West Indies or Africa. Floyd Miller of the University of Minnesota suggested that the title "father of Black nationalism" rightly belonged to Woodson, and not Delany.[5]

Delany became Woodson's protégé. In 1834, he was active in Woodson's temperance society in Pittsburgh. In 1843, Delany founded a newspaper, *The Mystery*, to enlighten Blacks as to the "mystery" of their condition—the twin evils of racism and slavery—and the means to elevate themselves through moral elevation.[2] He distributed his newspaper over a wide area that included 27 towns in Pennsylvania and through agents in seven states.

Delany therefore was developing a national reputation in 1847 when Frederick Douglass, the most famous Black American of the 19th century, recruited Delany to relocate to Rochester, NY, and serve as co-editor, fundraiser, lecturer, and roving reporter for Douglass's own newspaper, *The North Star*. The partnership only lasted 18 months, as Delany became frustrated with the recalcitrance of Northern Blacks to the abolition of slavery and the unceasing insolvency of Douglass's publication. By early 1849, Delany was no longer with the newspaper.[1]

Medical Career and Rejection by Harvard

In 1833, just two years after he arrived in Pittsburgh, Delany entered an apprenticeship to Andrew McDowell, an abolitionist physician—a bold decision at the time, as there were no practicing Black physicians in the U.S. By 1836, he had a practice as "a cupper, leecher, and bleeder" in addition to pulling teeth.[1]

As Delany worked for *The North Star*, he resumed his studies under Joseph Gazzan, another Pittsburgh physician. After his separation from Douglass,

Delany decided to apply to medical school, following the examples of James McCune Smith (first Black American graduate of a formal medical school, the University of Glasgow, in 1837) and David Jones Peck (Rush Medical College, 1847), the latter another alumnus of Woodson's church basement school.[6] Delany was rejected by the University of Pennsylvania, Jefferson Medical College, and medical schools in Albany and Geneva, NY. With letters of support from 17 members from the white abolitionist medical community, he set out to Massachusetts to seek admission to the Berkshire Medical Institution in Pittsfield.[1,4]

Instead, Delany went on to Boston. He had probably heard that two Black students, Daniel Laing, Jr., and Isaac Snowden, were at Harvard under the sponsorship of the Massachusetts Colonization Society, with the expectation that they would practice in Liberia. With the racial precedent broken, Oliver Wendell Holmes, Sr., dean of Harvard Medical School, accepted Delany for the winter session of 1850 as a 38-year-old medical student. Thus, Delany joined Laing and Snowden as Harvard's first Black medical students.[3]

The presence of Black students sparked an immediate outrage among their white classmates. They petitioned the faculty with a series of resolutions that formally demanded the removal of Delany, Laing, and Snowden:

> *We deem the admission of Blacks to medical lectures highly detrimental to the interests and welfare of the Institution, [and that Black students would] lower its reputation…lessen the value of a diploma from it, and…diminish the number of its students. [Moreover, we] cannot consent to be identified as fellow-student with Blacks; whose company we would not keep in the streets, and whose society we would not tolerate in our houses.*[3]

Delany and his Black classmates were dismissed from Harvard in December 1850 after a vote of the faculty. Among those voting against them were Jacob Bigelow (*materia medica* and clinical medicine), his son Henry J. Bigelow (clinical surgery), John B. S. Jackson (pathological anatomy), and Holmes. In a letter to the Colonization Society, the faculty wrote:

> *[It was deemed] inexpedient, after the present course, to admit colored students to attendance on the medical lectures. …that intermixing of the white and black races in their lecture rooms, is distasteful to a large portion of the class and injurious to the interests to the school.*[3]

Other students at Harvard supported Blacks at the school. They wrote:

> *… [As] students of science, above all, candidates for the profession of medicine, they would feel it a far greater evil if, in the present state of public feeling, a medical college in Boston would refuse this unfortunate class any privileges of education, which it is in the power of the profession to bestow…and they are deeply grieved that at a moment like the present, any portion of their fellow-students should wish to change a policy dictated alike by conditions of humanity and public right.*[1]

Ullman noted that their reference to "the state of public feeling" was the public uproar in reaction to the passage of the Fugitive Slave Act that September. In such a contentious environment, Dean Holmes and the Harvard Medical School faculty waited until the week after Christmas to quietly reject Delany, Laing, and Snowden.[1] They were only four months short of receiving their degrees.

Ullman wrote, "Being denied a chance for that precious degree was the worst blow Delany had ever suffered."[1] Rosenfeld wrote:

> *Delany's personal experience of rejection at Harvard no doubt intensified his alienation from white society. This, together with other unsettling indicators of the times, such as the Fugitive Slave Act, convinced Delany that Blacks in the United States would not be accorded equal status with whites, and that migration was a way out of permanent inferiority and degradation.*[3]

After his dismissal from Harvard, Delany returned to Pittsburgh, where he resumed his modest medical practice. During a cholera epidemic in 1854, he remained in town to provide care at a time when many licensed physicians chose to leave. In

1856, Delany moved his family to Canada, where he opened a medical practice in Chatham, ON, that served the many former slaves in the region.[1]

Nationalist and Emigrationist

Political events in the 1850s only confirmed Delany's impression that Blacks in the U.S. would never be afforded equal status to whites; notable were the 1850 Fugitive Slave Act and the 1852 election of Democrat Franklin Pierce (who promised enforcement the Fugitive Slave Act in return for Southern support), the Kansas-Nebraska Act of 1854, and the *Dred Scott* decision in 1857.

Delany did not think that Blacks could integrate into American society, as Douglass hoped. Liberia was not an option. Like many abolitionists, Delany saw the place as no better than a subjugated colony where the American Colonization Society sent destitute former slaves.

His solution was an independent Black polity. Delany sought an organized migration of committed Blacks with the training in agriculture, crafts, and commerce needed for a successful society.

Delany organized a national convention of Black emigrationists that met in Cleveland in August 1854. Among the issues discussed was the possible location for the new nation. The breakup of the Spanish Empire created opportunities in Central and South America and in the Caribbean. A possible site in Nicaragua was literally gunned down when the U.S. exerted gunboat diplomacy to control the proposed outlet of a trans-isthmus canal project where Cornelius Vanderbilt held a controlling interest.[3]

At the 1858 convention in Chatham, Delany and his group turned to Africa. At the suggestion of Thomas Hodgkin, pathologist and secretary director of the Royal Geographical Society of London, they decided to explore the Niger River Valley as a possible destination.[1,3]

Delany left for Africa in May 1859 and arrived in Liberia in July. Instead of an exploited and listless colony, he found the people successfully engaged in farming, mining, and commerce, a discovery that made him optimistic for his own venture. He was more warmly received in Monrovia than anywhere else in his lifetime.[1,3]

He then traveled along the coast to Lagos and inland to Abeokuta, about 100 km upstream on the Ogun River. There he arranged a treaty with the king and tribal chiefs of the Egba for the right to establish a settlement. The Egba soon backed away from the agreement, unwilling cede any of their land. British missionaries saw Delany's project as meddlesome, as did the British government, which had targeted the area as a potential colony. (Lagos became a British colony in 1861.) A breakout of tribal warfare made Delany's treaty moot.[3]

However, Delany did acquire a deep knowledge of African culture, civilization, and medical pathology. In May 1860, he left Africa for London, where he became a sought-after speaker. Abolitionists hoped Delany's proposal might be a way to end the African slave trade by establishing Christian countries engaged in legitimate international commerce. British textile industries recognized Delany's settlements as an alternative source of cotton, should an American civil war break out.[1]

Delany's adventure in Africa and England kept him an ocean away from John Brown and his raid on the federal armory at Harpers Ferry. In 1858, before Delany left for Africa, Brown visited Chatham to seek Delany's support for a Black settlement of freed slaves in Kansas. Delany accommodated Brown by calling a meeting of Black supporters, several of whom joined Brown's movement. For his part, Delany's voyage gave him an alibi for both the planning and execution of Brown's attack. A later Senate investigation mentioned Delany's name but did not implicate him. He was still in Africa when he heard of Brown's execution.[3]

Still in England during the election of Lincoln and the secession of South Carolina in November 1860, Delany sailed home and arrived in Chatham just before the new year. He lectured widely in the Northern states, occasionally appearing in a dashiki and other ceremonial African dress. He

gave a lecture in Rochester, NY, at the invitation of his rival Douglass, who reported the event in the August 1862 issue of his newsletter, *Douglass' Monthly*:

> *He himself, is one of the very best arguments that Africa has to offer. Fine-looking, broad chested, full of life and energy, shining like polished Black Italian marble, and possessing a voice which when extended to full capacity might cause a whole troop of African Tigers to stand and tremble. …He is the intensest embodiment of Black Nationality to be met with outside the valley of the Niger.*[1]

Civil War

With the attack on Fort Sumter in April 1861, Delany had to decide whether "this was the time to emigrate or the time to stay and fight."[1] Even though he had already recruited several families for his experiment at Abeokuta, the war "completely upstaged his emigration scheme."[2]

The war was an opportunity to crush slavery. As early as October 1861, Delany sought to serve in the war, offering himself as *aide de camp* to Asa Mahan, president of Michigan Union College in Adrian, MI, if the latter would use his position to raise a regiment of volunteers and serve as its general.[7] The Emancipation Proclamation (1863) allowed the widespread enrollment of Blacks into the Union Army. Both Douglass and Delany recruited Black soldiers for the next two years. Among the new enlistees was Toussaint L'Ouverture Delany, Delany's own 18-year-old son, who joined the fabled 54th Massachusetts Infantry Regiment.[1]

Delany wanted a position for himself. In March 1863, he applied for a post as a surgeon but received no response other than his application was "under consideration."[1] (Alexander Augusta was the first Black to receive a commission as surgeon to the Union Army, in April 1863; see Chapter 4.)

Delany pursued and got an audience with Lincoln in February 1865. After a firm handshake, Delany began by pointing out that Black soldiers had acquitted themselves faithfully and well, with the 54th Massachusetts being just the best-known of the many outstanding examples of bravery of Black infantry units in battle. But all of these units were led by white officers.

Lincoln recognized the problem. What Delany proposed was a Black army (*Corps d'Afrique*) commanded entirely by Black officers:

> *This army to penetrate through the heart of the South, and made conquests, with the banner of Emancipation unfurled, proclaiming freedom as they go…keeping this banner unfurled until every slave is free….*[7]

With a notecard of introduction from Lincoln ("Do not fail to have an interview with this most extraordinary and intelligent Black man"[7]) and a brief meeting with Secretary of War Edwin M. Stanton, Delany received a commission as major in the U.S. Army, with orders to help recruit Blacks into several U.S. Colored Infantry Regiments, with the 104th under his command (Figure 3). However, the war ended before his regiment saw action.[3]

Controversy in the Reconstruction South

Delany's first assignment after the war was with the occupation forces in South Carolina as a sub-assistant commissioner in the Freedmen's Bureau in the Sea Islands, providing relief and apportioning 40-acre parcels ("40 acres and a mule") to newly freed Blacks. But Delany also faced former white supporters of the Confederacy, now dispossessed and resentful. From his post, he was squarely between both sides and witnessed the racial volatility firsthand.

Radical Republicans wanted to solidify racial justice, especially Black suffrage, in the postbellum South through the disenfranchisement of ex-Confederates. The states of the Confederacy were subjected to military rule and harsh conditions for re-entry into the Union. Opposing the Republicans were President Andrew Johnson and the conservatives (both Democrats and sympathetic Republicans), whose goals were the restoration of the economic vitality of the former Confederacy


MAJOR MARTIN R. DELANY. U. S. A.
PROMOTED ON THE BATTLE FIELD FOR BRAVERY

Figure 2

and its reintegration into the Union. Significantly, the conservative position was that states held the Constitutional right to set voting rights, potentially giving Southern whites control of the volatile issue of Black suffrage.[8]

Delany took what he saw as a middle path. Emancipated Blacks needed whites as economic partners, he believed. Politically, this meant that Blacks had to take a less aggressive and assertive stance on political rights and power, including temporizing on the issue of the right to vote.

After Delany left the army and the Freedmen's Bureau in 1868, he stayed in South Carolina, where he vigorously advanced his conciliatory position. For their mutual prosperity, Delany envisioned a system where whites held the land and Blacks were a reliable source of labor; whites regained prosperity, and Blacks got economic stability. Political equality and social acceptance would come later. He also supported a full pardon of all ex-Confederate soldiers, which President Johnson issued on Christmas Day, 1868.

It was a utilitarian position at odds with his abolitionist past, and it estranged him from Douglass, the Black political mainstream, and the radical Republicans. "Many Blacks listened with disbelief, wondering if this was the same Delany of antebellum days," wrote Adeleke. "They began seriously to question his professed commitment to Black freedom."[2] Douglass could not believe the transformation. "Were you not Martin R. Delany," he wrote, "I shall have said that the man who wrote this of the colored people of South Carolina has taken his side with the old planters."[2]

History proved Delany tragically wrong. Once approval of a new state constitution allowed the readmission of South Carolina into the Union in 1868, white conservative Democrats conceded rights to Blacks only to the "limit of actual necessity…without sincerity."[2] Through threats and outright violence, whites regained political and social control of the South and excluded Blacks through intimidation. South Carolina especially was roiled by riots instigated by the Ku Klux Klan. Passage of the Ku Klux Klan Act (1871) and federal troops were necessary to uproot the Klan, protect Blacks, and assure their right to vote in the state.[9]

Federal intervention was anathema to southern Democrats, who saw it as a violation of state sovereignty—the same argument they used to justify secession. The opportunity to free themselves from federal control was the highly contested election of 1876, won by Republican Rutherford B. Hayes by a single electoral vote and not resolved until the eve of inauguration in March. As part of the unwritten Compromise of 1877, Democrats agreed not to contest the results on the condition that federal troops be withdrawn from the last remaining states of the former Confederacy where they were still stationed: Florida, Louisiana—and South Carolina.[10]

Henry Adams, a Black Louisianan, wrote, "The whole South—every state in the South—had got into the hands of the very men that held us as slaves."[10] "The negro," wrote *The Nation* at the time, "will disappear from the field of national politics. Henceforth, the nation, as a nation, will have nothing more to do with him."[10] One Republican from Kansas put the matter in blunt terms. "I think the policy of the new [Hayes] administration will be to conciliate the white men of the South," he wrote. "Carpetbaggers to the rear, and n*****s take care of yourselves."[10]

As Delany dallied with the Democrats, he remained politically active in the Republican party, seeking their nominations for U.S. Senate (1870) and lieutenant governor (1874). After his failed bid for the nomination for the latter office, he started a splinter Republican group that only further weakened the Republicans and their alliance with Blacks. Republican Governor Daniel Chamberlain overlooked Delany's duplicity during the election and gave him a patronage job as a trial judge in Charleston.

In 1876, Delany turned his back on Chamberlain by supporting his Democrat opponent, Wade Hampton, for governor, an office that Democrats would hold for nearly a century until a Republican was finally voted into office in 1974. Delany soon lost his judgeship when he was sued for malfeasance

for a transaction he brokered as a land agent after his service with the Freedmen's Bureau.

Delany suspected treachery by his many enemies. Found guilty, he was ruined financially by the time Hampton pardoned him.

He was now bereft of support from the Republicans and Blacks he betrayed, as well as the Democrats, his supposed allies. The latter now controlled the state and had no further use for him. Delany was desperate for any position where he could earn money. He applied for and failed to get positions as minister to Liberia and doorkeeper to the U.S. Senate.

In 1880, without steady work, Delany reunited with his family in Wilberforce, OH, where he resumed a medical practice to help send his children to college. He died, spent of mind and energy, in 1885.

Legacy

In his remarkable life, Delany lived through all the momentous events of Black America of the 19th century. As a child, his mother had to escape the unjust legal strictures of the antebellum South. He was educated by dedicated Black abolitionists and had a business partnership with Frederick Douglass. He founded an ideology of Black separatism that echoes to the present day. He served the Union Army as its first Black regimental officer. As an administrator and politician in the South during the Reconstruction, his embrace of white conservatives in the Democratic party helped dismantle the alliance between radical Republicans and Blacks and remove both groups from power in Southern politics for almost a century.

Delany's enormous skill as a political leader and inspiring speaker made him a dominant figure in Black America, in his prime nearly the equal of the great Douglass. His passion and intelligence made him a formidable advocate for every great cause he embraced, even when he was disastrously on the wrong side, as with accommodation of Southern whites in the postbellum South. Today he is best known for his advocacy of Black separatism and nationalism, a cause that he undertook in earnest when he was unceremoniously expelled from Harvard Medical School, an experience that verified for him that the most exalted institutions of the country were irredeemably racist and that emigration was the only option.

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Legends

1. Martin Delany. Public domain.
2. Delany in uniform, ca. 1865. National Portrait Gallery, Smithsonian Institution.

The Unsung Heroines of the Successful Repair of Postpartum Vaginal Fistulas by J. Marion Sims

Don K. Nakayama, MD, MBA, FACS

Figure 1

One of the signal advances in medicine—the operative repair of a postpartum vaginal fistula by J. Marion Sims (1813–1883, Figure 1)—used trial-and-error experiments on enslaved Black women some of whom underwent dozens of procedures before Sims worked out the elements of an operation that consistently succeeded.[1] His significant achievement was possible only because he tried different versions of closure on enslaved women who had no choice but to submit to Sims's experiments. Living with the smell and discomfort of a constant drainage of urine and stool from their vaginas, however, was a hellish existence for which Sims's surgical experiments gave some hope for relief. Their sacrifice benefitted all women suffering from vaginal fistulas.[2,3]

In all, 14 enslaved women were used by Sims over five years (1845–1849). We know three, and only their first names: Anarcha, Betsey, and Lucy. All of them were teenagers. Harriet Amos Doss, a historian at the University of Alabama at Birmingham, uncovered the small amount known about their lives that follows.[4]

Vaginal Fistulas

Vaginal fistulas frequently develop as a complication of obstructed labor. The unremitting pressure of a baby within the bony pelvis leads to ischemia of the walls of the vagina, bladder, and sometimes rectum. As necrosis progresses, the common wall between the structures can slough and leave a hole between the vagina and the bladder (vesicovaginal fistula), and sometimes the rectum (rectovaginal fistula).

A continuous stream of urine leaks through the opening, irritating and ulcerating the vaginal mucosa and the skin of the perineum. Painful

concretions collect in the folds and recesses of the vagina, adding to the misery. An affected woman's clothes and linen would be constantly soaked with smelly urine, and stool if the rectum was involved. Large fistulas confined a woman to a commode. The social isolation and physical misery drove some women to suicide.

A woman who developed a vesicovaginal fistula was seen as unfit for bearing children and for work in the fields or the household. She faced lifelong ostracism, a lonely and awful fate for a teenager already victimized by slavery.

The Patients

Enslaved women were "the most victimized group in the slaveholding South," forced to work and subjected to rape. In an article in the Harvard Women's Law Journal in 1984, attorney Karen Getman wrote that as property, an enslaved woman had no rights when she was sexually assaulted. Any children that resulted from the rape became the property of the slave owner. A widespread view among whites was that Blacks had a supposed "innate lasciviousness," which they claimed meant there could not be such a thing as rape involving Black women.[5]

Women of child-bearing age were to pick the same 200 pounds of cotton a day expected of men and also to produce offspring at the rate of one every 12 months.[4] After the importation of slaves was banned in 1807, enslaved women became all the more valuable for perpetuating the enslaved population. The growth of the cotton economy in the South fueled an "insatiable demand for slaves and an explosion of the price of slaves."[6] Slave-rearing became a principal source of income for many Southern farmers.

The diabolical economics of slave-rearing obviated any concept of family and husband-and-wife relationships. Mothers proven to reliably produce offspring were prized, fetching a premium price: one-sixth to one-fourth higher than a woman who could not bear children. Children could begin to work in the fields at age eight, so that became the age when they were separated from their mothers.[6] Both men and women were bought and sold as individuals, never as a family unit. Long-term relationships between women and men were therefore uncommon. In the words of Frederic Bancroft, a noted historian of slavery and politics of the South, "many mothers never had husbands but only temporary and changing friends."[6]

Anarcha

Anarcha, aged 17, was one of about two dozen enslaved persons owned by Samuel Wescott, a wealthy Montgomery County cotton planter just a mile outside of town. She probably picked her 200-pound allotment up to the day she went into labor.

Dr. H. W. Henry, the Wescott's regular physician, called for Sims's assistance after Anarcha had been in labor for 72 hours. Arriving from Montgomery, Sims used forceps to extract the child, but by then the damage was done. Five days later, Henry called Sims to tell him that Anarcha had lost control of both her bladder and rectum.

The dogma of the time was that there was no surgical remedy. The area was too sensitive and too high in the vagina. The margins of such fistulas were too friable to hold standard sutures. Invariably they would fail, and the fistula would reopen.

Anarcha's life after that was spent mostly alone and within doors, the offensive odor of urine and stool soiling her clothes and bedsheets, repelling visitors, and isolating her to only her most devoted family members and friends. Anarcha was miserable.

When Sims examined her vagina, he found not only a fistula into her bladder but one into her rectum, as well. He gave Wescott the bad news. "Anarcha has an affection that unfits her for the duties required of a servant," Sims said. "She will not die, but will never get well, and all you have to do is to take good care of her as long as she lives."[8] In Sims's estimation, Wescott was "a kind-hearted man, a good master, [who] accepting the situation, made up his mind that Anarcha should have an easy time in this world as long as she lived."[8]

Betsey

Betsey, aged 17 or 18, was one of five persons owned by Dr. James Harris in Lowndes County, southwest of Montgomery. Since giving birth a year earlier, she showed signs of a vesicovaginal fistula having destroyed the base of her bladder.

Betsey was married to a man from another household.[4] The arrangement was unusual not in that her husband was separated from her, as family separation was the norm. It was unusual in that she was married at all.

Lucy

Lucy, aged 18, was one of about 35 enslaved persons owned by Tom Zimmerman, a planter in Montgomery County. After giving birth two months previously, she had urinary incontinence from a fistula. Zimmerman sought Sims out in Montgomery. While Sims had a practice in Cubahatchee, a small village outside of Montgomery, Zimmerman had contracted him to treat his family and enslaved persons.

Though the doctor had since moved into Montgomery, Zimmerman insisted that their prior agreement still held. Despite Sims's protestations that he had nothing to offer, Lucy arrived on his doorstep, unannounced, within days.

The Physician

Sims's early career did not predict his ultimate success and fame. After his medical studies at the Medical College of the State of South Carolina in Charleston and Jefferson Medical College in Philadelphia, he had difficulty establishing himself. In his first practice in his hometown in Lancaster County, SC, Sims's first two cases were infants who died under his care, one the son of a former town mayor.

Demoralized, Sims relocated to Alabama for a fresh start. Settling in a practice in Mt. Meigs, just east of Montgomery, he became, in his words, "quite a respectable physician, and, I can say, a tolerably successful one."[8] In the midst of his modest success, he began to suffer periodic fevers suggesting that he suffered from malaria and chronic dysentery, which forced periods of prolonged convalescence.

Sims was also restless, yearning for a fortune that he knew he could not get practicing medicine in an Alabama backwater. When he got a fly-by-night offer to enter a partnership selling clothes in Vicksburg, he considered quitting medicine altogether. Fortunately, he had not yet quit his practice when the deal collapsed.

On his way to join his brother-in-law in a more secure medical practice in Lowndes County, AL, Sims settled in nearby Montgomery instead. Once more he had a relapse of his medical ills. After a year's recuperation, he started, in his words, "at the very bottom," caring for enslaved persons, free Blacks, and the town's Jewish community.[8] To accommodate his practice treating those subjugated by plantation owners, he built a small hospital of eight beds in the corner of his yard.

The Speculum

A day after Lucy's unannounced arrival, Sims had seen a white woman who had urgency and tenesmus in her bladder and rectum. Sims performed a vigorous bimanual manipulation of her vagina and rectum with the patient in a prone knee-chest position, trying to reposition what he supposed was a displaced uterus. When she collapsed on her side in exhaustion from the ordeal, her dependent lower extremity straight and the uppermost one still flexed at the hip and knee (the eponymous Sims position), she expelled a large amount of air from her vagina and with relief from her discomfort.

Sims realized that the vagina, if distended with air, might allow a thorough internal exam. He hit on the idea that a broad pewter serving spoon in the vagina might produce the same effect.

Betsey was led into the examination room of the makeshift hospital. He told her to assume the same knee-chest position as his previous patient. Two stout medical students held her buttocks and thighs apart. The serving spoon was pushed into her vagina. Once it was fully in place, Sims lifted it upward.

With the spoon in her vagina, the fistula came into view. Sims saw that he had an opportunity to try to repair it. By bending the spoon at a right angle, an assistant could easily pull it in the desired direction, and the Sims retractor was born (Figure 2).

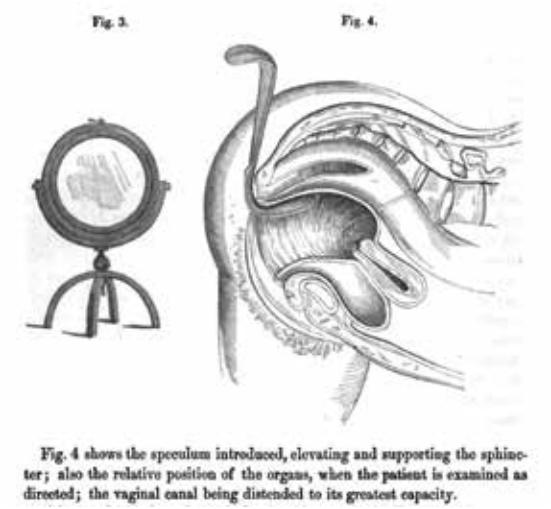

Figure 2

The First Attempt

Steven Kenny, a 21st-century historian at the University of Liverpool, reviewed human experimentation on the enslaved in the antebellum South. Subjugated Black people, already commodities in the American South, were, in his words, "easy targets for ambitious and entrepreneurial white physicians in the slave South."[7] At Southern medical schools, Black persons were used for bedside demonstrations; once dead, their bodies were used for anatomical dissections.

In the name of advancing medical science, enslaved persons were used as subjects for medical and surgical experimentation. Within such a professional environment, Sims had no hesitation on using them for his purposes.

Lucy was chosen for his first attempt at fistula repair. As she entered the examination room, she saw a room full of white men—about a dozen that Sims had invited for the event (Figure 3). As instructed, she got into a knee-chest position to expose her perineum. He pushed the modified serving spoon into her vagina as the strangers watched.

Even though he had special instruments made, Sims had little idea of the technical problems he would face trying to close her defect within the confines of the vagina. Lucy had to stay in position for an hour as he muddled about, trying to close the unexpectedly large defect that involved the entire base of the bladder. After surgery the repair broke down, and again Lucy began to leak urine.

Urinary Catheterization

Sims hypothesized that the bladder had to be empty for the repair to heal. After another attempt at repair of her fistula, a sponge was forced into Lucy's urethra; the end was dumbbell-shaped to hold it in place, and the sponge wicked urine out of her urethra and onto her thighs. While the sponge kept the bladder drained of urine, deposits precipitated onto the surface and inflamed the delicate skin. When he removed it days later, Lucy screamed in pain as he pulled the rough piece of fabric out of her.

Catheterization became a horrific part of the procedure, without the modern benefits of lubricant, antiseptic preparation, and sterility. The women had to withstand irritation and infection of their urethra, bladders, and lower tracts as catheters of varying materials and designs were inserted and reinserted.

Sims concluded that a catheter had to be large enough to allow "mucopurulent secretions" to pass, a sign that all of the women had urinary infections.[1] Left in place for several days, one catheter had stuck fast and had to yanked out. Inch-long shreds of tissue hung off the end of the catheter.

Lucy fell ill with fever after one of her operations, probably from urinary sepsis associated with Sims's crude catheters. Ojanuga quoted Sims: "I thought she was going to die … it took Lucy two or three months to recover entirely from the effects of the operation."[3]

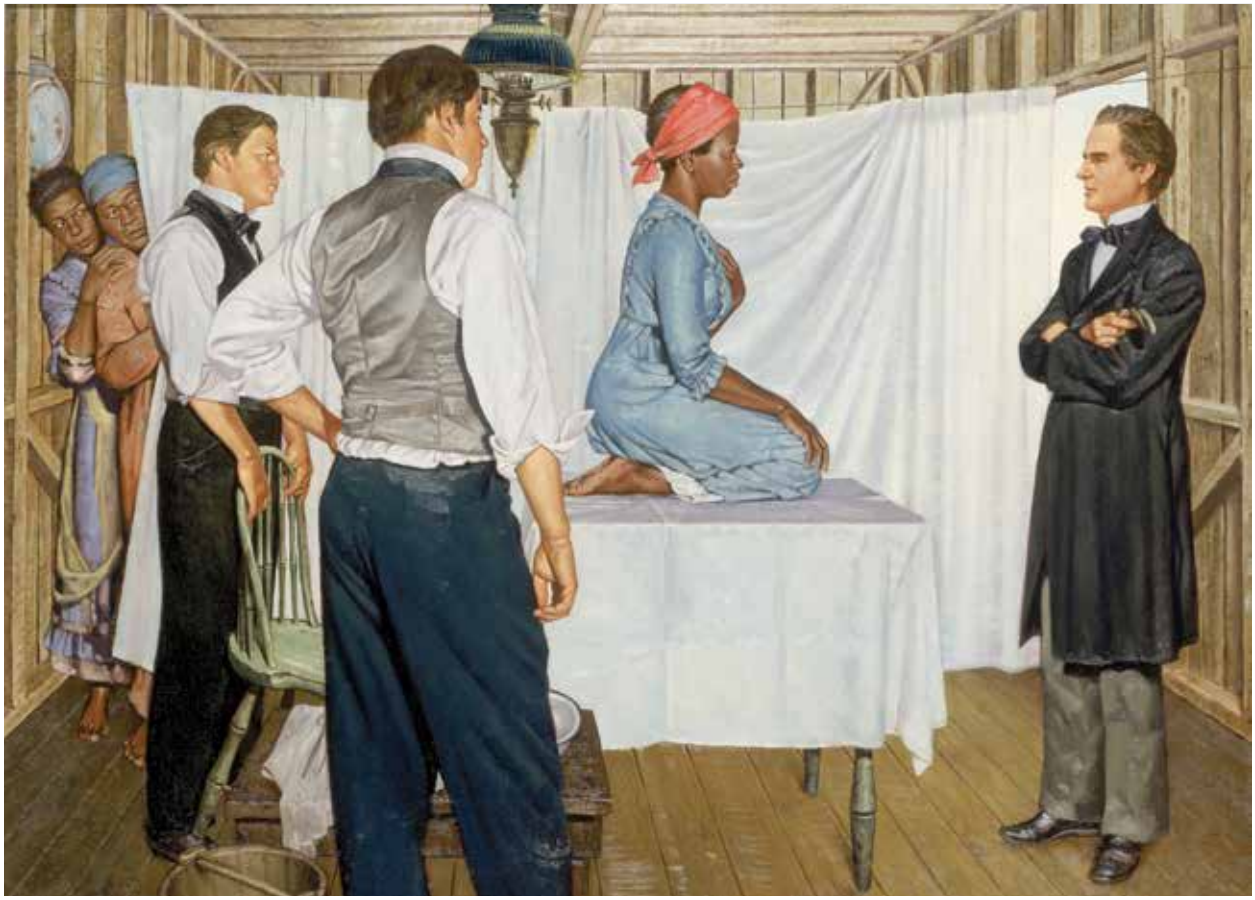

Figure 3

Trial and Error and Success

Anarcha, Betsey, and Lucy needed time to recover from their operations, so Sims arranged to bring in more women with fistulas from other owners. During a visit to New Orleans, he obtained an enslaved woman who had a fistula. He added another story to his small barracks to make room for the new arrivals.

The newcomers learned to steel themselves to remain still as the speculum was inserted and their urethras were cannulated. Despite Sims's assurances that he was getting closer to resolving their malady, each time they suffered disappointment when the repair fell apart. Many of them had more than one procedure; some had dozens.

The men who had observed the first operation tired of Sims's failures and ceased coming to watch and assist him. Now that Sims worked alone, the other women had to hold the speculum and steady the woman undergoing the procedure. For five years they stayed in Sims's backyard facility, waiting for him to call on one of them so he could try out a new instrument or variation on his procedure.

Finally, Sims arrived at a successful series of steps: abandoning silk thread and using silver wire for sutures; trimming the defect to leave a raw edge of fresh tissue that was more likely to heal; bolstering the margins of the defect with a metal bar at each edge so that the ligatures would not pull out; and instead of trying to tie the sutures, securing them by passing the ends through a perforated lead bird shot and then flattening it with a clamp.[1]

The urinary catheter design that worked best was a silver tube curved in an S with perforations on one end to siphon urine out of the bladder. When a

patient could not tolerate being on her knees for a long time, he found that nearly equivalent exposure was achieved with the woman semi-recumbent and chest downward with the uppermost thigh drawn up, a position that would be named after him.[9]

Finally, in May or June 1849, Lucy and Betsey underwent successful operations. In June, Anarcha also was cured—after her 30th operation. Sims had honed his operation to where it took no longer than 20 minutes. The speculum, procedure, catheter, and new positioning created gynecological surgery—work that took five years and the suffering of 14 enslaved women.

Fame and Fortune

Sims reported his operation in 1852, but as was his habit, he had long ago left Montgomery. Just six weeks after his successful procedures, he suffered a recurrence of his dysentery. With his weight falling to 90 pounds, he moved to New York City, a climate he thought was more commodious to his health. He sold all his possessions, including the one woman he bought in New Orleans.

He performed his operation on the other women in his hospital, then returned them to their owners.[3] Nothing is known of any of their subsequent lives.[4]

Sims got the riches and fame that he had long sought. In the North, he built a successful practice by performing on middle- and upper-class white women the operations he had devised on Black women in the South. He went overseas and maintained offices in London, Paris, and Berlin.

In 1857, the New York Academy of Medicine asked him to give its "Annual Discourse" on his operation, which was later printed as a monograph titled *Silver Sutures in Surgery*. Sims did acknowledge Lucy, Betsey, Anarcha, and the other women upon whom he refined his operation and its aftercare. He did not, however, mention their names or the fact they were enslaved. He wrote:

> *To the indominable courage of these long-suffering women, more than to any one other circumstance, is the world indebted for the results of these persevering efforts. Had they faltered, then would woman have continued to suffer from the dreadful injuries produced by protracted parturition, and then should the broad domain of surgery not have known one of the most useful improvements that shall forever grace its annals.*[10]

Consent Under Slavery and the Use of Anesthesia

L. Lewis Wall, a gynecologist at Washington University in St. Louis who wrote on the ethics of Sims's experiments, points out that the enslaved women's ordeal was mitigated by the desperation of having a vesicovaginal fistula. He wrote:

> *These patients, even though they were enslaved, would have jumped at the opportunity to have surgery. That patients with a vesicovaginal fistula are desperate for a cure and will willingly submit to almost any therapy that is proposed to them is the universal experience of surgeons who have worked with the condition, both in the 19th century and today.*[2]

Sims obtained permission from the women themselves, even though (because they were considered property) he could have proceeded without it. He wrote:

> *I [agreed] to perform no operation without the full consent of the patient, and never to perform any that would, in my judgment, [jeopardize] life, or produce greater mischief on the injured organs—the owners agreeing to let me keep them (at my own expense) till I was thoroughly convinced whether the affection could be cured or not.*[9]

In her discussion of the ethics of Sims' work, however, Durrenda Ojanuga of the University of Alabama wrote that "the enslaved women … were totally without any claims to decision-making about their bodies or any other aspect of their lives … permission was obtained from their masters."[3]

His work in Alabama from 1845–1849 followed with Crawford Long's 1842 discovery of ether anesthesia in the neighboring state of Georgia. However, Sims may not have known about ether anesthesia, as the first public demonstration took place in 1846 in faraway Boston, and Long's first publication on the topic did not appear until 1849.

In the written version of his address before the New York Academy of Medicine Sims wrote that he never used anesthetics for his fistula operations "because they [were] not painful enough to justify the trouble, and risk attending their administration."[10] Wall noted that Sims made his presentation when he was in New York, attending to a clientele of middle- and upper-class white women. His denial of anesthesia therefore was not so much racist as sexist.

The undoubted benefit of Sims's work arose from the tragedy of American slavery, a historical fact that has led to the recent removal of his statue from Central Park in New York City and of his portrait from the University of Alabama at Birmingham.

Ojanuga addressed how Sims should be remembered today. She noted the argument of others that Sims was "a man of his time and should not be judged by present-day standards."[3] But she pointed out that two other surgical advances were performed by rural practitioners in the American South on white patients, the first elective laparotomy (1809) and the discovery of ether anesthesia (1842), monumental achievements that arguably exceeded Sims'. Since both Black and white were at risk for the complication of vaginal fistula, Sims had his choice on whom to test his operations. That he chose enslaved Black women revealed that he was indeed a man of his time.

This chapter chronicles only one episode of the deeply troubling history of human experimentation on Black Americans. Lucy, Anarcha, Betsey, and 11 other women had no choice but to submit to Sims' painful procedures. They personify centuries of medical injustice that started with the importation of enslaved Africans in Jamestown Colony in 1619 and continues as the present-day racial disparities in health outcomes. In recognition of their suffering and subjugation, this chapter and the entire volume that contains it are dedicated to them.

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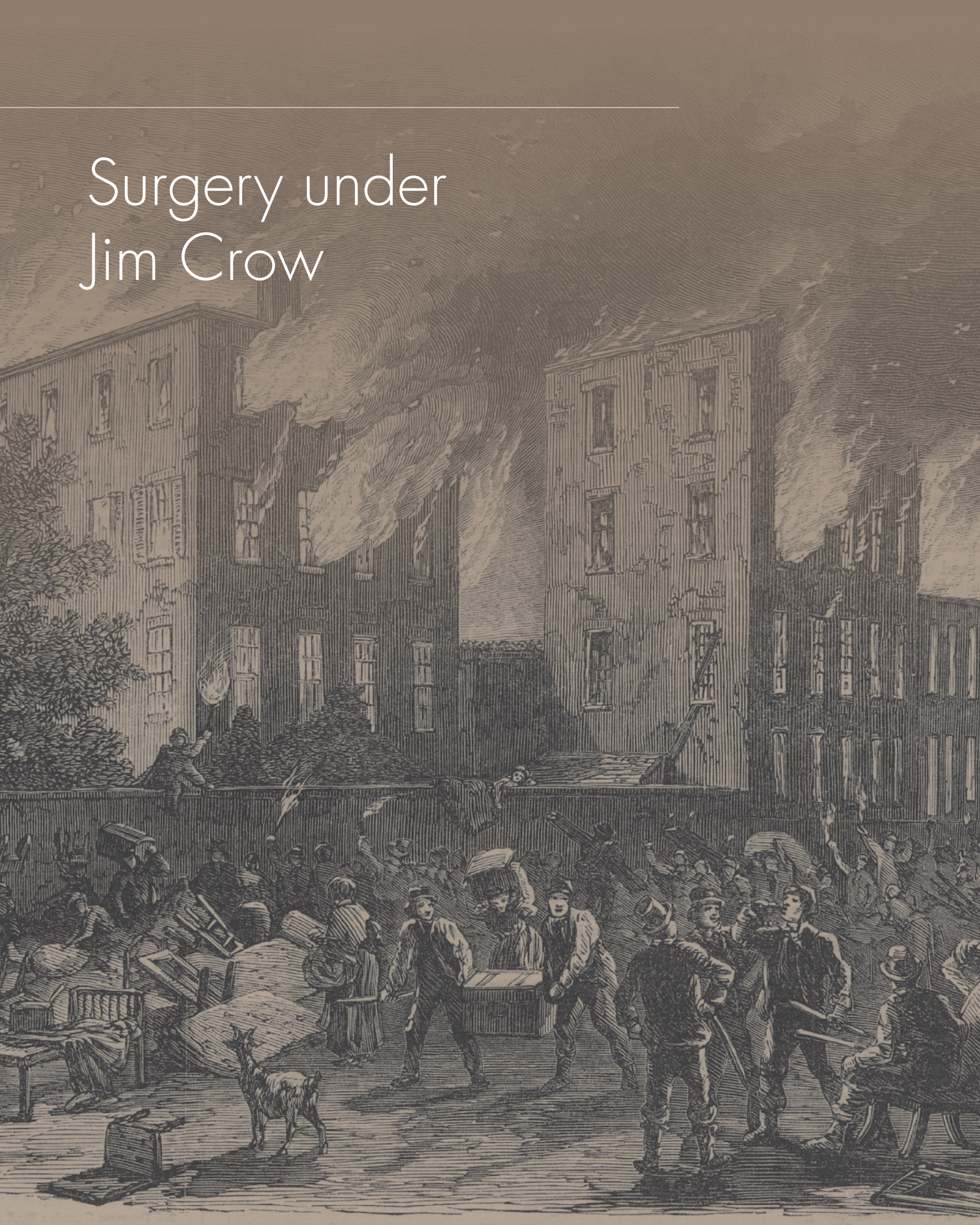
Legends

1. J. Marion Sims. National Library of Medicine.

2. Sims retractor in place, opening the vagina and exposing the fistula. From reference no. 1. Public domain.

3. Depiction of J. Marion Sims at right, with Lucy. Anarcha and Betsey are at far left. Robert Thom (1915–1979). J. Marion Sims: Gynecologic surgeon, from "The History of Medicine." From the collection of Michigan Medicine, University of Michigan, UMHS.30.

Surgery under Jim Crow



Medical Practice and Jim Crow

Peter J. Kernahan, MD, PhD, FACS

This chapter examines the experiences of Black doctors during the Jim Crow era (c. 1890–1965). This rigid system of racial segregation was established throughout the South between 1874—when the last federal troops withdrew from the region—and 1896, when the Supreme Court decision *Plessy v. Ferguson* legitimized the "separate but equal" fiction. Enforced through law, custom, economic pressure, and violence, African Americans were denied basic rights, opportunity, and education. Not confined to the South, discrimination and de facto segregation extended into the North despite nominal equality.[1] Tensions and racism in the North were heightened as the Great Migration, from 1917 onward, brought millions of Black Southerners to Northern and Midwestern industrial cities.

Jim Crow became the environment in which the first substantial generations of Black physicians practiced. Their numbers grew from 909 in 1890 to 3,495 in 1920 to about 4,000 in 1947, with the majority practicing in the South.[2,3] This chapter will look at the challenges of practicing medicine between the 1890s and the 1950s, first in the South and then in the North. A section on Black physicians and organized medicine during this period follows. Bookending these sections will be short discussions of Reconstruction and the Civil Rights era.

Reconstruction

"My mind centered upon Richmond, the capital city of Virginia, as the proper field for missionary work," wrote Dr. Rebecca Crumpler of Boston.[4] Crumpler, the first Black woman physician, would spend the last three months of 1866 in Richmond, with a few other Freedmen's Bureau physicians, caring for "over 30,000 colored." Crumpler's brief description captures the enormity of the task of even attempting to provide care for roughly four million newly freed individuals displaced across the South. They faced a humanitarian crisis in which, according to historian Jim Downs, perhaps tens of thousands died of disease and hunger.[5] The federal response, the Freedman's Bureau and its Medical Division, attempted to address their needs. Created by Congress on March 3, 1865, and continued by a second bill passed over President Johnson's veto in 1866, the Bureau established hospitals and rural dispensaries throughout the South.[6] Short-lived, the Bureau's activities ended January 1, 1869. At its peak the Bureau employed 118 physicians and 406 hospital attendants.[6] Unsurprisingly, the Bureau's actions were hampered by the sheer scale of the challenge, racial assumptions of Black inferiority, and the prioritization of creating a labor force.[5]

The subsequent withdrawal of the Freedmen's Bureau left only a handful of regularly trained

Black physicians in the South. Of those who had served in the US Army during the war or with the Bureau, most returned to the North, including Crumpler. A few, however, remained in the South. Dr. Joseph Dennis Harris, who had attended Western Reserve's medical department and commanded the Freedmen's Hospital in Portsmouth, VA, remained in Virginia and became active in politics.[7] Martin Delany and Benjamin Boseman, a graduate of the Maine Medical School, both remained in South Carolina and entered political life; Delany later returned to Ohio, while Boseman would stay in the South until his death.[8] Louisiana native Louis Charles Roudanez graduated from the University of Paris in 1853 and obtained a second degree from Dartmouth in 1857. He returned to practice in New Orleans after the war.[7]

Although harder to document, apprentice-trained physicians may also have entered practice after emancipation. As discussed in an earlier chapter, some enslaved individuals apprenticed with physicians. Moses Camplin of Charleston, SC, is one example documented by historian Gretchen Long. As an enslaved person, Camplin apprenticed with a notable local physician and became one of a cadre of skilled freemen and enslaved persons in that city. After the war, his qualification to practice as a physician was recognized by the Freedmen's Bureau, and, although not without opposition, he established a medical practice in his native city.[9] Camplin's correspondence with the Freedmen's Bureau placed him in the historical record. Others remain to be discovered.

But particularly in rural areas, what care was available continued to be provided by family, lay healers, and those white physicians who were willing to treat Black patients—something that could not always be assumed.[5] An example of the traditional healer, or "root doctor," is John Donaldson. He learned his trade as an enslaved person. After emancipation, he established himself as a recognized lay practitioner in Austin, TX. Like Camplin, Donaldson enters the historical record through his correspondence with the Freedmen's Bureau.[9] In rural areas, a reliance on root doctors, midwives, and home remedies continued for many years and followed the path of the Great Migration.[10,11] The great majority of the population would have had no contact with a regular Black physician until graduates of the newly formed Black medical schools began to enter practice in the later 1870s.

The Jim Crow Era

"The medical profession has attracted to its ranks in recent years some of the ablest and most intellectual young men of the race."[12] These optimistic words began the 1919 biographical sketch of Dr. Samuel Sheldon Lawton, a 1909 Meharry graduate then practicing in his hometown of Greenville, SC. But Dr. Lawton, like all Black physicians, practiced in the shadow of the Jim Crow. Despite the optimism of Lawton's sketch, Black physicians faced significant obstacles in establishing and maintaining a practice, over and above those faced by their white counterparts. These occurred at both the individual and the institutional level. While the worst of this was experienced in the South, discrimination and obstacles existed throughout the country.

Individually, the barriers to entry into medicine could be formidable from childhood. Few prospective doctors, particularly in the first generations, came from well-to-do backgrounds.[2] As late as 1934, in a study of just over one thousand Black physicians, Carter W. Woodson found that the most frequent paternal occupation was farmer (19.6 percent), followed by minister (11 percent), teacher (5.5 percent), and laborer (5.2 percent). Only 2.9 percent had fathers who were physicians.[13] Medicine, however, remained an attractive profession and perhaps the most prestigious that a young African American could aspire to in that era.[14] In the Jim Crow South, it offered independence from a white employer or patron. And nationally, Woodson found that physicians were the Black professional group held in the highest regard in the Black community.[13]

Medical Practice in the Jim Crow South

Historians Todd Savitt and Thomas Ward have written landmark studies of African American medical education and practice in the Jim Crow

South from which this section draws.[2,14,15] The barriers that segregation erected to a medical career, overcome only through great determination, were formidable.

These barriers began with the overwhelming poverty of a largely rural population, the poor quality of segregated public education, an impoverished family's need for children to work alongside adults, and a lack of financial resources to support higher education.[14] In the early decades of the 20th century, in Alabama, Georgia, and Louisiana, for example, less than half of Black children under ten attended school.[16] While the few children from better-off backgrounds had access to private, parochial, or Northern schools, the Jim Crow system placed many other barriers. Segregation, for example, extended to public libraries, further stymying education.[17] For those who overcame the preliminary hurdles, the cost of medical school would be a formidable barrier.[2] The financial burden increased in the first decades of the 20th century, as reforms in medical education extended premedical requirements to a college degree and lengthened medical school to four years.

Further, medical school options narrowed significantly for students from both the North and South in the wake of the Flexner-era reforms that left Howard and Meharry as the only Black medical schools. Apart from those schools, there were few options for Black students. All the Southern medical schools, including state schools supported in part by Black taxpayers, remained segregated. A few Northern schools admitted one or two Black students each year, but not on a regular basis. Later reforms that mandated an internship for licensure introduced another barrier. Although by 1927 only 12 states required an internship for licensure, internship was increasingly important in preparation for a successful medical career and specialization. That year, however, 119 Black graduates competed for only 68 available internship positions.[18] As historian Vanessa Gamble writes, medicine's "institutionalized racism actually intensified as medicine became more scientific and as new standards for medical practice developed in the first decades of the twentieth century."[19]

The resulting shortage of Black doctors was particularly dire in the South. The Great Migration and the burdens of Jim Crow meant that fewer and fewer new graduates willingly entered practice in the South. By 1930, while 85 percent of the African American population still lived in the South, only 60 percent of Black physicians practiced there. And while the Southern Black population remained largely rural, the majority of Black physicians practiced in the region's cities. By that time, Mississippi had a Black physician/population ratio of 1/14,000, the lowest of any Southern state.[20] The lack of internships in the South because of segregation compounded the problem, contributing to a "brain-drain" of younger physicians. By the 1940s, only 1,751 Black doctors served 9.7 million African Americans in the South, and South Carolina had only three Black physicians under age 50.[21,22]

Once graduated, a newly minted Black physician faced obstacles over and above those of any white graduate, despite cities and towns courting Black graduating classes in the early decades of the 20th century.[2] Limited financial resources and lack of access to capital—another manifestation of racial discrimination—made starting a practice difficult. The first Black physician in one North Carolina town, a graduate of Leonard Medical School, walked into town, unable to afford a buggy or car.[23] Attracting patients could be another obstacle. Enslavement had conditioned many poor African Americans to think of doctors as white, leading to a wariness about the competence of Black physicians.[2,14] In a 1976 oral history, an elderly resident of Jackson, Mississippi, recalled that "the poor colored doctor didn't have a chance because we wouldn't feel like we had a doctor unless he was white."[24]

Local white physicians offered varying receptions. In some communities, Black physicians were welcomed; in others, they were opposed.[14] But even welcoming receptions did not extend to hospital privileges, local medical societies, or social settings. Black physicians were not welcome as observers in the operating room at a time when this was a common professional courtesy. As one

Georgia doctor complained, "these white surgeons don't want Negroes to learn."[19] Consequently, Black physicians faced professional isolation in a segregated society, a fact often commented on by contemporary observers.

Having established a practice, the unique challenges facing a Black physician did not end. Rural poverty placed a significant burden on Black doctors, who not only had to charge lower fees but also had lower collection rates than their white counterparts. One physician in the 1950s estimated that 40 percent of his patients could pay, 40 percent could pay in part, and 20 percent could pay nothing.[17] Middle-class Black patients, with the resources to pay fees, often had a preference for white physicians for a variety of reasons.[14] This placed Black physicians in unequal economic competition with their white counterparts. Practice expenses increased with new technologies like X-ray and other laboratory equipment, particularly as Black physicians often lacked access to hospital equipment. And as hospitals became increasingly important in the delivery of care, denial of hospital privileges meant losing hospitalized patients to white physicians and less opportunity to develop specialist skills.[14] Even when hospital privileges were granted, they were usually limited in scope and always limited to a segregated, poorly equipped "colored" facility or ward. In 1950s Huntsville, Alabama, for example, the "colored wing" had a single room that the two Black physicians on staff used as operating room, delivery suite, and emergency room.[17]

Others faced even greater challenges. For one Georgia physician starting practice in the 1920s, operating on a patient required driving them 40 miles to the nearest Black hospital—in Florida. Like other entrepreneurial Black physicians in the same situation, he opened a small infirmary of his own, which later expanded into a very successful clinic and hospital.[25] Developing a specialty practice could be particularly challenging and was limited to the region's larger cities. At a time of fluid boundaries between specialists and general practitioners, and when most surgeons continued to do some general practice, some Black general practitioners sent their referrals to white specialists, knowing that they would not keep the patient.[14]

When established, Black physicians became part of a small but important Black middle class, along with entrepreneurs, lawyers, teachers, and ministers. All were expected to play a leading role in the community. For physicians, besides the demands of daily practice, there was the added expectation that they would work to improve the overall health and health literacy of the Black population.[14] Although less dependent on the white community than teachers or lawyers, physicians still had to negotiate the color line and, because Black doctors were seen by whites as representatives of their community, find accommodation with the local power structure.[2,14]

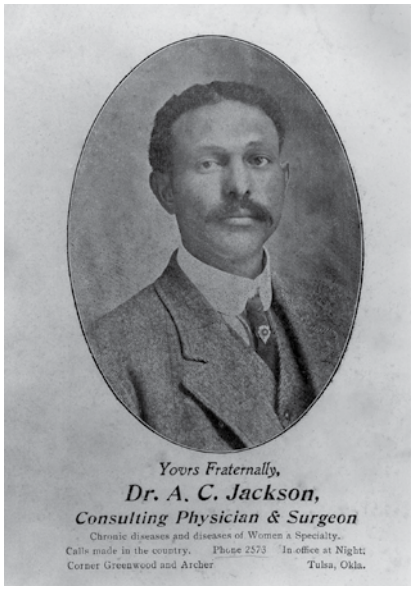


Figure 1

But under Jim Crow, the threat and reality of violence were never far away. To give three examples among many, in 1918 a group of "leading" citizens of Vicksburg, Mississippi, tarred, feathered, and jailed Dr. J. A. Miller, a Williams College and University of Michigan medical school graduate, for "sedition." He was then run out of town on pain of death. Three other Black professionals—a dentist, a pharmacist, and a lawyer—escaped a similar fate by being out of

town on the day.[24] Tulsa surgeon Dr. A. C. Jackson (Figure 1), described by William and Charles Mayo of the Mayo Clinic in Rochester, MN, as "the most able Negro surgeon in America," died during the 1921 Tulsa race massacre.[27] Although he had his hands up and a white attorney neighbor called out, "that's Dr. Jackson. Don't hurt him," his assailants shot him twice in the chest and once in the leg before setting his house on fire.[28] In 1923, the prominent Tuskegee physician and editor of the *Journal of the National Medical Association*, Dr. John A. Kenney (Figure 2), moved to New Jersey following Klan death threats over the appointment of Black physicians and nurses to the segregated Tuskegee VA staff.[29]

Figure 2

Threats and harassment of physicians continued into the Civil Rights era, particularly for physicians who engaged in civil rights activism.[14] Mississippi surgeon and civil rights leader TRM Howard (Figure 3), for example, traveled with four armed bodyguards, as at times did fellow Mississippian Dr. Gilbert Mason. Less fortunate was Dr. Thomas Brewer of Columbus, GA (Figure 4), an outspoken advocate of civil rights, who was shot to death in 1956 by a white businessman in disputed circumstances. The grand jury never indicted Brewer's assailant.[14,33]

Figure 3

The Northern Experience

In his 1934 study of Black professionals, Carter G. Woodson divided the country into five zones of attitudes towards Black physicians.[13] The first zone consisted of an arc of cities from New England and New York across the northern tier of states and down into California. The second included cities nearer the border line between North and South. The Border States comprised the third zone, and the South, divided between seaboard and Lower South, contained the last two zones. Constraints on Black physicians, present in all zones—Woodson used patronage by white patients as one surrogate measure—became progressively more intense between the first and last zone. But even in the first zone, Black physicians had to meet and overcome significant challenges.

The development of the profession in the North was impacted both by the actions and prejudices of white America and by the Great Migration, which transformed the demography of Black America and the Northern industrial cities. Between World War I and the 1970s, between five and six million Black people left the South for greater opportunities, becoming part of one of the largest migrations in history.[10] The first migration, from 1917 through the 1920s brought over one and a half million people to the North and Midwest.[16,34] As the Black population increased, so too did racial tension and white backlash.[34] By 1915, as historian Allan Spear observed, rising white hostility and discrimination

over housing, jobs, and municipal services "in an increasingly biracial society" distinguished African Americans from other ethnic groups arriving in these cities.[35]

Figure 4

Black physicians featured prominently in the Great Migration, either by leaving practices in the South or by not returning there after training or military service. The number of Black physicians in Chicago, for example, rose from five at the turn of the 20th century to 250 in the 1930s.[10] A similar pattern was seen in other Northern cities. As the total number of Black graduates remained relatively stable throughout this period, this growth in the North exacerbated the shortage of Black physicians in the South.

Although free of the worst strictures of Jim Crow, physicians in the North faced many of the same professional challenges as their Southern colleagues. Poverty and the inability of patients to pay fees existed in the North, as in the South. The same reservations about African American physicians and a preference for white doctors, particularly specialists, was also apparent in the North.[36,37] Black specialists, including surgeons, also faced a reluctance on the part of general practitioners to refer to them.[26] This reluctance to refer continued as residency and board certification became increasingly important in defining qualified specialists. Los Angeles proctologist Thomas Peyton reported in 1963 that Black general practitioners lacked confidence in Black specialists if the latter were not board-certified, yet board certification depended on an "all-white Board…which in some instances is predominantly southern and often prejudiced."[26] Compounding this, he noted that some specialties had no Black diplomates and that few Black specialists published widely. Further, discrimination gave Black physicians fewer opportunities for residency training, and thus less eligibility for board exams (discussed in detail in Chapter 8).

Black physicians had difficulty obtaining hospital privileges in many Northern cities. In Gary, IN, surgeon Dr. Robert Hedrick, a 1918 Meharry graduate who began practice in Mississippi, lost his hospital privileges when a local hospital segregated in 1925.[38] He and other Black doctors then opened their own hospital. In Detroit, where the Black population rose from just under 6,000 in 1910 to over 40,000 by 1920, only one of about 30 Black practitioners, surgeon Dr. Alexander Turner (Figure 5), had admitting privileges at a local hospital.[39] The larger private hospitals in Detroit continued to deny Black physicians privileges into the 1960s.[39] Cleveland told the same story, where in 1920 only one Black physician held a hospital appointment.[19] By 1939, despite pressure for integration, only 11 of 35 Black physicians in Cleveland had hospital appointments. In Philadelphia, no white-majority hospitals extended staff privileges to Black physicians.[40] Integration of hospital staffs in the North would proceed at different rates in each of the major cities.

Another consequence of the Great Migration in its early years was the development of patient segregation in previously integrated Northern hospitals.[19] For example, the public hospital in Kansas City, which had earlier admitted some Black patients, became segregated in 1908.[41] In Cleveland, hospitals began segregating patients by race and limiting Black admissions as the

Black population rose in the 1910s.[19] As with staff privileges, integration arrived slowly and at different rates. For example, an Urban Commission survey in Philadelphia during World War II found 12 hospitals admitting Black patients to segregated wards and an additional three giving false information about their segregationist admission policies.[40] In Philadelphia, as in many other cities, integration would not occur until the Civil Rights era.

Figure 5

In response to segregation and difficulty obtaining hospital privileges, Black physicians and communities, sometimes with the aid of white philanthropy, created their own institutions.[19] Many were small, private establishments. By the 1920s, Detroit for example had more private Black proprietary hospitals than any other city.[39] Some of these Black-led hospitals became important institutions for both patient care and the training of Black doctors and nurses. Daniel Hale Williams founded Chicago's Provident hospital in 1891 as an interracial institution at a time when the city' hospitals were becoming increasingly segregated. Four years later, Philadelphia surgeon Nathan F. Mossell, the first Black graduate of the University of Pennsylvania Medical School, opened the Frederick Douglass Memorial Hospital and Training School.[42,43] Dissent within the Black medical community over Mossell's management would lead to the opening of Mercy Hospital in 1907. The two institutions merged in 1948.[42,44] Both Provident and Douglass/Mercy-Douglass became important sites for surgical training at a time when most programs were segregated.[45] Other major hospitals established during this period, which also became important sites for surgical training, included municipal institutions Homer G. Phillips Hospital in St. Louis and Kansas City General Hospital No. 2 in Kansas City, Missouri; Provident Hospital in Baltimore; and, in the South, the Kate B. Reynolds Memorial Hospital in Winston-Salem, NC.[19,44,46,47]

Jim Crow and Organized Medicine

Black Physicians and Delegated Discrimination

John Van Surly Degrasse (1825–1868, Figure 6) had the distinction of being the first Black physician to become a member of a medical society when he joined the Massachusetts Medical Society in 1854.[48] James McCune Smith (1813–1865), the first African American to graduate from medical school (in 1837), also has the less happy distinction of having been the first African American to be denied entry into a medical society, despite election to the prestigious American Geographical Society.[49] Shamefully, for over a century, McCune Smith's experience would be the more common one.

Discrimination against African Americans by medical societies had important and negative consequences during a time when membership in a medical society provided professional education and collegiality and was often a requirement for hospital privileges, licensure, and practice loans.[48] The importance of American Medical Association (AMA) membership in particular, which required membership in a state medical society, increased after the turn of the 20th century. As Thomas Ward notes, privileges, advanced training, and board eligibility all required AMA membership.[14] Thus, the historical relationship between organized medicine and Black physicians has been a troubled one—one for which the AMA, after a three-year historical investigation, publicly apologized in 2008.[50]

Figure 6

At its inception in 1847, the AMA hoped to unify a disorganized and demoralized profession, stem the threat from homeopathic physicians, and improve the profession's abysmal educational standards.[51] Unsurprisingly, given the handful of Black physicians at the time, the new organization's original Code of Ethics made no mention of race.[52] In the interests of professional unity, both before and after the Civil War, the organization attempted to sidestep the nation's sectional divisions.[51,48] Meetings and the annual presidency, for example, were rotated between North and South, even though at the time the majority of members came from the Northern states. For much of the 19th century, however, the AMA was a small organization of only about 8,000 members. The big expansion in membership, which made it a powerful national force, only occurred with a reorganization in the 1900s.[51]

On equality, the AMA's annual meeting in 1870 would set its course for most of the next hundred years. The meeting was held in the wake of the Civil War and the Thirteenth (abolishing slavery), Fourteenth (citizenship and equal protection), and Fifteenth (voting rights) Amendments.[48] At that time, representation at the annual meeting was determined by organization, with delegates appointed from the better medical schools; from county, district, and state medical societies; and from the larger hospitals.[51] In 1870, delegates from the integrated National Medical Society of Washington, DC (NMSDC) and from the integrated medical faculty of Howard University (established 1868) asked to be seated. The AMA, meanwhile, had recognized delegates from the white-only Medical Society of the District of Columbia (MSDC). The NMSDC and the MSDC each accused the other of unethical conduct.

The NMSDC itself came in to existence in 1868 when the MSDC refused to admit three Black physicians: Alexander T. Augusta, Charles B. Purvis, and Alpheus T. Tucker. What happened next has been discussed many times.[29,48,53,54] With the two DC delegations leveling charges at each other, the matter was referred to the Ethics Committee, which split three to two. The majority, led by AMA cofounder Nathan Smith Davis, voted to exclude the NMSDC and both its Black and white members on "ethical" grounds. The minority, led by cofounder Alfred Stillé, voted to seat the interracial delegations. The question went before the general meeting; the majority report was adopted and the minority report tabled. (Without the votes of the large MSDC delegation, the minority report would have been narrowly adopted.[55]) Massachusetts delegate John L. Sullivan then proposed a resolution that there should be no exclusion on the basis of race or color. This was defeated 106 to 60.[48] In 1872, the NMSDC was again excluded without the explicit mention of race.[48] One reason given was that Howard had a woman on its faculty.[55] While never explicitly denying entry based on race, the AMA had effectively done so.

A significant rules change adopted in 1874 reinforced exclusion. After that, delegates to the annual meeting were restricted to members of state and local societies, and state societies—not the national organization—would henceforth determine which local societies would be recognized.[48] With Black physicians largely excluded from these societies, the AMA, whatever

its other motives for the change, had essentially created a policy of delegated discrimination.

To expand its membership, the AMA subsequently recognized all members of state societies as members of the AMA. As some state societies in the North accepted Black physicians, by the end of the 19th century, the AMA had a few Black members. Among them was Dr. Daniel Hale Williams, one of the founders of the National Medical Association (NMA).[48] Even so, by the 1930s the AMA had only 150 Black members, 50 of whom were from New York City, a relative leader in medical integration.[13] Another step forward occurred in 1949, when New York surgeon Peter Marshall Murray (Figure 7) became the first Black member of the House of Delegates, a position he held until 1961. As a paradox of delegated discrimination, before the racial integration of Southern medical societies, Black physicians in the North could be AMA members in good standing, but if they moved to the South, they would cease to be members because the local societies were all segregated.[56]

Figure 7

Pressure for integration grew in the Civil Rights era, and in response, some local and state societies in the South began offering so-called "scientific" memberships to Black doctors. These let them attend educational events but not social or business meetings. For example, the Mississippi Medical Association began offering such memberships in 1954.[57] This created a dilemma for Black physicians. Some accepted limited membership as a step forward; others refused anything less than full membership.[14,32] Despite decades of pressure from, among others, the NMA, the Medical Committee for Human Rights, and some Northern state societies, it was only in 1968 that the AMA ceased deferring to local societies and changed its bylaws to end discrimination.[58,59]

For surgeons, the American College of Surgeons (ACS, founded in 1913) offered a means of distinguishing a qualified surgeon from an occasional operator. Although Daniel Hale Williams was a founding member of the ACS and Louis T. Wright became a fellow in 1934, no other Black surgeons received fellowships until 1945. The story of the integration of the ACS is related in more detail elsewhere in Chapter 33. The pace was slow enough that the NMA gave serious consideration to a separate surgical college (see below).

Black Organizations

Institutionally, these first generations of Black physicians, excluded from existing medical organizations, had to build a professional infrastructure from scratch. Their efforts included hospitals, pharmacies, clinics, societies, and journals. Historian Darlene Hine argues that these types of actions on the part of physicians and other Black professionals, beginning in the 1890s, would provide a crucial link to the civil rights movement of the second half of the 20th century.[60]

From the 1880s, as the color line hardened and integration proved elusive, Black physicians created a parallel world of medical societies and journals.[2,61] The first Black medical society, founded in Washington, DC, grew out of the NMSDC. Excluded from the MSDC, Black physicians created the Medico-Chirurgical Society

of Washington DC in 1884.[55] (The MSDC would drop its segregated policy in 1952.[62]) Black physicians in states throughout the South followed. By the 1910s, Black medical societies existed at the state, county, and local levels.[14] Physicians in the North also formed separate societies, such as the North Jersey National Medical Association, founded in 1895.[63] With no prospect of AMA membership, the National Association of Colored Physicians, Dentists, and Pharmacists was founded in 1895, with Daniel Hale Williams among the founders and its first vice president.[64] In 1903, it became the National Medical Association.[14]

That same year, the surgical clinics initiated by Williams became an important part of the annual NMA meeting at a time when few other continuing education opportunities existed for Black surgeons. On at least some occasions, those clinics were held in otherwise segregated hospitals, with white surgeons attending to watch Williams operate.[64] Growing out of the 1912 NMA meeting was the John A. Andrew Clinical Society, which held well-attended annual clinics at the Tuskegee Institute until 1944. Among other goals, its founder John A. Kenney regarded bringing "outstanding members of the medical profession of both races together at The Clinic as one of its most important functions."[65] The Surgical Section of the NMA, with 18 members, was organized at the NMA's 1906 meeting. Created in the years of exclusion from majority surgical organizations, the Surgical Section would become the major professional body for Black surgeons.[66]

Journals developed along with societies. In 1893, the entrepreneurial Dr. Miles V. Lynk of Jackson, TN, the son of formerly enslaved parents, launched the *Medical and Surgical Observer*—the first journal specifically addressing the concerns of Black practitioners.[61] Lynk would be one of the organizers of the NMA. With support from the Tuskegee Institute, whose students published its first issue, the NMA started the *Journal of the National Medical Association* in 1908.[59,67] The *Journal*, under a succession of dynamic editors including Charles V. Roman (1908–1915), John A. Kenney (1916–1948), and particularly Howard professor, anthropologist, and NAACP leader W. Montague Cobb (1949–1977, emeritus 1978–1990), became the national voice for Black physicians in both medical matters and the push for civil rights.[67,68] In all, at least nine Black medical journals existed between 1892 and 1948.[11]

Figure 8

By the 1930s, the promotion of specialization became a concern. The majority specialty organizations had few Black members. In 1930, for example, the ACS, the American College of Physicians (ACP), the American Laryngological Association (ALA), and the American Psychiatric Association each had only one African American fellow. The American Association of Clinical Pathologists had three Black members. This reflected both direct discrimination and the difficulties Black physicians had obtaining internships and specialty training—itself a result of medical racism and discrimination. That year, W. Henry Barnes, the sole Black member of the ALA and the first Black doctor to be board certified (1927, Figure 8), created the Society for the Promotion of Negro Specialists in Medicine. The organization's purpose was "to stimulate, assist and promote the development of specialists among the Negro medical profession."[69] Among its goals were the integration of training programs and hospital

staffs, support for specialty training, mutual support for Black specialists (whether full- or part-time), and the provision of free postgraduate courses at annual NMA meetings. Although the organization had some initial successes, it became defunct in 1938, in part due to the ill-health of its founder.[69,70]

Figure 9

Given the difficulties that Black physicians had in obtaining membership in the ACS and the ACP, in 1941 the NMA adopted a recommendation that separate colleges be established for Black specialists.[71] The proposed colleges would be named the National College of Surgeons and the National College of Physicians. As with the initial fellowship standards for the ACS, admission would be based on recommendation by a credentials committee and on experience represented by case reports. Chicago surgeon Ulysses G. Dailey (Figure 9), although repeatedly rejected by the ACS, expressed serious reservations about the proposal.[72,73] Dailey and other critics argued that progress would be better served by developing the surgical section of the NMA than in creating a new organization that, to be viable, would necessarily have to have lower standards than the ACS. Lower standards, the critics pointed out, would of course defeat the purpose of the new organization. Growing opportunities for residencies and encouraging better scientific papers at section meetings would go further in developing Black surgeons, Dailey urged. The argument reflected a practical appreciation of the difficulties Black physicians faced in specializing, as well as exemplifying the integrationist ethos of many leaders in the Black medical profession at the time. The ethos encompassed an opposition to what W. Montague Cobb, perhaps its leading proponent, referred to as "deluxe Jim Crow"—improved but still segregated and second-class institutions.[19,3,74]

Desegregation and Integration

The overcoming of what Cobb called the "Negro Medical Ghetto" proceeded slowly and incompletely.[3] In his 1958 study of Black physicians in 14 major cities, sociologist Dietrich Reitzes found wide variations in the degree of segregation in the profession and in hospitals. He identified seven factors driving desegregation and integration: (1) the relative strength of Black hospitals; (2) the degree to which local white leaders supported integration; (3) the extent of professional contact between Black and white doctors; (4) action by Black physicians; (5) the presence of board-certified Black physicians, which raised the status of all Black physicians; (6) the willingness of older Black general practitioners to refer patients to the younger generation of specialists; and (7) the general state of segregation in the city.[56] Cities could vary widely even in the North and West. For example, 75 percent of Los Angeles's board-certified Black physicians had appointments at predominantly white hospitals, while only 26 percent of those in Chicago did. New Orleans had no board-certified Black physicians at all. Overall, of the mid-1950s communities Reitzes studied, the most integrated professionally were Gary, Indiana, then a major steel center, and New York City; Atlanta, Nashville, and New Orleans were the least.[56]

To historian Edward Beardsley, in his work on medical desegregation in the South, the major

drivers were, first and foremost the activities of Black physicians, both at the local level and at the national level by the NAACP's medical committee led by Cobb. Second came the federal government, and third, a gradual change in attitude on the part of white physicians, the result of prolonged contact and a recovery of professional ideals.[22,75]

DeShazo's study of medical desegregation in Mississippi, however, is a reminder of the dangers faced by Black physicians who risked their lives to challenge Jim Crow and fight for justice in health care, a story summarized in Chapter 17.[57] Thus, desegregation efforts required city-by-city and state-by-state work in conjunction with the larger civil rights movement, the NAACP's legal strategy to undermine Jim Crow, and the increasing intervention by federal courts and the broader federal government following the 1964 Civil Rights Act and the Medicare legislation passed the next year in 1965.[76–78] Desegregation, however, posed its own challenges and would not be a panacea for either health disparities or discrimination against Black doctors.[14,58,79]

Conclusion

This chapter has provided an overview of the challenges facing Black doctors practicing under Jim Crow. Paradoxically, desegregation and the changing economics of health care also meant the loss of many of the historic institutions that had been crucial to the education and support of Black surgeons in the Jim Crow era. Shamefully, the legacies of that era have also outlasted those institutions.

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Legends

1. Andrew C. Jackson (1879–1921), surgeon murdered during the Tulsa race massacre of May 1921. Public domain.

2. John A. Kenney, Sr. (1874–1950), medical director and surgeon at the John A. Andrew Hospital at the Tuskegee Institute and editor of the *Journal of the National Medical Association*. Moved to New Jersey after Klan threats to him, his family, and the staff of the Tuskegee VA hospital. He later founded the Kenney Memorial Hospital in Newark. Public domain.

3. T. R. M. Howard (1908–1976), surgeon and civil rights leader active in his adopted state of Mississippi in the early 1950s, actively supported tracking down witnesses and evidence in the Emmett Till murder in August 1955. He moved to Chicago the following year to escape the increasingly dangerous racial environment that followed the acquittal of Till's murderers. Courtesy of the Archives and Records Services Division, Mississippi Department of Archives and History.

4. Thomas H. Brewer, Sr. (1894–1956), Columbus, GA, physician and civil rights activist, murdered by a white businessman in 1956. The murderer, who shot Brewer seven times, was not charged. Columbus *Ledger-Enquirer*.

5. Alexander Turner, reputedly the first Black surgeon in Detroit and one of 30 investors who founded the Dunbar Hospital, the first inpatient facility open to Blacks in the city. His newly purchased home in a white neighborhood was vandalized by a mob only hours after he moved in. Turner was forced at gunpoint to sell the house. Public domain.

6. John Van Surly Degrasse (1825–1868), commissioned officer in the Union Army and first Black member of a professional medical society. Collection of the Massachusetts Historical Society.

7. Peter M. Murray (1888–1969), the first Black representative to the House of Delegates of the American Medical Association, representing the New York Medical Society (1949). He also served on the boards of trustees of Howard University and the State University of New York, vice president of the Hospital Council of Greater New York, and the President's National Medical Advisory Committee on Health Resources. New York Academy of Medicine.

8. William Henry Barnes (1887–1845), the first Black surgeon certified by an American specialty board (1927, in otolaryngology). Public domain.

9. Ulysses G. Dailey (1885–1961) of Chicago, after several unsuccessful applications, was among a group of four Black surgeons initiated *in absentia* as Fellows of the American College of Surgeons at the 1945 Convocation. New York Public Library.

Surgery under Jim Crow section photo: The riots in New York: destruction of the Coloured Orphan Asylum. The Miriam and Ira D. Wallach Division of Art, Prints and Photographs: Picture Collection, the New York Public Library (1863).

Black Medical Education and Specialty Training

Peter J. Kernahan, MD, PhD, FACS

The half-century from the 1870s to the 1920s saw profound changes in American medical education. The next 30 years would see the consolidation of hospital-based residency followed by board certification as the pathway to a specialty career. While not intentionally directed at Black Americans, these changes would create serious impediments to pursuing a career in medicine and as a surgeon. They did so first because they existed within a racist system that denied equal opportunity at every turn. Second, the reforms themselves would have a disproportionate impact on Black Americans.

The Reform of Medical Education

Reform before Flexner

The weaknesses of American medical education and the tenuous status of American physicians were very much on the minds of the founders of the American Medical Association (AMA) and state medical societies. Beginning in the 1870s, state medical associations pushed stricter medical licensure. Separately, a number of medical schools began the process of strengthening their admissions standards, moving to a multiyear progressive curriculum, and instituting clinical training. To support this reform movement, the leaders of the stronger reforming schools founded the American Association of Medical Colleges (AAMC) in 1875. Beginning in the 1890s, the AAMC and the state licensing boards began a concerted effort to improve the overall quality of medical education. Thus, by the turn of the century, medical education represented a wide variety of institutions. These ranged from the Johns Hopkins medical school, opened in 1893—with its rigorous requirements for an undergraduate science degree, two preclinical and two clinical years—through the stronger reforming schools and down to a bottom tier of proprietary schools and diploma mills (themselves a market response to weak licensure laws that only required a diploma).

The pace of reform intensified in the first decade of the 20th century as the AMA became an increasingly powerful national organization, growing from about 8,000 members in 1900 to over 70,000 by 1910.[1,2] The AMA's Council on Medical Education (CME), under the leadership of Chicago surgeon Arthur Dean Bevan, took the lead on educational reform and, by 1906, had completed surveys of all U.S. medical schools. Bevan, recognizing that any attempt by the AMA to force the closure of inadequate schools would be seen as self-serving, took an indirect approach in public, working through the Carnegie Foundation. The Foundation commissioned Abraham Flexner, an educator, to prepare a report on U.S. and Canadian medical schools.[3]

Thus, although the reforms often bear his name, Flexner did not initiate them and had no power to close schools. In historian Todd Savitt's words, "he stepped into the middle of such an era, put his imprint on it, and through his work with the General Education Board of the Rockefeller Foundation (GEB) after 1912, influenced the way reforms were implemented."[4] Although they were not specifically targeted, the reform movement would disproportionately affect Black medical schools—only two would survive the reforms.

Flexner and the Black Medical Schools

Their stories began in the first decades after the Civil War. In those years, an African American student had very few options for pursuing a medical career. A handful of Northern medical schools admitted one or two Black applicants on a somewhat regular basis. Canada or Europe represented another option for those who were well prepared and had the resources to travel. So, in the three decades after the Civil War and Emancipation, 15 Black medical schools, all but one in the South, were established.

Of the 15 schools, Howard University, the strongest, was established by Congress in 1868. And, although cast by Flexner as a "colored" school, the school's racial makeup and history were in fact more complex.[5] The remaining schools were divided into two groups by contemporaries.[6] Religious denominations (all but one Northern) had established eight schools. Black physicians established a further six proprietary schools. While Howard received some limited federal support, the finances of all of the other schools remained precarious despite rising numbers of applicants and a rising demand for Black physicians. With the demise of Reconstruction, Northern missionary societies soon turned to what appeared to be more pressing problems of urban poverty and immigration in the North. The schools' alumni lacked resources; deep rural poverty meant that students struggled to pay even nominal tuition and fees; state support was nonexistent; and Black philanthropists were few.[4] As a consequence, even the stronger schools had little margin to finance the improvements required by medical education reform and modernization. With such limited resources, most of the schools performed poorly in the CME's surveys.[6] By the time Flexner began his investigation in 1908, only seven Black medical schools were extant.

Flexner wrote his 1910 report in classic muckraking style and, as historian Todd Savitt details, did more than just describe conditions at the schools. He also laid out a comprehensive program for reform, including curriculum requirements, the number of schools needed in each region, and the education of women and African Americans. So although Flexner brought the almost invisible Black schools to national attention, he also, according to Savitt, "harmed the black cause by portraying African American medical education as deficient in general and five of the seven…as particularly wanting."[4] Of the seven, Flexner recommended that only Howard and Meharry survive.

Further, Flexner proposed a limited role for Black physicians, with an emphasis on training in hygiene. This, he argued, both addressed the most pressing needs of the primarily Southern and rural Black community and protected the white community from contagious disease. While he argued that a good Black physician would be superior to a poor white one, Flexner saw no role for the former beyond practice among "his own race," which he was to serve "in the missionary spirit…humbly and devotedly."[7] Even so, while accepting segregation, Flexner made no attempt to estimate the number of Black physicians needed and admitted that the number of Howard and Meharry graduates would "be unequal to the need and the opportunity."[7] In Flexner's reformed world, "hygiene rather than surgery" should be the focus of African American medical schools and their graduates.[7]

This chapter on "The Medical Education of the Negro" has been a source of ongoing controversy about Flexner's intentions and motives. Savitt regards the chapter as illustrating "how, in the world of medicine as in so many other aspects of American life at the time, whites attempted to discount, dominate, and devalue blacks."[4] In his

memoir of Harlem Hospital, surgeon Aubré de L. Maynard called it "bluntly racist…the health of the Negro was of concern solely out of white self-interest."[8] By 2008, an expert panel established by the AMA concluded that the report had helped create an unequal and segregated educational system and an inadequate number of graduates.[9,10] On the other hand, in Flexner's defense, his biographer Thomas Bonner notes that in Flexner's later work at the GEB, he became a strong supporter of Black education and advancement, helping Howard and Meharry survive and grow.[3] But, however intentioned, the chapter makes for painful reading today.

How much did the report contribute to the fates of the seven schools? Drawing on a larger database of all medical schools in the Flexner era, Miller and Weiss attempted to answer that question quantitatively.[11] They observed that Flexner was more lenient to Meharry and Howard than to comparable white, all-male schools—all of which he recommended be closed. Further, enrollments at three of the weakest schools had begun a precipitous decline around 1906, a pattern also seen in white schools in the process of disbanding with the advent of the reform era.

Of the remaining four schools, Howard and particularly Meharry survived with eventual support, financial and otherwise, from Flexner and the GEB.[6,11] Howard, in fact, set higher premed standards in an effort to be seen as one of the better national medical schools, despite a resulting drop in enrollment. The Leonard Medical School of Shaw University, the third-largest school and one with a strong claim for continuance, would attempt to improve, valiantly but unsuccessfully (and without foundation support), before closing in 1920.[12] The small, proprietary University of West Tennessee carried on defiantly into the 1920s, even as fewer and fewer states recognized its degree.[13]

The Flexner Effect

The closures, particularly of Leonard, had an immediate effect on Black medical education. Southern medical schools would remain segregated for another five decades. A few Northern schools admitted Black students, but only in miniscule numbers. In 1928, for example, only 53 Black students graduated from Northern schools.[14] Thus, after Flexner, most of the responsibility for training Black physicians fell on Howard and Meharry.[5] The combination of closures, segregated Southern schools, and almost no admissions at Northern schools, meant that by the 1930s the number of graduating Black medical students could no longer even replace losses from death and retirement.[10,15] Even in the Civil Rights era, in 1967, 83 percent of Black physicians were graduates of Howard and Meharry. A further 15 percent had graduated from Northern schools, primarily in the upper Midwest.[16]

Clinical clerkships, an important part of educational reform, posed an additional obstacle to Black students. Howard students had access to Freedmen's Hospital (now Howard University Hospital) from its inception. Meharry, with its students and faculty excluded from local hospitals, opened Hubbard Hospital in 1910. The costs of the hospital, however, weighed heavily on the school.[17] And even small associated hospitals had not been sufficient to save either Leonard or the Flint Medical College of New Orleans.[18,19]

Meanwhile, in Northern schools, the increasing importance of inpatient clinical experience in the third and fourth years conflicted with social mores and the color line. The University of Chicago serves as an example. Between the World Wars, the medical school admitted more Black students than any of 16 other Northern schools but still found that, in the then-dean's words, it was "not practical to assign colored students to clerkships in white hospitals."[14] Even "with one or two tactful colored students" the "experiment" had created "an embarrassing situation." (One observer commented that any embarrassment may have been more on the part of the white staff than the white patients.[8] This was certainly the experience of Louis Wright in 1914, when he insisted on taking the rotation at Boston Lying-In like any other Harvard student.[20]) Consequently, Black students were relegated to outpatient clinics, depriving them of inpatient clinical experience. For the university, the solution to this and to the admission of Black patients to

Billings Hospital had been to create an affiliation with the predominantly Black Provident Hospital.[14] This affiliation ran from 1930–1944 but ultimately failed.[21]

So, while the Flexner-era reforms greatly improved the quality of American medical education, they came at a cost. The closure of Black and women's schools, the increasing costs of education in time and money, a preference for doctors' sons, and admissions quotas, which included "ethnic" whites, made the profession far less diverse, as Paul Starr noted, in its social composition.[22] Beginning in the 1950s, the profession began again to slowly diversify. Quotas for Jews and other "ethnic" whites fell. From the early 1970s, women were accepted in increasing numbers and now make up 51 percent of the medical school class.[23] All of the segregated Southern medical schools began to admit Black students, although not without controversy, and Black admissions rose at Northern schools.

But progress remains uneven and, in the case of Black males, is actually reversing.[24] Currently, about 3.4 percent of medical students identify as Black men.[23] As a percentage of all medical students, admissions of Black males have declined by 25 percent over the last 30 years.[25] Epps, in fact, observed this trend as long ago as 1986.[26] Additionally, while there is approximate gender parity for white, Latino, Asian, and Native American medical school matriculants, men represent only 38.5 percent of Black medical students, a sharp decline from 57 percent in 1986.[27] A detailed discussion of this critical issue is beyond the scope of this chapter, but it has been the subject of increasing concern and attention.[28]

Graduate Training & Specialization

The Second Reform Movement

If the first reform movement in American medicine was undergraduate education, the establishment of standards and certification for specialty education was the second.[29] Despite this, the history of the residency, especially the surgical residency, remains an understudied area. Kenneth Ludmerer's 2014 *Let Me Heal* is the first scholarly study of residency training in general.[30] More recently, Justin Barr has traced the origins of the surgical residency.[31] While Claude Organ's comprehensive *A Century of Black Surgeons* describes the major surgical training programs in historically Black hospitals, a complete history of residency and Black hospitals remains to be written.[32]

In the expansion of surgery at the end of the 19th century, most American surgeons were essentially self-taught. Aspiring surgeons took an a la carte approach to their education from a number of options: an extra year of internship; assistantship to an established surgeon; a short course at one of a growing number of postgraduate schools; visits to prominent clinics; trial and error; and, for the fortunate, travel to European clinics (an even smaller cohort received formal training there).[31] In this period, there was little difference in training between Black and white surgeons, although the options for Black surgeons were far more limited, given the many restrictions they faced. The Mayo brothers, George Crile, and Daniel Hale Williams, for example, all established their surgical careers in much the same way.

This would change with the introduction of formal surgical training. Halsted founded a residency based on the German model at Johns Hopkins in the 1890s.[33] Subsequently, in the first three decades of the 20th century, a number of other leading institutions also established organized residencies. Graduates of these programs would become the next generation of surgical leaders for both academia and the community. Established at white institutions, these programs were closed to Black physicians, which severely limited their options for specialty training.

Thus, the ad hoc approach would continue far longer for Black surgeons. For example, John Henry Hale (1878–1944), a prominent surgeon at Meharry, began his practice in 1905 and began specializing in surgery in 1906. His formal training occurred mainly with trips to the Mayo and Cleveland Clinics to observe operations.[34] His colleague, Julius August McMillan (1871–1949), similarly spent his summers at these institutions for 12 years. Consequently, by the late 1920s, both

Black medical leaders and the GEB agreed that the lack of access to graduate training, for both internship and residency, posed a serious hurdle for Black physicians.[35]

The Internship Problem

In fact, Black graduates would have difficulty even finding an internship. As Dr. Isabella Vandervall (Figure 1), a recent medical graduate, lamented in 1917, seven years after Flexner, "a huge stumbling block…has suddenly been placed in the path of the colored woman physician."[36] That stumbling block was the increasing importance of the internship, both for medical licensure and for mastering a rapidly expanding body of medical knowledge. Further, as graduate education became more formalized, internship increasingly became the first step to a specialty career. Vandervall herself, a graduate of the New York Women's Medical College, had been accepted as an intern at the Syracuse Women and Children's Hospital, only to be turned away when she appeared in person to take the position.

While Vandervall faced discrimination for both race and gender, male Black graduates also had limited opportunities to find internships. Even unsegregated Northern hospitals, like the Syracuse hospital that turned Vandervall away, refused to accept Black applicants. Although the Howard-affiliated Freedmen's Hospital accepted its first interns in 1893–1894, other options were limited and remained so for many years.[37] By 1927, 12 states required an internship for licensure. That year, however, according to the Rosenwald Foundation's 1931 report, *Negro Hospitals*, 119 Black graduates competed for only 68 available internship positions, a third of which were at Washington's Freedmen's Hospital.[38] In fact, Freedmen's Hospital took more interns than it strictly needed to provide a few more internship places for African Americans.[39]

Some steps toward integration did occur during this period. In 1926, Harlem Hospital appointed its first Black interns, among them Aubré de L. Maynard, its future director of surgery.[8] And in 1931, Harvard graduate and future thoracic surgeon Frederick Stubbs became the first Black intern at a white hospital—Cleveland City Hospital.[40] The Rosenwald study, however, could find no residencies accepting Black graduates.[38] Overall, by the early 1930s, postgraduate training for Black doctors was, in physician and civil rights activist Paul Cornely's words, at its "lowest ebb."[41]

MISS ISABELLA VANDERVALL
New York Medical College

Figure 1

Responding to the dire need for internships, Black physicians and hospital administrators had formed the National Hospital Association in 1923. One of its first actions was to establish contacts with the American Hospital Association (AHA), the AMA, and the American College of Surgeons (ACS) with a goal of increasing the number of approved internship positions.[42] By 1939, "helped" by a decline in the number of Black graduates due to the economic privations of the Depression, 75 graduates had access to 168 approved internships at 13 hospitals.[38] As some interns took a second year, in total 134 of those positions were filled. Ironically, the decline in Black graduates during the Depression also meant that Provident Hospital in Chicago had trouble filling its positions and began to take white international graduates.[35]

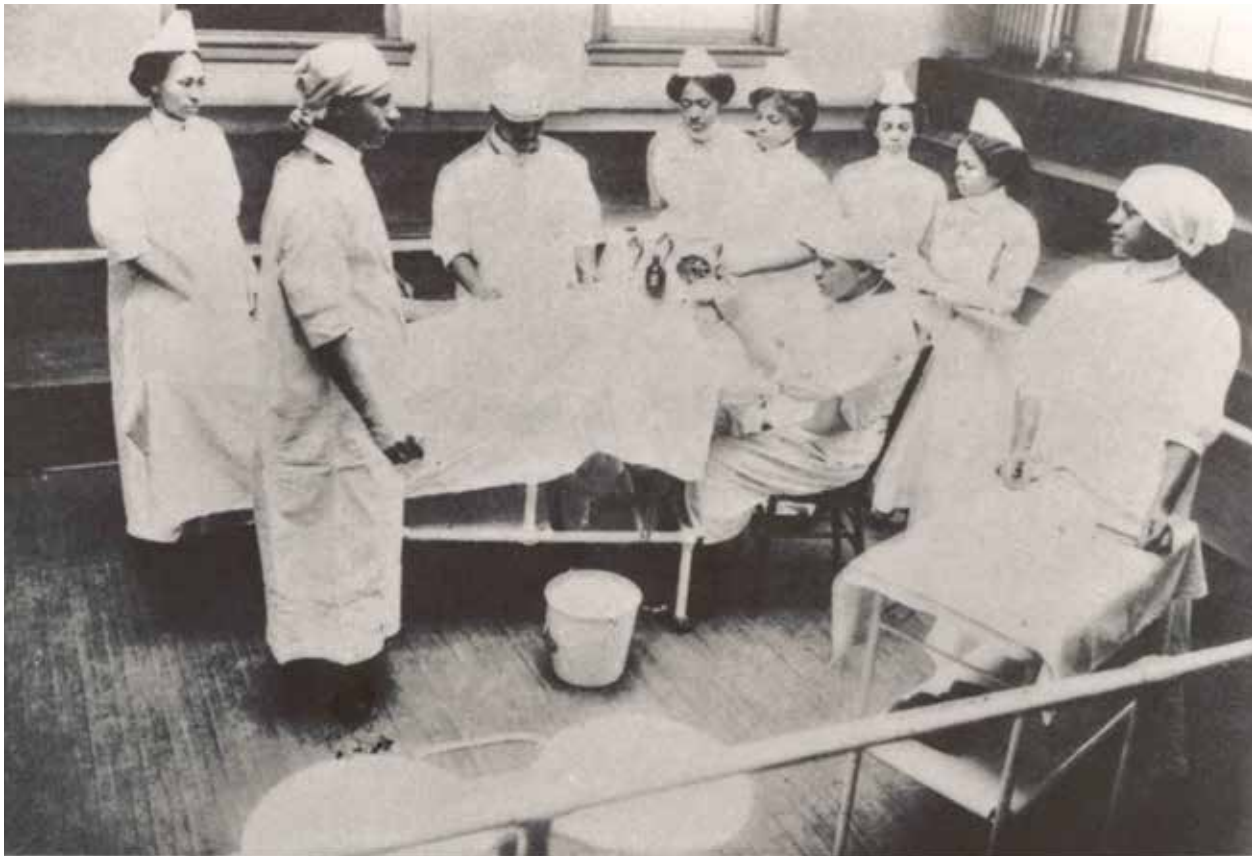

Figure 2

The First Residencies

No residencies were available for Black physicians in 1930. As had been the case for aspiring white physicians a generation earlier, "the great mass of practicing doctors [were] still confined to short refresher courses for additional training."[38] Like societies, hospitals, and journals, these courses—the John Andrew Clinic at Tuskegee was the oldest and largest—were part of the parallel professional infrastructure, created by Black physicians, aided sometimes by white philanthropy, in response to segregation and exclusion by the white professional majority. Through their efforts, by 1939, 34 residency positions in eight specialties were available at Black hospitals—enough for about half of all Black graduates.[38]

A handful of surgical positions became available, although the figures vary by source. According to Bousfield, citing numbers from the National Medical Association's Commission on Medical Education, 11 of these residency positions were in surgery at seven hospitals.[38] By contrast, the 1938 AMA directory of approved residencies gives nine positions at six hospitals. It is certain that, at this time, surgical residencies were offered by Freedmen's Hospital in Washington, DC (Howard); George W. Hubbard Hospital in Nashville (Meharry; Figure 2); Harlem Hospital in New York City (Figure 3); Homer G. Phillips Hospital in St. Louis; Provident Hospital in Baltimore; and Provident Hospital in Chicago (Figure 4).[43] The residencies were of varying lengths, as was typical of the time, ranging from one to four years.

The provenance of the first Black surgical residency can be hard to establish, given the flexibility in the length of internships in the early decades of the 20th century and overlapping inspections by the AMA and the ACS. For example, Homer G. Phillips Hospital (HGPH) offered a second year of internship as a surgical house officer from

its opening in 1919.[44] At New York's Harlem Hospital, Maynard, appointed in 1926 in the first class to include Black interns, served a second year houseship (an abbreviated period of training rather than a formal residency) in gynecology and general surgery.[8] It was his entire formal training in surgery. He succeeded Louis T. Wright as Director of Surgery in 1952. During the 1930s, the first formal programs were established in the leading Black hospitals, with HGPH as perhaps the first.

A lack of records makes it difficult to determine precisely when HGPH officially established a surgical residency.[44] The AMA approved the hospital for surgical training in 1927. Evarts Graham, as chair of surgery at Washington University (1919–1951), helped develop an affiliation between HGPH and Washington University. At its height, HGPH trained about one-third of all Black surgical residents, including leaders of the profession like LaSalle Leffall and Herschell Hamilton.[45]

Looking at records available from 1940 to 1979 (when HGPH closed), Richards found that 235 individuals had completed at least one year of surgical residency, with most finishing the program.[44] Graduates of Meharry and Howard predominated. The number of these graduates declined, replaced by international graduates, from the 1960s onwards, as previously white programs opened to Black graduates in the wake of *Brown v. Board of Education*. The impact of the hospital's 1979 closure was immediate. Between 1979 and 1987, when Richards wrote, only three African Americans completed surgical training in St. Louis.[44]

Figure 3

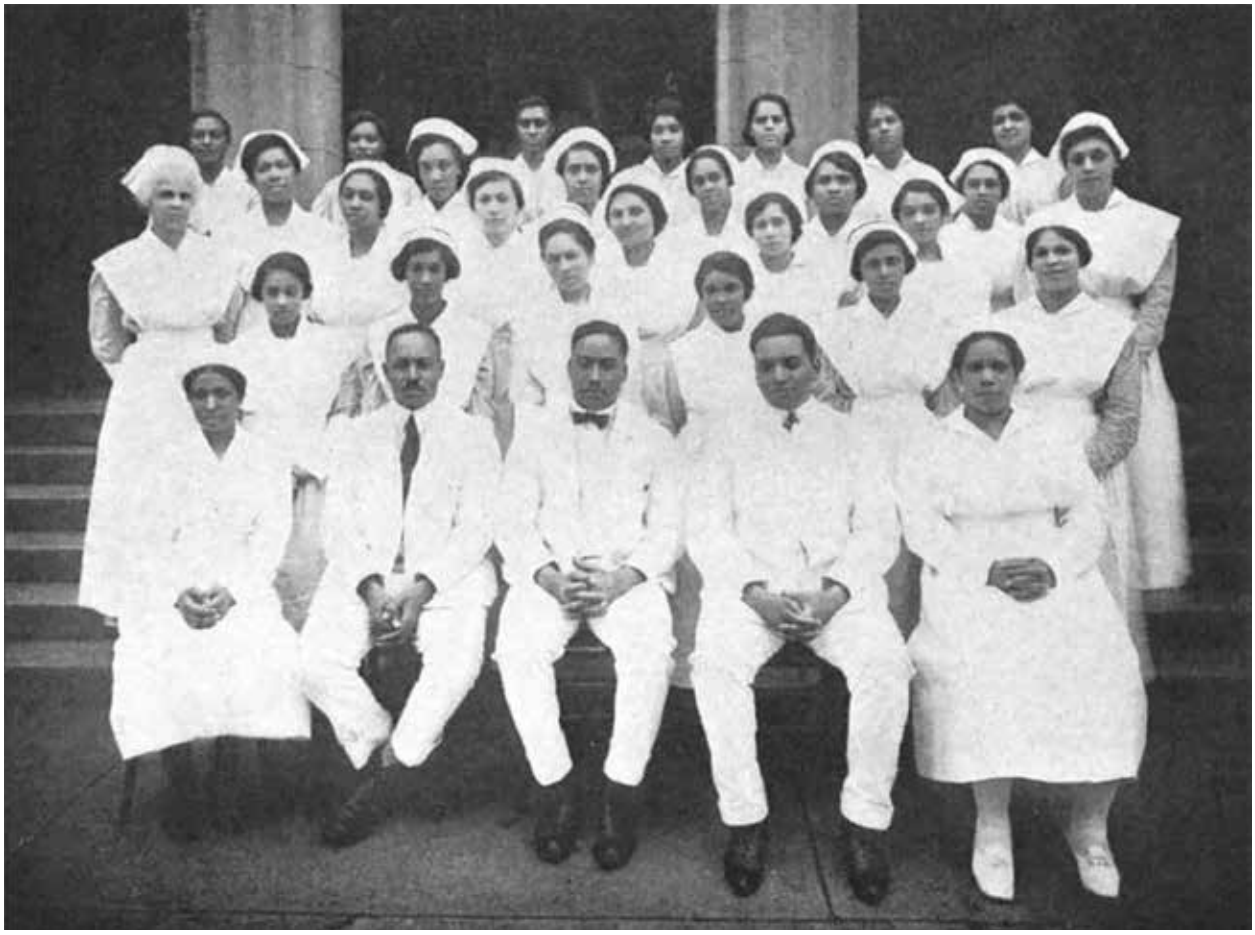

Figure 4

At Provident Hospital in Chicago—envisioned as a center of Black medical education, affiliated with the University of Chicago, and financially supported by the Rosenwald Fund and the GEB—Ulysses Grant Dailey established a surgical residency in 1932. This became a full, five-year program in 1935 under Carl Glennis Roberts. Unsurprisingly, given its location and the absence of opportunities at other institutions, the majority of the residents were Black graduates of Big Ten universities. As white institutions opened to Black graduates, the surgical training program at Provident weakened as it became unable to attract the African American graduate. The program finally closed in 1965.[46]

Two programs appeared in 1934, at Provident Hospital in Baltimore and at Harlem Hospital. Since its founding in 1894, Provident had been seen as a place where, according to the 1897 annual report, "the colored physicians may have an opportunity to develop themselves along the lines of specialty."[47] A new hospital building opened in 1928, with teaching overseen by faculty from Johns Hopkins and the University of Maryland.[48] The AMA approved a three-year general surgery residency in 1934.[49] J.M.T. Finney served as one of the first chiefs of surgery, and in 1954, Robert Jackson became the first Black chief of surgery. The residency continued until 1972, with at least 21 surgeons having all or part of their training there.[49] Despite its illustrious history, Provident did not survive the 1980s consolidation of the hospital industry.[50]

Harlem Hospital, which integrated after a political battle in the 1920s, established a formal residency in 1934.[8] Louis Wright expanded this to a four-year

residency in 1945. An affiliation with the New York University Postgraduate Medical School in 1953 allowed an expansion of the residency to five years until the agreement's termination in 1958.[51] During this time, although Harlem Hospital relied more and more on international medical graduates, the majority of surgical house staff were drawn from Howard and Meharry.[8] In 1963, the residency returned to five years under an affiliation with Columbia University.[8,51]

Freedmen's Hospital's surgery residency opened on July 1, 1936, with a three- to five-year program.[52] The residency had its origins in 1929, when Howard's dean, Numa P. G. Adams, began to actively recruit faculty. The Rockefeller Foundation provided five years of support to Edward Howes, a white Columbia resident under Allen Whipple, to establish the program and train the first cohort of residents. John Manly, a 1935 Howard graduate, became the first resident.[53]

Because this was the only residency slot, Charles Drew and J. Richard Laurey were hired as assistants in pathology and physiology, respectively. Subsequently, with Rockefeller Foundation support, Drew and Laurey would complete residencies at Columbia (Drew) and Michigan (Laurey). When Howes's contract expired in 1941, Drew became head of the department.[53] His tenure was cut short by a tragic automobile accident in 1950, and Laurey succeeded him as head. Despite their record of success, Howard surgeons would have difficulty obtaining privileges at other DC hospitals well into the 1960s.[54]

Residency in the Postwar Period

By 1946, the ACS, which had begun inspecting residencies in 1938, had only approved the surgery residencies at Freedmen's and Provident (Chicago), although the others had AMA approval.[52] The ACS would approve six more by 1952 (Table 1). In the 1940s, Kansas City No. 2 Hospital (the city's segregated Black hospital), the Tuskegee Veterans Administration Hospital, the segregated Hughes Spalding Pavilion of Grady Memorial Hospital, and Meharry's Hubbard Hospital all established surgical residencies.[34,49,55–58] The conflict over approval of residencies between the AMA, the ACS, and the American Board of Surgery (ABS) would be resolved in 1955 with the establishment of the Residency Review Committee.[31] In the 1970s and 1980s, surgical residencies were developed at the King-Drew Medical Center and the Morehouse School of Medicine.[59–61]

Hospital	City	ACS Approval
Provident Hospital	Chicago IL	1939
Freedmen's Hospital	Washington DC	1939
Harlem Hospital	New York City NY	1945
Homer G Phillips	St. Louis MO	1948
Provident Hospital	Baltimore MD	1950
Hubbard Hospital	Nashville TN	1950
Tuskegee VA	Tuskegee AL	1950
Kansas City No. 2	Kansas City MO	1952

Table 1: Principal Residency Programs with Date of ACS Approval
Source: Archives, American College of Surgeons

These institutions played a vital role in the education of Black surgeons, particularly before the Civil Rights era. In their 1987 study of Black surgeons, Margaret Kosiba, Mary Lane, and Cynthia Murray identified more than 600 Black surgeons then practicing either general or thoracic surgery.[62] Over half had attended medical school at Howard or Meharry. Of the 265 surgeons who trained at a university-affiliated program, 44 percent had trained at a predominantly Black institution: Howard, Meharry, HGPH, Harlem Hospital, Tuskegee VA, Kansas City No. 2, and Drew. Unsurprisingly, this percentage was even higher (59 percent) for those trained before 1965. A further 110 had trained at 72 free-standing hospital programs, while 20 were military trained. The remainder had trained at predominantly white institutions, notably Wayne State, the University of Illinois, and Wright State. But by the 1990s, of the pioneer hospitals that had carried the burden during the Jim Crow era, all but Howard University Hospital (Freedmen's), Hubbard, Harlem, and Tuskegee (now CAVHCS-East Campus) had closed.

Certification of Surgeons

The American College of Surgeons

As surgery expanded and surgical training remained haphazard, identifying the qualified surgeon became a critical issue. The ACS, founded in 1913 to improve the quality of surgery in the United States and Canada, offered a Fellowship to surgeons meeting its standards.[63] Governed by a Board of Regents, the founders had not considered race until Regent William Haggard of Tennessee opposed the inclusion of Daniel Hale Williams in the 500 initial fellows, the night before the first convocation of the new College. Williams had been unanimously recommended by the credentials committee. A fierce debate ensued, principally between Haggard and Albert Ochsner of Chicago, who championed Williams. Emotions ran high as both Haggard and Ochsner threatened to resign over the issue. Several Regents, including J.M.T. Finney of Johns Hopkins, expressed the opinion that as a scientific society, the ACS should have no color line. Ochsner prevailed, and Williams was admitted.[63]

The debate, Haggard's threat of a Southern boycott, and the fact that nominations for fellowship came through local and state committees meant that no further Black surgeons were admitted until 1934. That year, the New York Credentials Committee, strongly in favor of integration, nominated Louis Wright for Fellowship. After a lengthy discussion, the Regents unanimously approved Wright. Although the lengthy deliberation had left several Regents with the impression that any racial barriers had been dropped, they did not set a specific policy—an omission that would be significant over the next decade. Despite subsequent opposition from some Southern surgeons, Franklin Martin, the College's Director-General, stood firm on Wright's admission.[63]

Martin's death the next year and the Regents' decision not to appoint a successor stymied any further progress toward integration of the organization. The Regents shared an unwillingness to address controversial issues. In 1939, the Board passed a resolution against admitting any surgeon "whose admission would be injurious to the good order, peace, or interest of the College."[64] With this as the only guidance, the otherwise leaderless permanent staff refused requests for applications from Black surgeons by replying that "the subject is now under consideration."[65] By 1945, the situation was untenable, and the College was attracting unwanted national attention. Through the efforts of Regent Henry Cave, the Regents agreed, after a heated debate, to admit qualified Black surgeons to the College. That year, Drs. Ulysses Dailey (Chicago), who had applied three times since 1917; Peter Murray (New York); Roscoe Giles (Chicago); and Carl Roberts (Chicago) received Fellowships.[63,65] The story is told more completely in Chapter 34.

The American Board of Surgery

By 1936, the College's claim to be the certifying body in American surgery was also under threat. In an effort initiated by the American Surgical Association, the ABS was established in 1936 to set a higher standard of certification. After some initial reluctance, the ACS joined in this effort.[31,63,66] From its inception, the ABS's policy was to have no color line—the same standards applied to all applicants.[66] However, the disparities and discrimination in opportunities for training described earlier in this chapter meant that relatively few Black surgeons met the new board's eligibility standards.

Figure 5

Roscoe Giles became the first Black diplomate in 1937, one year after the ABS's founding (Figure 5).[67] Louis Wright and Charles Drew followed, in 1939 and 1941 respectively. By 1947, 14 Black surgeons had become certified. Using data from Cobb's 1956 article, of the 21 Black surgeons certified before 1950, 13 had graduate from Northern medical schools, and four each were from Howard and Meharry.[68] This corresponds to a general pattern for the first two decades of board certification, where graduates of Howard and Meharry appear to have been at a disadvantage. By 1947, there were a total of 93 board-certified Black physicians in all specialties. Half of that number came from predominately white medical schools, although these schools graduated only 15 percent of all Black doctors in the period.[69]

Between 1947 and 1956, the number of ABS-certified surgeons rose to 53.[68] But even with improving opportunities after World War II, in 1969, rates of board certification were still lower for Black surgeons, although the gap was narrowing (43 percent vs. 48 percent).[16] By Kosiba et al.'s 1987 study, the number of African American diplomates had risen to 455 (72 percent of all Black general and thoracic surgeons).[62] At that time, graduates of the programs at Howard, HGPH, and Meharry led in certification rates. The second-largest group (after Howard graduates), however, had finished at free-standing hospitals, reflecting discriminatory practices in university-affiliated programs of the day.[62] Notably, disparities in rates of board certification based on sociodemographic characteristics continue to exist to this day.[70,71]

Conclusion

This chapter has traced the many barriers to a surgical career faced by Black Americans over the past 150 years. It is also a tribute to all of the surgeons who overcame those barriers.

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Legends

1. Isabella Vanderwall, MD. Reproduced from *The Crisis*, July 1912. Public domain.

2. Operating room, Meharry Medical College. Meharry Medical College Archives.

3. Harlem Hospital nurse and intern bandaging the head of an assault victim as a police officer stands by in the hospital's emergency room, 1944. Herbert Gehr, LIFE Images Collection via Getty Images.

4. Interns and nurses at Provident Hospital and Training School, Chicago, 1922. National Library of Medicine.

5. Roscoe C. Giles, MD, the first Black surgeon certified by the American Board of Surgery (1937). Division of Rare and Manuscript Collections, Cornell University Library.

Chapter 9

The Black Hospital

Don K. Nakayama, MD, MBA, FACS

The medical treatment of Blacks in America touches nearly every major event of the country's social history: slavery; emancipation; Reconstruction and the Jim Crow era that followed; the Great Immigration; and the civil rights movement. Beset by centuries of discrimination and segregation—*de jure* in the South and *de facto* in the North—Blacks suffered rates of death and infectious disease that far exceeded those of whites.

Blacks were excluded from nearly all private hospitals and were inadequately served by public facilities. In response, Black physicians founded proprietary hospitals to treat Black patients and train Black nurses and doctors, often in substandard buildings that suffered for want of upkeep and lacked necessary equipment and financial resources. There were notable successes in Chicago, Philadelphia, Kansas City, St. Louis, and the Freedmen's Hospital in Washington, DC, where extraordinary leadership and unique circumstances created stable but still financially vulnerable Black hospitals. The isolated successes and widespread inadequacies of the entire Black hospital system in America demonstrated the structural and moral failure of the "separate but equal" political philosophy that justified racial segregation. The only remedy was full integration of all U.S. hospitals and medical schools with the enactment of the Civil Rights Act of 1964 and the Medicare legislation the next year.

Vanessa Gamble wrote a complete history of the Black hospitals in America.[1] In his history of Black health care in the U.S., David McBride focused on the role health care played in the civil rights movement.[2] The two authors provided the outline and most of the facts in the discussion that follows.

The Antebellum South

In 1803, a Dr. Collins—there is no record of his given name, and he may not have been a trained physician at all—published a handbook titled *Practical Rules for the Management and Medical Treatment of Negro Slaves in the Sugar Colonies*.[3] In a diabolical glimpse of American history, the author described all aspects of ownership of enslaved persons. More than 200 pages are devoted to medical care. He gave the recipes for various nostrums and the necessary "instruments and utensils" in case surgery had to be carried out.

The ideal plantation hospital, or "sick house," had four large rooms: one for men, one for women, one for "dangerous diseases," and a space for its attendants.[3] Women cleaned, cooked, and attended to the daily needs of the patients. A fully trained

physician visited once or twice a week to give a cursory once-over to the sick and affirm that they were healthy enough to work.

Medical Segregation in the South—and the North

In the South

Not all of those who enslaved people could justify the construction of a sick house. In 1832, the Georgia Infirmary was founded in Savannah by white physicians to accommodate sick enslaved persons for a daily fee. Such inpatient facilities were rare.

Hospitals in the South were for whites only and excluded Blacks. The few exceptions were facilities that relegated Black patients to spare rooms in undesired areas of the facility, such as basements and storage areas.

Charity Hospital in New Orleans (1736) was founded as L'Hôpital des Pauvres de la Charité, caring for both poor whites and Blacks. The hospital was devoted from its founding to the medical assistance of those in need: "orphans, convalescents, indigent widows, and the 'walking well' in its capacity as an almshouse."[5] In 1815, levies on gambling houses, balls, and concerts financed the construction of a modern facility that accommodated 120 patients in separate "white" and "colored" wards (Figure 1).

Figure 1

After the Civil War, the Freedmen's Bureau (established in 1865) opened facilities to care for former enslaved persons in Southern and border states. At its peak in 1867, it operated 45 hospitals with a capacity of 5,292 beds. With chronically inadequate funding, the bureau never could attract qualified physicians. Without resources, freed people were housed in abandoned houses and old army medical barracks, moving from place to place as the facilities became too decrepit to function. By 1872, all freedmen's hospitals had closed except for the original Freedmen's Hospital (founded in 1863) in Washington, D.C.[1] (The history of Freedmen's Hospital is discussed more completely below.)

The end of the Civil War brought economic recovery to Southern boomtowns such as Atlanta, New Orleans, Kansas City, St. Louis, and Charleston. With it the rural poor, both Black and white, migrated into the new Southern urban hubs of industry and commerce. While the new arrivals were a cheap source of factory and domestic labor, they also carried a large burden of infectious disease, especially tuberculosis and syphilis, that placed the entire city at risk—both Black and white, rich and poor.[4] In Gamble's words, "Germs had no color line."[1]

To deal with the illnesses of the poor, who were often Black, white philanthropic organizations built segregated Black hospitals, many of them attached to Christian theological institutes: Hampton, VA (1891), Atlanta (1896), and Raleigh (1896). The facilities remained under the administrative control of the white philanthropists and prohibited Black physicians from joining their staffs.

In the North

One of the outstanding demographic phenomena of American history was the Great Migration, the movement of Blacks from the rural South to the urban centers of the Midwest and Atlantic Seaboard. From 1916–1970, more than 6 million Blacks resettled in the North.[6]

Blacks packed into tenements that were already full of European immigrants who had arrived a generation before. Rates of deaths and infectious diseases among urban Blacks skyrocketed due to overcrowding and poverty.[4] In 1900, the death rate for Blacks was 29.6 per 1,000 people, compared with 17.3 for whites. Communicable diseases were

rampant, with annual death rates for Blacks far exceeding those for whites in tuberculosis (485 vs. 174 deaths per 100,000, respectively), pneumonia (356 vs. 185), typhoid (68 vs. 32), and malaria (63 vs. 7).

Rates of maternal and infant mortality were far higher among Blacks compared to whites in Northern cities. In 1922, the national infant mortality rate for Blacks was 110 deaths under age 1 per 1,000 live births; for whites it was 73. The difference was more dramatic in cities: for Baltimore, the numbers were 191 and 78, respectively; in Kansas City, they were 155 and 78.

For basic care during the 19th century, the urban poor depended on dispensaries, a concept imported from late-18th century England designed specifically to keep the needy from filling hospitals by treating them at home until patients either recovered or died. Run on a shoestring and dependent on both private and municipal contributions, dispensaries had apothecaries to provide medications and house physicians to perform simple procedures, such as tooth extractions.[7]

But families in city slums could ill afford to have one of their members sick and requiring the attendance of an adult or older child. Almshouses were caretakers of last resort for the dispossessed, and their sickrooms were the forerunners of the public hospital. The Friends Almshouse, established in 1713, evolved into Philadelphia General Hospital. The first permanent almshouse in New York City, established in 1736, became Bellevue Hospital (Figure 2).[8] They had a primarily custodial mission, isolating those with infectious disease and housing those with incurable conditions, and confinements that could last for months to years.[9]

Most private hospitals prohibited the admission of Blacks. A few operated by churches and charity organizations admitted Blacks in segregated wards, often in basements, vacant rooms, and abandoned wards.[1] The Pennsylvania Hospital kept a small building separate from the main wing for Blacks and patients with venereal disease.[7]

Figure 2

In the late 19th century, technical advances in surgery and bacteriology led to the development of a hospital-based professional staff of doctors and nurses, skilled in increasingly complex surgical operations and inpatient treatment regimens. Hospitals opened schools to meet the demand for nurses skilled in operating room procedures and inpatient care.[7]

The creation of the Johns Hopkins Hospital in 1889 formalized in-hospital training of physicians. Under this model, hospitals became the place where medicine and surgery were practiced and taught. Physicians in training flocked to urban public hospitals, where they learned and gained clinical experience first through one-year internships, then through multiyear residencies.[10]

The flood of immigrants from Europe and the American South coincided with the rise of hospitals in the urban North. As immigrants flooded to New York City, Bellevue Hospital became the largest public hospital in the country. Because they had large concentrations of patients with advanced diseases, public hospitals became centers of clinical research as well.[9]

Black patients began to dominate the censuses at urban public hospitals. These facilities remained under the control of white administrators and staffed by entirely white physician and nursing staffs. A 1930 survey found that Philadelphia General Hospital, where half the inpatient population was Black, had an entirely white staff of 200 physicians, 50 residents and interns, and 600 graduate and student nurses. Harlem Hospital evolved into an entirely Black hospital during the interwar period yet had an entirely white professional staff.[4] With large populations of poor Black patients who had no alternatives for medical care, public hospitals became places where white interns and residents acquired clinical experience through practicing medicine and surgery under minimal or no supervision.

The Black Medical Ghetto

Black Proprietary Hospitals

In the late 19th century, the few Black doctors in America had no place to admit their patients who needed inpatient care and no place to perform surgery. They established their own hospitals, some of which became the first training sites for Black nursing students and Black medical graduates (Figure 3).

Figure 3

The first was Provident Hospital in Chicago, organized by Daniel Hale Williams (1856–1931) in 1891, followed by the Frederick Douglass Hospital in Philadelphia, organized by Nathan Mossell (1856–1946) in 1895. Inspired by his own early success, Williams became a vocal advocate for Black hospitals owned and operated by Black physicians and their communities. By 1920, 118 Black hospitals were in operation.[1]

Williams's Provident Hospital got off the ground quickly, because he had the support of both the Black Chicago community and white businessmen. His vision was an interracial enterprise, without discrimination with regard to hospital admission or membership on its medical staff. By 1912, Provident had no debts, an endowment of $50,000 (90 percent of which came as donations from Chicago's burgeoning Black business class), and a facility valued at $125,000. (Williams's life and

Figure 4

the Provident Hospital story are covered more completely in Chapter 10.)

In contrast to Williams's early financial success, Mossell's Douglass Hospital was chronically insolvent (Figure 4; see Chapter 11). Lack of money was a problem that plagued almost all Black proprietary hospitals and was the major reason they failed. Even with financial support from the Pennsylvania Board of Charities, in 1904 Douglass Hospital had an $18,000 deficit and a facility it had long outgrown.

Mossell had to constantly fight to keep his position as medical director, including a row with other Black doctors on his staff. Eventually his rivals formed a hospital of their own, the Mercy Hospital, located just four blocks from Mossell's facility.[1]

In 1918, 30 Black doctors in Detroit purchased a residence in a well-to-do Black neighborhood and opened the nonprofit Dunbar Memorial Hospital in the building, the second inpatient facility open to Blacks in the city (Figure 5). It had 27 beds and one operating room. In 1928, demand had grown such that the hospital moved to larger facility, renaming itself Parkside Hospital.[11]

Figure 5

Separate but Equal Black Hospitals in Missouri

Thomas Unthank (1866–1932, Figure 6) was a vigorous leader in the Black hospital movement in Kansas City. An 1898 Howard Medical School graduate, he opened two proprietary hospitals on each side of the state line to accommodate his practice: Douglass Hospital in Kansas (1898) and Lange Hospital in Missouri (1903). In addition to maintaining a busy private practice, Unthank served as assistant city physician to the Black residents of the city, an official status that gave him influence on public health decisions in the city.

Figure 6

When a new municipal hospital was constructed in 1908, most of the white patients were moved there, leaving all the Black patients and the white patients with infectious disease in the old one, which was called Kansas City General Hospital No. 2. The nursing staff and administration were all white, as was its physician staff. If a Black doctor had a Black patient who needed admission, the case had to be under one of its white physicians.

By 1911, Unthank made sure that Black physicians, including himself, gained privileges to the hospital. The next year, the facility named its first Black intern and opened a training school for nurses that was open to Blacks. In 1914, it became the first public hospital to be managed by a Black superintendent and a Black superintendent of nurses, and within ten years, all departments of the hospital were headed by Blacks. In 1938, it began to train residents in surgery.

The story across the state in St. Louis began similarly, as told by H. Phillip Venable in the *Journal of the National Medical Association* in 1961.[12] The public hospital in St. Louis, City Hospital, barred Black physicians from its staff and relegated Black patients to the rear sections of two wards. As with nearly all urban public hospitals, it was a training site for white physicians only. In response to a public outcry, in 1918 the city purchased and renovated the vacated Barnes Medical College facility, renaming it the St. Louis City Hospital No. 2.

At the completion of renovations in 1919, all Black patients were transferred to the refurbished facility. Its visiting staff was composed of faculty from Washington University. Black physicians from the community comprised an associate staff, with four new Black graduates in its inaugural internship program.

It was immediately obvious that the building was never intended to be a hospital. The rooms were small, the corridors were dark, and the whole place was a fire hazard. It was reminiscent of the Kansas City story; in the words of W. Montague Cobb, professor at Howard Medical School, editor of the *Journal of the National Medical Association*, and civil rights leader, "the establishment of the two segregated hospitals in Missouri represented the 'old-clothes-to-Sam' pattern of hospital development."[1]

Figure 7

Black attorney Homer G. Phillips (1880–1931, Figure 7) was on the citizens' oversight committee for the hospital. In 1922, he worked to make

certain that money from a $87 million city bond issue included $1 million for a new hospital for Blacks to replace City Hospital No. 2. When the bond issue passed, other interests tried to modify its provisions to direct construction funds for a new wing at City Hospital No. 1. Phillips, however, felt that a separate hospital was necessary to preserve practice and training opportunities for the city's Black physicians and new Black medical graduates.

Phillips eventually won out, but he never saw the completion of his vision. He was shot and killed in 1931, the year before ground was broken. The 685-bed general hospital was completed in 1937 at a final cost of $3.1 million with the help of a second grant of $200,000 from the city board of alderman and with federal money (Figure 8). Mayor Bernard Dickmann, in office 1933–1941, saw the project to completion during his administration.

Figure 8

When the hospital opened, it was named the Homer G. Phillips Hospital, in honor of its most ardent advocate. It was a complex of five buildings, including two multistory wards, an administration building, and living quarters for student nurses and interns. True to its mission of providing care to indigent populations and training Black doctors, in 1961, graduates of Homer G. Phillips internships were in 44 states and included LaSalle Leffall, who became chair of the department of surgery at Howard University School of Medicine and president of the American College of Surgeons.[13]

White Philanthropists

White philanthropies, notably the Duke Endowment, the Julius Rosenwald Fund, and the General Education Board (GEB), had major roles in the construction and funding of Black facilities in the first half of the 20th century, a story covered by Vanessa Gamble in her book, which is the source of all facts in this section.[1]

Duke Endowment

James Buchanan Duke, a tobacco magnate, and his family supported the construction of the segregated Lincoln Hospital in Durham, NC, in 1901. At first the Dukes intended to support only the construction of a wing at the city hospital. John Merrick, a prominent Black businessman, convinced them that a separate Black hospital would be of greater benefit to the doctors, nurses, and community.

During the 1920s, the Duke Endowment gave money to hospitals in the Carolinas of all types—white only, Black only, and mixed—without regard to quality of the facility, thereby perpetuating segregation and unequal distribution of health resources. Many of the hospitals were poorly equipped and small, averaging only 28 beds. None were approved by the American Medical Association for internship training. Duke Endowment money, while used to purchase badly needed equipment or upgrade an existing physical facility, was never sufficient to materially upgrade Black hospitals to approach the quality of white facilities.

Rosenwald Fund

Julius Rosenwald (Figure 9), an executive of Sears, Roebuck, and Co., founded the Rosenwald Fund to support Black and Jewish educational institutions and health facilities. One notable beneficiary of the Rosenwald Fund was the Tuskegee Institute.

In 1931, the fund donated $50,000 toward the construction of a Black wing for Knoxville General Hospital, toward which the city and county provided $200,000. Laboratory and radiology services were shared with the main hospital, but the section for Black staff and inpatients had entrances

separate from the main wing of the building. While it started with an all-white medical staff, the intent was to eventually include Black physicians. The hospital, its new addition, and its good intentions were hailed at the time as a great advance in health access by Black professional societies, such as the National Medical Association (NMA) and the National Hospital Association.

Figure 9

The praise, however, was premature. The white medical staff blocked the appointment of Black physicians, claiming that their education and training was inadequate. One Black doctor specifically spent a year at New York University in internal medicine to be eligible for staff privileges but was still refused.

The Rosenwald Fund supported the appointment of Black physicians to the medical staff. When its representatives reminded the hospital of their contribution to its construction, the Knoxville city council responded with a threat to enact a measure that specifically prohibited Black physicians from practicing in the facility. The council never carried out the measure, but Black physicians were nonetheless excluded until 1942, when the threat of legal action against the discrimination of Black physicians broke the impasse and they were given hospital privileges.

General Education Board and Provident Hospital (Chicago)

The GEB was started by John D. Rockefeller in 1902 and incorporated by Congress the following year. A major supporter of programs improving the South, and the education of Blacks specifically, the board was a major supporter of Meharry Medical School in Nashville.

In 1929, Provident Hospital received grants from both the Rosenwald Fund and the GEB, with the goal of making Provident Hospital the foremost medical institution for Black medical education and hospital care in the country.

In reality, the University of Chicago, one of the primary beneficiaries of Rockefeller's largesse, needed Provident Hospital as a training site for its medical students. White patients at the university's Billings Hospital resisted being seen by Black students from the medical school. Billings prohibited Black patients from its clinics. An affiliation with Provident would obviate the need to build a new wing for Black patients at Billings.

To get the support of university officials, a promise was made to limit the number of Blacks admitted to the medical school class to 10, even though 14 had been enrolled in 1928. The goal was to have a physician staff that was 60 percent Black, but at the start of the arrangement, the administration and attending staff for the university practice was entirely white.

When fundraising began in 1929, the project had the support of both the GEB and the Rosenwald Fund. The timing, however, was horrible. The stock market crash in October and the subsequent Great Depression decimated the Rosenwald endowment. Provident had enough funds to acquire the vacant Chicago Lying-In Hospital, which it occupied in 1933. At its dedication, Julius Rosenwald called the renovated facility "the greatest project for the American Negro since Lincoln's Emancipation Proclamation."[2]

The Rosenwald Fund and the GEB sparred over how the money was spent. The GEB supported endowments and balked when it discovered that its money was being used for operating costs, the method of support favored by Rosenwald. Both funds suspected mismanagement, a view supported by the hospital's deteriorating financial position. In 1929, Provident had a deficit of $10,000; in two years, it had ballooned to $165,000. The GEB started to wind down its support in 1935 and terminated it completely in 1939. The agreement between the University of Chicago and Provident Hospital ended in 1944.

Throughout its agreement with the University of Chicago, Provident was always the far poorer sister to Billings, a fact that was obvious to the city's Black civic organizations, including the local chapter of the NAACP. "The issue was not whether Provident Hospital, under Black control, should exist," wrote Gamble, "But whether the hospital should be supervised and used for Jim Crow purposes by a white university."[1] Despite the money pumped into the project by two of the country's most generous philanthropists, the model of a segregated black hospital was flawed from its beginning.

Cobb summarized the fundamental problem of relying on the assistance from white philanthropists. Far from solving the problems of health care in Black communities, it cemented and perpetuated a system of inferior care. "The effect of their activity was merely to embellish and decorate it and make it more comfortable and less troublesome," he wrote. "They had, moreover, the effect of the philosophy of separatism. Negro education and medical executives were the more shackled…[to] the great foundations."[14]

Freedmen's Hospital

Freedmen's Hospital has a unique place in the history of the Black hospital because of its origin as an infirmary for the thousands of Black slaves finding refuge in Washington, D.C., during the Civil War and the assumption of its management by the medical department of Howard University in 1868. Cobb outlined its history in the *Journal of the National Medical Association*.[15]

Jill Newmark of the National Library of Medicine traced the origin of the Freedmen's Hospital. A flood of Black slaves sought asylum in Washington, D.C., during the war and relief from destitution in its aftermath. City officials, unprepared for the volume of refugees, housed 40,000 in shelters in Camp Barker, then a rural military installation in the northwest sector of the district. Infectious disease and neglected medical conditions were rampant, so the sickest were sent to one-story barracks and tents that were converted into a complex of wards, commissaries, kitchens, laundry facilities, morgues, and other components of a hospital, including an isolation area for smallpox patients. Because slaveowners considered escaped slaves to be property, the makeshift facility was called the Contraband Hospital (Figure 10).

At first staffed by military personnel, civilians, and volunteers under the control of the U.S. Army, in May 1863 the appointment of a Black surgeon, Alexander Augusta, began a shift of authority over the Contraband Hospital to Blacks. Black residents of the camp served as nurses and other workers. Formally disbanded in December 1863, the hospital continued to provide care to Black civilians and soldiers at a number of sites before moving into the abandoned Campbell Army Hospital. With a 600-bed capacity, the new quarters had a better water supply and waste disposal system. At war's end in 1865, the Contraband Hospital came under the administration of the Bureau of Refugees, Freedmen, and Abandoned Lands, popularly referred to the Freedmen's Bureau, and was renamed Freedmen's Hospital.[16]

General Oliver Howard, commissioner of the Freedmen's Bureau, was also among a group of 12 socially conscious men who founded a theological seminary to train Black ministers in 1866. Howard urged that the concept of the school be expanded to that of a university, including all levels of teaching, theology, medicine, law, and agriculture. The new institution, renamed Howard University in honor of the general, was chartered by Congress in March 1867.[17]

Figure 10

The new university's medical department needed patients, so a hospital was a necessity. It was therefore fortuitous that General Howard was both president of the university and in charge of the Freedmen's Bureau. In 1868 the bureau ended its funding of the hospital, so the general had the medical department continue its operations. The hospital was supported largely by a tax imposed on all freedmen under its authority throughout the nation, not just those in the Washington area.[18] In 1869, he ordered the erection of four large two-story frame buildings to be used as permanent hospital wards adjacent to the new medical building then under construction on campus.

Thus, Freedmen's Hospital and the medical department of Howard University were a single unit, with lecture halls and laboratories for medical instruction close to patient wards for clinical training. Freedmen's Hospital moved to a new structure on university property in 1907.[19] In his 1910 report on American medical education, Abraham Flexner wrote favorably about the close ties between the Howard College of Medicine and Freedmen's Hospital.[20]

Despite Flexner's endorsement and its small annual appropriation from the federal government, inadequate finances would plague Freedmen's Hospital long into the 20th century. Many white philanthropists considered the hospital to be the government's responsibility and eschewed giving money to it. Andrew Carnegie was willing to pay for a new library for Howard, but not a new hospital. "If we start helping medical colleges for colored people," he said, "we cannot discontinue." Todd Savitt, a historian at East Carolina University, wrote, "Their needs, he felt, were too great and their allies who might help in funding were too few."[20]

Training for Black Nurses and Physicians

Black hospitals needed Black nurses to staff their newly opened facilities. With nursing schools closed to Blacks, they had to train their own. The impetus for including a nursing school at Provident Hospital was a Black Chicago woman's rejection from one of the city's nursing programs because of her race. The woman's brother, a Chicago pastor, asked Williams for help. His request became one of the reasons for organizing Provident Hospital.[21]

When Williams later became surgeon-in-chief at Freedmen's he brought a nurse from Chicago to reorganize the nursing curriculum, upgrading the training to be the equal to that of any school in the country. Both Black hospitals in Philadelphia also trained nurses.

By the 1920s, a one-year, hospital-based internship became an integral part of medical education, and Black medical graduates were denied this essential part of modern training.[10] Only Black hospitals like Provident (Figure 3), Douglass, Freedmen's, and Kansas City General Hospital No. 2 offered training positions for Black physicians. None of the 202 Black hospitals in the U.S. had a residency training program in surgery until the St. Louis City Hospital No. 2 started one in 1927. Over the next two decades, the numbers of programs and internship positions fluctuated, but always the number remained inadequate. Poor quality of training and inadequate facilities made some of the internships so unattractive that they went unfilled.[1] The topic of training of Black physicians is covered in Chapter 8.

Problem and Solution

The underlying problem was that most Black hospitals, once the centerpiece of Black communities and the embodiment of self-help within the Black community, were insolvent. Without financial resources, their buildings were deteriorating, and the equipment was breaking down. After paying the staff their meager wages, hospitals had no money to pay trainees. Homer G. Phillips Hospital's success in St. Louis came about only through extraordinary leadership from the local Black community and engagement with white politicians. Freedmen's Hospital survived as a distinct entity largely because of General Howard's positions as both commissioner of the Freedmen's Bureau and president of Howard University, as well as funding from the freedmen's tax and an inadequate stipend from the federal government. Both were unique circumstances that could not be replicated in all towns and cities in America.

By the end of World War II, both the NMA and the NAACP declared that, in Gamble's words, "a segregated health care system resulted in the delivery of inferior medical care to Black Americans." In essence, she wrote, "a poorly financed Black medical ghetto existed."[1]

Despite being on opposite sides with regard to slavery, the central issue of the Civil War, both North and South became segregated by race: the South through the hardening of Jim Crow laws, and the North through racial tensions and institutional prejudice. In health care, this meant that in both North and South, hospitals remained segregated, unequal, and inadequate, and training facilities remained closed to Black nurses and doctors. The only way to assure full access to hospitals and medical schools would be their full integration.

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Daniel Hale Williams, MD, FACS: "A Moses in the Profession"

Alisha J. Jefferson, MD; Tamra S. McKenzie, MD, FACS; and Don K. Nakayama, MD, FACS

Daniel Hale Williams, MD, FACS, (1856–1931, Figure 1) was the most prominent Black surgeon in the United States in the late 19th and early 20th centuries. While he is best known for his achievements in surgery (the second reported repair of a stab wound to the pericardium, in 1893; among the first to repair a penetrating wound to the spleen, in 1902), his signal achievements were as an advocate for equal access to medical care and training for Blacks.

Figure 1

Williams had a significant impact on the major health institutions of Black America. After graduating from Chicago Medical College in 1883, he was denied appointment to hospitals in Chicago due to his race. He opened Provident Hospital in 1891, the first Black hospital in the country to provide inpatient care and a facility to train Black nurses and doctors. He reorganized Freedmen's Hospital in Washington, D.C., as its chief of surgery from 1894–1898, reforming its school of nursing and starting a training program in surgery. He was a leader in the formation of the National Medical Association (NMA) in 1895 and served as its inaugural vice president.

The success of Williams's annual clinics at Meharry Medical College, which began in 1900, motivated the Black community in Nashville to open an inpatient facility, the forerunner of a wave of Black hospitals across the U.S. In 1913, he became a charter member of the American College of Surgeons (ACS) and its first Black Fellow. Ulysses Dailey, MD, FACS, surgeon and former president of the NMA, called Williams "a Moses in the profession."

Helen Buckler wrote a well-referenced biography titled, *Daniel Hale Williams, Negro Surgeon*.[1] All details in this profile come from her book

unless otherwise referenced. She described in detail his contentious years in Washington, D.C., at Freedmen's Hospital and his difficulties at Provident Hospital. Another source, especially for Williams's impact on Black health institutions, came from W. Montague Cobb, professor at Howard University and a chronicler of Black medical history. Cobb wrote two profiles of Williams in the *Journal of the National Medical Association*.[2,3]

Early Life and Education

Daniel Hale Williams was born on January 18, 1856, the fifth of six children of Daniel Williams, Jr., and Sarah Price Williams, in Hollidaysburg, PA. His father's family, a racial mix of German immigrants, Native Americans, and free Blacks, settled in York County, PA. They were active in the abolitionist movement as members of the National Equal Rights League. Williams's mother, with the same interracial heritage, came from a free family in Annapolis headed by a clergyman. The Williams family did well until Daniel Jr. died of consumption during a visit to Sarah's family.

In the aftermath of the passing of their father, the Williams children were separated. Eleven-year-old Daniel was taken out of school and sent to Baltimore as a shoemaker's apprentice. One year later, out of loneliness, he asked an acquaintance of his father for a rail pass to Rockford, IL, where his mother had resettled with her family. Their reunion, however, was brief. Daniel's mother left town, leaving him and his sister Sally under the care of her family and in the company of his cousins.

In Rockford, Williams worked odd jobs on lake boats and learned to cut hair. With a restlessness like their mother's, the two Williams children moved to Edgerton, WI, where Daniel opened a barbershop of his own at age 17. When the business failed, he joined an established barbershop in Janesville, a larger town a few miles away.

Harry Anderson, the barbershop's owner, was impressed by the independent, hard-working lad and took Sally and him into his home. Daniel cut hair part-time and tried unsuccessfully to finish high school. He tried music for a year, singing tenor and learning to play the guitar and bass fiddle. With Anderson's encouragement, Daniel entered a private school, Haire's Classical Academy, where he completed his secondary education in 1877. He continued to cut hair part-time, played bass fiddle with a dance band, and attended services at the Unitarian Church.

Daniel's older brother was a successful lawyer, but reading law had little interest for Daniel. He instead tried medicine. In 1878, he became an apprentice to Henry Palmer, a prominent surgeon and civic leader in Janesville and throughout Wisconsin. After two years with Palmer, Williams entered Chicago Medical College in 1880, an institution that later became the medical department of Northwestern University. As he became immersed in his medical studies, Williams received money from Anderson, the barber with whom he got his start in Janesville.

Williams struggled with low passing grades. During finals week one year, he fell ill in the midst of a smallpox epidemic, which left him with pockmarks on his nose. His clinical experience was at the South Side Dispensary, Mercy Hospital, and St. Luke's Hospital.

After graduation from medical school in 1883 and a year as intern at Mercy Hospital, Williams, one of only three Black physicians in the city, opened a practice in a well-to-do South Side neighborhood where both white and Black families resided. He established a reputation as a skilled surgeon. As he built his practice, he taught and demonstrated anatomy at the Chicago Medical School from 1885–1888. He had privileges at the South Side Dispensary and got a job as surgeon to the City Railway Company. In 1889, Illinois Governor Joseph Fifer appointed Williams to the State Board of Health.

However, none of the established hospitals in Chicago would grant privileges to a Black surgeon. Williams did minor operations at the dispensary, which was little more than a storefront where the

poor could pick up nostrums for themselves or sick family members. Without access to an inpatient facility, like all Black physicians, Williams was unable to practice the medicine and surgery for which he was trained.

Provident Hospital

In 1890, Reverend Louis Reynolds, pastor of St. Stephen's African Methodist Church, approached Williams with a concern. The pastor's sister Emma had come to join him from Kansas City, hoping for admission in one of the city's training programs for nurses. She had been turned down by all of them because she was Black.

The solution was a hospital, not restricted to either race, that would train Black nurses. Williams and other Black physicians would benefit, as it would be an inpatient facility for their patients. Another pressing need would be met: intern training positions for Black medical school graduates. The idea had merit. Chicago's Black community was growing, supporting 200 Black-owned enterprises, 20 churches, and three newspapers. As a member of the state board of health, Williams knew that more hospitals were needed for all races.

Williams organized rallies in support of a hospital in the Black communities of the West and South Sides of Chicago. He won over Black pastors and lay leaders. City businesses, both Black- and white-owned, pledged money to the project. An important early contribution was made by Reverend Jenkins Jones, who secured a down payment from Armour and Company, one of the city's premier meatpacking businesses, for a three-story brick house on the corner of 29th Street and Dearborn.

Frederick Douglass donated the proceeds of a lecture to the hospital fund. Members of the community gave what they could: a wringer for the hospital laundry, lace for the nurses' caps, and books for a patient library. White philanthropists donated, as did white churches and synagogues.

As momentum grew, resistance began to build. Some resented that a separate facility had to be built at all; why not integrate the existing hospitals? Another said that a Black-owned hospital had never been tried before; what made Williams believe that he could succeed?

Williams's dedication and resolve overcame the doubters. In January 1891, the articles of incorporation were drawn up in the name of the Provident Hospital and Training School Association, with every donor as a member. An advisory board of white civic leaders and medical professionals was named; the hospital trustees, executive, and finance committees were all Black. In May 1891, the hospital opened its doors (Figure 2).

Figure 2

Success depended on having excellent clinicians on staff. Williams's priority was quality, regardless of race, so his staff had both Black and white members. He availed himself of consultants from the city's medical schools, such as Christian Fenger and Frank Billings, who were his past associates at the Chicago Medical School.

Austin Curtis became Provident's first surgical trainee under Williams later that year. (He later became professor of surgery at Howard University and chief surgeon at Freedmen's Hospital.) The first class of nursing students enrolled the year following, including Emma Reynolds.

Repair of the Pericardium

Williams is best known as the second surgeon to successfully repair a laceration of the pericardium, a feat he accomplished in July 1893. The patient, a 26-year-old man, was admitted to the Provident Hospital one evening after suffering a stab wound just left of his sternum. During the night, he continued to bleed from his wound. By morning he was in shock, so Williams was forced to operate.

With five other surgeons in attendance as observers, Williams extended the stab wound toward the sternum on either side in the direction of the border of the costal cartilage. The internal mammary vessels had been transected. To expose and ligate the vessels, he removed a segment of the costal cartilage.

With the bleeding controlled, Williams found a 1.25-inch laceration of the pericardium. No hemopericardium was present, and there was enough room to inspect the heart. There was a laceration of the right ventricle near the right coronary artery, but it was not bleeding. He left it alone and sutured the pericardium closed. The patient's recovery was complicated by a 2.5-liter pleural effusion, which Williams drained three weeks after the original operation. The patient walked out the hospital a month later. Williams found him at work at the Union Stockyards two years later.

Williams believed he had done something unprecedented: exploration of a cardiac stab wound and suture of a pericardial laceration. After a search in the National Library of Medicine, he thought he established his priority. He reported his success in the *Medical Record* in 1897 (Figure 3),[4] but he had missed an 1895 paper, just two years before his, that reported repair of the pericardium done in 1891 by Henry Dalton in the *Annals of Surgery*.[5] Still, Williams' operation remained a great achievement that would be acknowledged for generations.[2,3]

STAB WOUND OF THE HEART AND PERICARDIUM—SUTURE OF THE PERICARDIUM—RECOVERY—PATIENT ALIVE THREE YEARS AFTERWARD.

By DANIEL H. WILLIAMS, M.D.,

SURGEON, FREEDMEN'S HOSPITAL, WASHINGTON, D. C.

THE following case is deemed of sufficient importance to be reported three and a half years after its occurrence. The writer's illness about the time of the patient's recovery and a change of duties to his present position have prevented previous publication.

James Cornish, an expressman, aged twenty-four years, during an altercation received a stab wound through the fifth costal cartilage, injuring the internal mammary vessels and wounding the pericardium and heart. The kind of knife and length of blade could not be determined from the patient.

He was admitted to Provident Hospital, Chicago, July 9, 1893, at 7:30 P.M., with a stab wound about one inch long, three-fourths of an inch to the left of the sternum, through and in the long axis of the fifth cartilage. A probe recognized only a superficial wound, but during the night there were such persistent

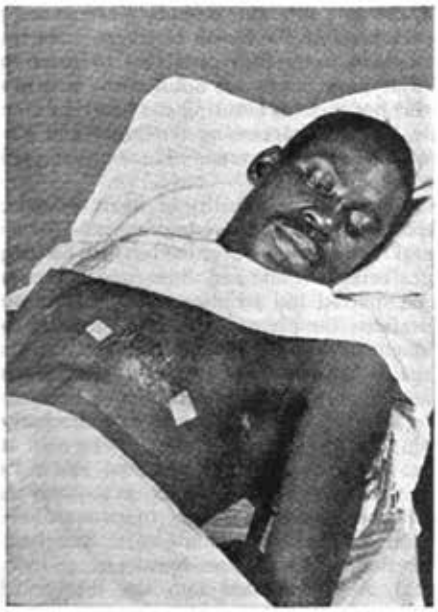

Figure 3

Freedmen's Hospital

In 1893, Williams was named professor of surgery of Howard University and surgeon-in-chief of Freedmen's Hospital, a 220-bed facility for Blacks in Washington, D.C. He was recommended by Walter Q. Gresham, Secretary of State under Grover Cleveland, and by the leadership of the Chicago medical community. Franklin Martin, MD, FACS, founder of the ACS, wrote:

I have known intimately Dr. Daniel H. Williams for more than ten years. I know him to be a man of honor and as a member of society a superior gentleman. Professionally he stands at the top of the medical profession of Chicago. He is a surgeon of great scientific ability, and his executive ability as demonstrated in the organization and equipment of Provident Hospital of Chicago, is beyond question.[1]

While Williams was reluctant to leave the 12-bed Provident Hospital, the opportunity to take the most prominent position in surgery at Howard and the largest medical facility for Blacks was irresistible. "If it's service to your race you're thinking of," Gresham said, "Freedmen's needs you more than Provident."[1]

Created by an act of Congress and located in the District of Columbia, the Freedmen's Hospital was under the authority of the federal government. The responsibility for running the hospital had been passed around through a number of departments. By the time Williams arrived, the facility was in the Department of the Interior, led by its newly appointed Secretary, Hoke Smith, who gave Williams freedom to do as he liked, as long as he stayed within its meager budget.

Under its previous chief, Charles Purvis, the hospital had no formal departmental organization. It had a ward for men, one for women, and one for "confinement" cases. Nursing was substandard and staffed by attendants with minimal training. When it came time for medication, a nurse stood at the center of the ward and clapped her hands. "All you eleven-o'clockers, take your medicine!"[1] The death rate in the facility was more than 10 percent.

Williams arrived in Washington several months late, delayed by a hunting wound that was slow to heal. He had to overcome the resentment of local physicians who mistrusted an outsider, and from Purvis, who had stayed on faculty and still served as secretary of the medical staff organization for Freedmen's.

Williams reorganized the hospital into seven departments: medicine, surgery, gynecology, obstetrics, dermatology, urology, and respiratory. He added departments of pathology and bacteriology, even though the facilities and equipment were hopelessly inadequate. To replace the existing staff of four entrenched full-time physicians, Williams enlarged the medical staff to "twenty gentlemen who have achieved eminent success as practitioners in their respective lines of work."[1]

Both the nursing and operating room staffs were substandard. Purvis had started a nurse training program at Freedmen's the year before he arrived, but it was a haphazard curriculum of didactic lectures. The trainees were given no formal instruction on direct patient care.

Williams got Sarah Ebersole, the night supervisor at Presbyterian Hospital in Chicago, to move to Washington as his nursing superintendent. Ebersole and Williams instituted a rigorous 18-month training program that included practical work on the wards and was equal to any program in the country. Under Ebersole's strict supervision, the trainees provided vastly improved care.

The surgical assistants at Freedmen's were lazy, so Williams fired them. With the money thus saved, he started a training program for Black interns. Most importantly, this opened training opportunities to Black medical graduates. A tough taskmaster, Williams demanded full attention during operations. He once sent a trainee out of the operating room because he let his eyes drift away from the patient while administering anesthesia.

Williams's predecessors used carbolic acid spray and adhered to the concept of "laudable pus" as a sign of healthy wound healing. Williams introduced steam sterilization and aseptic technique.[3] He started a hospital ambulance service. His clinical ability had a profound effect. At the end of his first year, he had only 8 deaths out of 533 operations—a mortality of only 1.5 percent. He operated anywhere in the body and had spectacular surgical successes, which added to his reputation.

Williams believed that the Black community did not accept the professional ability of Black physicians and surgeons. His solution was

controversial: public operations. Every Sunday afternoon, the public was welcome to observe an operation at Freedmen's Hospital conducted by a Black surgeon and staff. In defense of Williams, Cobb noted that the patient's identity was for the most part hidden.[2] The surgical amphitheater was a longstanding tradition as the centerpiece of surgical instruction, and the viewing of operations conducted by John Murphy, MD, FACS, at Mercy Hospital was a popular event at annual meetings of the Clinical Congress of the ACS well into the 1920s.[6]

Black Professional Societies

Excluded from Washington's professional organizations because of his race, there was no forum where Williams could present and discuss his cases among his peers. The Medical Society of the District of Columbia (MSDC) restricted its membership to white physicians, a policy it held from its founding in 1717. Black physicians in Washington, including Purvis, formed a racially integrated rival group, the National Medical Society (NMS), in 1870. At the annual meeting of the American Medical Association (AMA) that year, they had tried to win recognition by the national group on the basis of the racist membership requirements of the local AMA society, the MSDC. They were soundly defeated by Southern delegates on the basis of the perceived right of professional organizations to set their policies, and by Northern delegates reluctant to create disharmony within the organization. This policy was maintained by the AMA long into the 20th century, allowing racial exclusion to persist until the Civil Rights Act of 1964.[7]

In 1884, an interracial group of physicians revived the NMS and formed the Medico-Chirurgical Society of the District of Columbia (MCSDC), dedicated to the exchange of medical ideas and information among practitioners of all races. Within a decade, other Black medical societies formed in Texas (1886), North Carolina (1887), Georgia (1893), and Arkansas (1893), using the MCSDC as a model. At the Cotton States and International Exposition world's fair in Atlanta in 1895, representatives from these organizations, including Williams, formed the NMA. Williams was named its inaugural vice president.[8]

Accusations and Disappointment

Under Interior Secretary Hoke Smith and the Democrat Grover Cleveland administration, Williams was free to reorganize Freedmen's the way he wanted. Things changed with the presidential election of 1896 and the election of Republican William McKinley, who named Cornelius Bliss Secretary of the Interior in 1897. "Now," observed Buckler, "Freedmen's was indeed a political football."[1]

Bliss suspected that the charities in the District of Columbia, including Freedmen's, were mismanaged and corrupt. One of his Republican allies, Senator James McMillan, had come out with a report that accused Freedmen's and Williams of incompetency. At a hearing of McMillan's committee, Williams was pointedly asked about details of his purchases of books, instruments, and even hospital linen. Discrepancies were questioned in detail, with aggressive follow-up questions that implied malfeasance. As the hearing unfolded, Williams's counsel Judge Jerry Wilson asked, "So my client is charged with felonious theft?"[1] Hearing those words, Williams suddenly realized the gravity of the accusations against him. He fell to the ground in a dead faint.

The motivations behind his prized achievements—the training programs for nurses and Black physicians—were questioned. Purvis, still smarting from being replaced by Williams, saw his chance. He said that Williams's changes in the nursing program that Purvis had started were unnecessary. Purvis claimed that his ouster was politically motivated. Williams then had to field questions whether he won his appointment not from a Civil Service examination but through patronage.

Williams, weary of the brouhaha, resigned his position at Freedmen's in February 1898, just a year into the new presidential administration. In accordance with the new regulations, the Civil Service Commission submitted candidates to an

examination. The leading candidate was rejected by Bliss, who instead chose Austin Curtis, Williams's former trainee at Provident, who finished a distant second in the test but whose wife had been especially useful to the chair of the Republican National Committee during the election.

Williams escaped Washington to Chicago with his new bride, Alice (née Johnson). Much had changed at Provident Hospital. The facility had plans to move to a much larger 65-bed facility the next year. But the hospital that he founded had no role for him other than staff surgeon. George Cleveland Hall, now surgeon-in-chief and chief of staff at the hospital, made no sign of yielding either position to Williams. The latter, not wanting to create a controversy, reopened his old office and resumed his practice at Provident and other hospitals in town.

The disaster at Freedmen's and his disappointment on his return to Provident changed Williams. He was solitary and somber, a contrast with the ebullient, outgoing Hall. To add to his misery, Alice miscarried in 1899, and the Williamses received the sad news that she would never have a baby.[1]

Meharry

Black patients from the South sought Williams out in Chicago to operate on them. The need for a medical and surgical center in the South was obvious, he concluded. What better place than the Tuskegee Institute in Alabama under Booker T. Washington? Washington had visited Freedmen's Hospital and was impressed by Williams's reorganization. He invited Williams to Tuskegee to inspect the clinic there and suggest improvements. Williams was ready to do in the South what he had done at Provident and Freemen's.

However, when Williams and Washington met, the latter was decidedly cool to the idea. A short visit by Williams to Alabama was one thing; transforming the institute's small dispensary into a hospital was quite another. Washington's letters in response to Williams became brief and terse, and eventually they broke correspondence. The dissolution of Williams's relationship with the most prominent figure in Black America depressed him.

In 1899, George Hubbard, president and dean of Meharry Medical College in Nashville, invited Williams to hold clinics there. The clinics would be week-long sessions where he would see patients and perform operations. Williams agreed, eager to recommit himself to surgical education and provide clinical services to a Black community that badly needed both.

Meharry was the primary source of medical doctors for the Black South. By the turn of the century, half of its 410 graduates were in practice below the Mason-Dixon line. The clinical education Meharry could offer its students, however, was woefully inadequate. Robert Boyd, a professor at Meharry who became the first president of the NMA, saw patients and performed deliveries in the basement below the school's offices. This was the only clinical exposure Meharry students got before graduating and beginning their practices.

In 1900, the first of Williams's demonstrations was held in Boyd's makeshift facility. Even though Williams was forced to operate by candlelight, it was an immediate success. Williams saw firsthand the deficiencies at Meharry. Later that year, he returned to Nashville and addressed the town's Black community leaders. He described how he started Provident Hospital and encouraged them to do the same. Williams evoked Frederick Douglass's advice to him when he started his term as surgeon-in-chief at Freedmen's: "The only way you can succeed is to override the obstacles in your path," he said. "Hope will be of no avail. By the power that is within you, do what you hope to do."[1] That September, the Black community of Nashville opened a facility in a large house that accommodated 12 beds at first and would eventually hold 33. Meharry's professors had an operating room for their practices. When Williams came back for his annual clinics, he had a place to demonstrate modern surgery.

Williams's speech in Nashville was published, and his message motivated other Black communities

to open inpatient facilities in Knoxville, Kansas City, St. Louis, Louisville, Memphis, Birmingham, Atlanta, and Dallas. In a few years there were Black hospitals in 20 states.

An Operating Surgeon

Williams was invited to many of the new facilities, speaking and often doing operations. By all accounts he continued to show surgical dexterity long into his career. Supremely confident in this ability and knowledge, he made bold decisions that were counter to surgical orthodoxy. At Provident in 1902, he repaired a stab wound to the spleen, preserving the organ when the conventional recommendation was removing it. The patient recovered with his spleen intact, an immunological priority that was recognized decades later in the 1960s and 1970s.

Williams was among the first to recognize the risk of abdominal injury in stab wounds to the chest. A patient had been stabbed in the chest below the nipple, in the sixth interspace. The pericardium had been lacerated without injury to the heart or lung. He noted, however, two tears in the diaphragm where the knife had pierced it completely. The conventional approach was to enlarge the diaphragmatic injury to make sure nothing below it was injured. Not liking what he saw, he instead made a second incision in the abdomen and through a laparotomy found a laceration of the transverse colon. Williams was convinced that he would not have found the injury to the colon through a small incision in the diaphragm. The lesson was that a penetrating injury, seemingly high in the chest, can still enter the abdomen, a dictum that is now a basic principle in trauma to the torso.[9]

For injuries to the extremities, Williams saw amputation only as a last resort. He went to extremes to salvage limbs, especially in the young. He took the time to painstakingly get fractures to heal and to cover wounds with skin. It might take months of hospitalization, but his patients generally walked out of Provident on their own two feet.

Sad End and a Final First

Williams resigned from the staff at Provident in 1912, unable to fight an internecine battle with Hall, his successor as surgeon-in-chief. Since his return to Chicago, Williams, a stellar instructor at the bedside and in the operating theater, ran weekly clinics at Provident that attracted students and doctors from across America. To Hall, the clinics were unwieldy affairs and impracticable for the rest of the hospital, so he closed the popular events.

Williams had a busy practice and at times had patients of both races at five Chicago hospitals. His successful practice at St. Luke's attracted rich white patients, an income source that in Hall's eyes deprived Provident of badly needed income. Hall demanded that Williams bring all of his patients, rich and poor, white and Black, to Provident.

Williams and his wife Alice were also the targets of slurs, slights, and rumors that made them and their friends miserable. In 1917, two years after the death of Booker T. Washington, Williams was on a trip with Washington's assistant and confidant Emmett Scott. It was well known that Hall had Washington's confidence. With Washington's death, Scott was free to explain why Washington was so cool to the idea to start a Black inpatient facility at Tuskegee: Hall had spread falsehoods about Williams, Scott said. The mildest among them was that Williams had the ambition to be named surgeon-in-chief at Tuskegee.

Even with this revelation, Williams kept his silence. His friends could not understand Williams's resignation and refusal to confront Hall directly. In the first year after Williams's resignation from Provident, the hospital lost 250 patients; in the second, 300. It took five years to rebuild the number of patients to the level it had been.

In 1913, Williams was elected as a charter member of the ACS and its only Black member. Franklin Martin of Chicago organized the first meeting of the ACS in Washington, D.C., a controversy retold by John O'Shea, MD, FACS, in an article appearing in the *Bulletin of the American College of Surgeons*[10] and summarized more completely

in Chapters 8 and 34. Acceptance of a surgeon as a Fellow of the ACS required review of 100 cases by a credentials committee, five letters of recommendation by colleagues, and a pledge not to engage in fee splitting. John B. Murphy, Albert Ochsner, MD, FACS, and Franklin Martin, all founding members of the College, supported his application. Murphy wrote, "[Dr. Williams] has had great experience and a studious career, surgical training far above average. Moral standing exceptional. Ethical standing perfectly good."[10]

O'Shea noted the controversy that Williams's candidacy generated at the Board of Regents' meeting to review applicants for the first convocation of the ACS. "At least one Southern surgeon expressed a strong opinion that recognizing Dr. Williams as a Fellow and the notoriety that would follow would be a source of considerable social problems," O'Shea wrote.[10] Most of the Regents supported Williams, and Ochsner threatened to resign if Williams was rejected. Williams's application was accepted.

"A Moses in the Profession"

Williams's travel to Black hospitals and clinics decreased as he and Alice spent more of their time in a summer home they maintained in Park County, north of Chicago. She preceded him in death by several years, of complications of Parkinson's disease. Williams suffered a series of strokes and died in 1931 at age 75.

His accomplishments in American medicine go far beyond his groundbreaking operations and his membership in the ACS. He founded the first hospital for Blacks in the country, advanced the training and education of Black nurses and surgeons, and made substantial contributions to the most prominent institutions in Black America at the time: Freedmen's Hospital, Howard University, Meharry Medical College, and the NMA. The honors bestowed on him during his lifetime, although heartfelt, seem relatively modest for someone of this historical position: honorary degrees from Wilberforce University and Howard University, a portrait at Meharry, and fellowship in the ACS.

The most succinct description of his stature came in an article by Ulysses Dailey, quoted in an article by W. Montague Cobb. "He was a medical missionary," Dailey wrote, "a veritable Moses in the Negro profession."[3]

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Nathan F. Mossell, MD: Medicine's Uncompromising Champion of Racial Justice

Vidya Viswanathan, MD

This chapter appeared as an essay in *The Pharos* in 2018 in its Autumn issue (pp. 4–11). It received first place in the Alpha Omega Alpha Honor Medical Society 2018 Helen H. Glaser Student Essay Award competition.

Figure 1

When Nathan Francis Mossell, MD (1856–1946; Figure 1), died October 27, 1946, at the age of 90, he left behind a long list of accomplishments. He was the oldest practicing African American physician at the time; in fact, he had just seen a patient eight hours before his death.[1,2]

Mossell was the first African American student to graduate from the University of Pennsylvania School of Medicine (MD, 1882) and was subsequently the first African American physician to be elected to the Philadelphia County Medical Society (1888). Mossell, who trained as a specialist in genitourinary treatment and general surgery, founded the Frederick Douglass Memorial Hospital and Training School in 1895 in Philadelphia and served there for 38 years as its superintendent and medical director. He trained 400 nurses and 150 physicians during his tenure there.[3] Mossell cofounded many organizations for the advancement of equality for African Americans, including the National Medical Association (NMA) and the Philadelphia branch of the National Association for the Advancement of Colored People (NAACP). But Mossell, who penned an autobiography in his 90th year of life, did not see himself simply in terms of his own ladders climbed, positions attained, and achievements won; he saw himself as a vehicle to break down the barriers he

had overcome so that others could do what he did. More than simply a pioneer, he was a trailblazer—and he stayed on the path of activism even when others stood in his way.

Demanding a First-Class Medical Education

Born July 27, 1856, in Hamilton, Canada, Mossell learned the value of opportunity in education and work from his parents, Aaron and Eliza. Freedom for African Americans was not guaranteed in the United States, so his parents chose Canada for respite from the possibility of enslavement that might haunt their children in America.

After the Civil War, the Mossells moved back to America, settling in Lockport, New York. Lockport was segregated, but Aaron, who manufactured bricks for a living, fought hard against separated schooling for his children. He presented his case to the Board of Education and won—a very early successful case for school integration in the country.[4] Nathan grew up helping his father's business and studying when he could.

According to pioneering African American physician and anthropologist William Montague Cobb, who profiled Mossell for an article in the NMA journal in 1954, "Mossell was a large man of impressive mien and dignity. In his prime he stood 6 feet 1 inch and weighed about 200 pounds."[2] Mossell attended Lincoln University in Pennsylvania—the country's first degree-granting historically Black university—working part-time to pay his tuition. He graduated in 1879 at the top of his class, receiving both his Bachelor of Arts and the Bradley Medal for excellence in the physical sciences.

He considered pursuing engineering in New York but worried about the expense.[5] According to Cobb, "Mossell was not certain as just to what factors influenced him to choose medicine for a career, but he had earlier made up his mind to get further training and to attend only a first-class institution no matter which field he chose."[2]

When Mossell was offered financial aid by the American Colonization Society to go to medical school in Liberia, he wrote them an angry letter, accusing them of wanting to deport Black people to Liberia to die from tropical diseases. This would be the first of many times Mossell would fight the idea that he had to settle for less opportunity because of the color of his skin—and it was an early instance of his desire to not only reject these propositions but also to explain why they offended his race.

When Mossell turned down the offer for medical education in Liberia, he had his sights set on something much closer: the University of Pennsylvania. Mossell writes in his autobiography:

> *It is just barely possible that this selection was partially in-fluenced by the fact that during my junior and senior year at Lincoln, I met a young lady who resided in Philadelphia [his future wife Gertrude] in whom I became interested and planned finally to marry.*[5]

Dr. James Tyson, dean of the medical school, stared at the dark-skinned young man in his office with a stellar transcript and told him that the department had never admitted a student of color. Mossell convinced the dean to submit his application to the faculty for approval. The dean seemed to lean in favor of Mossell's application, reasoning aloud, "We have a greater medical school than Harvard or Yale, and they have admitted Negroes, [so] we will."[2]

After the faculty finally voted to admit Mossell, Pennsylvania historian Daniel Walden wrote, "They explained to Mossell that he would be considered an experiment, and the university could not assume responsibility if anything happened to him."[4] The board of trustees was concerned and posed the question, "Would the Negro mind be able to comprehend higher education?"[4]

On Mossell's first day of medical school in October 1879, he was told to sit behind a screen. He refused and sat on a bench. At first no one would sit near him, and some students began to yell, "put the n***** out."[2]

But there were some who positioned themselves as his allies. One white student sat with Mossell on that first day as classmates yelled slurs, then stood

on the table and yelled at the lecture hall, "Go to hell!"[5] Mossell wrote, "Following the lecture, two young men who were in attendance, overtook me in the street and expressed their regret over what had occurred. They said that they hoped I had not been frightened away and that I would return."[5]

Mossell was not frightened away and felt that his strong academic record in medical school eventually ingratiated him with his classmates, even if there were times when students tried to push him into the Schuylkill River.[2,4]

Mossell graduated on the honor roll in 1882, and "the provost had to ask the students to stop applauding when Dr. Mossell received his diploma."[2] After graduating, Mossell opened a private practice at 924 Lombard Street and was soon selected by University of Pennsylvania surgeon D. Haynes Agnew to be one of his outpatient surgical clinic assistants.

In the course of his career, Mossell also studied abroad in England, completing postgraduate training at Queens College and St. Thomas Hospital in London. He gained membership in the Philadelphia Medical Society in 1888, with sponsorship from Drs. J. Britton, Agnew, and Tyson. When the selecting board questioned whether a "Negro" would have the ability to belong to a medical society, Tyson assured them that "Dr. Mossell graduated with an average higher than three-fourths of his class."[2]

In less than a decade, Mossell had managed to convince the most esteemed physicians in Philadelphia that he could be considered their peer.

A New Hospital to Protest Racial Segregation

Mossell saw vast inequities in the way Black patients in Philadelphia received care, and he sought to close this gap. In the late 19th century, Black patients in Philadelphia lacked hospital space and nurses to treat them. The city's hospitals were staffed mostly with white physicians and nurses—who could refuse treatment, beds, or rooms to patients of color. They also often refused to give jobs to the few Black physicians and nurses for training, claiming that it would reduce white patients' desire to go to that hospital. "Caste prejudice in the hearts of the dominant race, in charge of the numerous hospitals and training schools in our city made it impossible for the capable and ambitious colored nurses and physicians to secure hospital experience," Mossell wrote.[6]

In 1895, he decided that the city needed a hospital that could care for the underserved and turn away no one, which he felt would reflect the values of Frederick Douglass. It would be the first interracial hospital and training school in Pennsylvania.

The first hospital in the nation led by an African American had been established by surgeon Daniel Hale Williams in Chicago in 1891, after a young Black woman was refused acceptance to Chicago's nurse training schools on the basis of race.[7] Mossell's hospital would be the second in the nation. "That it was my brain child, and that I fought and suffered for it is of little moment, since for long years I have lived by the simple creed, 'Men do less than they ought, unless they do all that they can,'" Mossell wrote.[6]

The Frederick Douglass Memorial Hospital and Training School initially stood at 1512 Lombard Street. It was a three-story building with a basement, 15 beds, and a small second-floor operating room (Figure 2). The first bed—and the majority of the hospital—was financed by Black donors. The hospital was incorporated in 1896 under charter by the state of Pennsylvania, with Mossell as its chief of staff. Mossell's first head nurse was Minnie Clemens, who was the first Black graduate of Penn's nursing school.[4]

Douglass Hospital was especially appreciated by the Black community in Philadelphia during the 1918 influenza epidemic, when it took care of more than 100 Black patients in its main building and an emergency annex, without pay or financial support from the city's board of health.[7]

Though Mossell was regarded by many as a visionary, he faced criticism and complaints from

some hospital staff who said he was too controlling. For example, of the 31 operations performed in the first year of the hospital's existence, Mossell did 21.[4] Mossell, however, felt that his involvement in the hospital was generous, claiming that most hospitals would pay $4,000–$5,000 annually to a chief of staff, while his annual income was just $2,000.[6] Many physicians on his staff petitioned unsuccessfully to remove him from his position as director. These physicians, who called themselves "the Progressive Fifteen," quit their positions at Douglass Hospital in 1907 and moved four blocks away to form the new Mercy Hospital. They decided that this new hospital would provide more training opportunities for Black physicians.[4]

Figure 2

Despite its internal strife, the Douglass Hospital grew, and in 1909 it moved to a new site at 1532 Lombard Street, a five-story building that had 50 beds.[8] Alfred Gordon, a staff physician at Douglass Hospital and member of the Philadelphia County Medical Society, described the hospital in an article:

> *No one is ever turned away from its doors because of creed or color, or because they are too poor to pay. Of the 4,531 bed patients cared for during the past five years, thirty percent (30 percent) were unable to pay for either services or treatment.*[6]

Mossell was invited to give a talk in 1908 to the NMA, entitled "The Modern Hospital: Its Construction, Organization, and Management." He articulated the history of hospitals and their improvements, recommended guiding principles in starting a new hospital, and commented on details ranging from management to plumbing. Mossell envisioned that he could spread his model hospital concept for others to use.

Mossell's commitment to Douglass Hospital's success and mission would be tested in the face of his commitment to true desegregation. After admitting Mossell as a medical student in 1879 and watching his success, the University of Pennsylvania had begun to admit an average of six Black medical students per class. Each year, these students struggled to gain internships after they graduated, just as Black nurses faced difficulties obtaining jobs and training due to racial discrimination. With new state legislature requirements passed in 1915, these physician internships, which were optional when Mossell graduated, were now mandatory for practicing physicians (as they remain today). In 1916, the dean of the school of medicine at the University of Pennsylvania, Dr. William Pepper, approached Mossell and asked him to give their graduating Black medical students internships in his hospital. Mossell, perhaps to the dean's surprise, refused, as this request was made solely on the basis of race. Mossell wrote:

> *[The university] was thoroughly equipped to take care of all its medical students for their practical work in obstetrics and bedside practice, regardless*

of race. Therefore, under the above-mentioned circumstances, I saw no reason why I should be asked to permit their colored students from a school such as this to do their practical work in the Douglass Hospital which in no way had any connection whatsoever with the University of Pennsylvania School of Medicine. I took the dean all through the institution so that he might see that Douglass operated in a genuinely democratic way… the hospital was organized to protest against racial segregation, not to encourage it. The dean told me frankly that he did not blame me; that he thought I was right, but he stated that he has been sent by the management of the university.[6]

Despite the dean's professed sympathy, Mossell was called into a hearing before the appropriations committee of the state legislature and charged with failure to cooperate with the University of Pennsylvania School of Medicine. "Clarence Wolf, a member of the Board of Managers of the University of Pennsylvania and of the Chamber of Commerce, also a business man with offices on Market Street, told me one day that he would make me the biggest Negro in Philadelphia if I would forget all about the principles of Fred Douglass," Mossell wrote."[6]

Mossell did not recant his decision; he further criticized the university for its "Jim Crow" practice of barring Black patients from its private wards and for pressuring his hospital to admit Black pediatric patients for convalescence, when white children would typically be sent to a white-only convalescent home.[6] The Philadelphia Chamber of Commerce withdrew its financial endorsement from the hospital. As the hospital started to struggle with funds, the 1919 state legislature offered a hospital appropriation (worth $22,000) with the stipulation that Mossell be removed as hospital superintendent.[4] Amos Scott, president of the board of directors of Douglass Hospital, refused the request and money, stating, "Our principles are not for sale at any price."[4]

Even though Mossell won his right to disregard race in the hiring process for Douglass Hospital, an unfortunate and unexpected effect of this victory was that, without guaranteed training spots for Black medical graduates, the University of Pennsylvania started to decrease its enrollment of Black medical students. According to Mossell, "the university instituted the quota system. When Douglass Hospital organized in 1895, there were six colored youths studying medicine at the University of Pennsylvania. Compare that number with the number of colored students admitted into the institution now and the years when there are no colored students admitted."[6]

Not all Black physicians agreed with Mossell's unyielding position on segregated education. Some thought that establishing Douglass Hospital as a training hospital for Black medical graduates who desperately sought an official position was a necessary step forward toward equality. As Cobb said in a 1956 address at the Banquet for Integration in Medicine in Chicago, "The separate facilities concept, born thus of desperation, found unopposed avenues for growth and eventually came to be tacitly and sometimes vocally accepted by the Negro medical profession as the way out," even if it was not the way out that Mossell demanded.[9]

When Mossell retired from leadership of Douglass Hospital in 1933, the hospital's succeeding board of managers discontinued his policy against segregated hiring. They agreed to unilaterally accept the qualified Black physicians and convalescent patients that other hospitals would not.[10] In his later years, Mossell expressed regret for creating Douglass Hospital, feeling that it furthered segregation.

Nationally, until the Civil Rights era, physician professional associations were separated by race. The American Medical Association (AMA) was for white physicians, and the NMA was for Black physicians. Abraham Flexner's 1910 report in medical education, though important in advocating for quality in medical training, "reinforced segregated and unequal medical education for African-Americans."[11] Flexner encouraged the closure of all but two African American medical colleges (despite a population of roughly 9.8 million African Americans in the United States in 1910) and recommended that Black physicians be

trained to serve only people of their own ethnicity, as "sanitarians."[11]

A 2008 article in the *Journal of the American Medical Association* reporting on the history and legacy of the AMA and racial integration stated, "African-Americans in 2006 represented 12.3 percent of the U.S. population, but just 2.2 percent of physicians and medical students. This is less than the proportion in 1910 (2.5 percent) when the Flexner Report was released."[11]

Refusal to Tolerate Racism

Mossell spent a significant amount of time protesting the depiction of African Americans in media and entertainment. His most profound victory, which he writes about in his autobiography, may have been persuading the Philadelphia mayor to ban the 1906 white supremacist play *The Clansman* from performing at the Walnut Street Theater. "Everywhere '*The Clansman*' played, race riots followed, which indicate the drama's powerful grip upon people's emotional and moral faculties," Mossell wrote.[12]

Initially, when Black citizens of Philadelphia asked the mayor to ban the play, he did not see a reason to, citing the right to freedom of speech despite the play's positive depiction of the lynching of Blacks in the South. When this group of citizens convened again, Mossell left work to attend their meeting and proposed a loophole they could try. "There is a city ordinance which says that if a play incites riot, it is the mayor's duty to suppress the play."[12]

Mossell was appointed the chairman of this committee of citizens, and they held regular meetings to organize a nonviolent riot. "Our committee had less than three weeks to rally the colored population. …The radio was nonexistent then…[there were] no colored dailies. All the colored people [were] not churchgoers even though the ministers rallied their congregations into wholehearted support," recalled Mossell. "We decided to issue circulars throughout the colored neighborhoods."[12]

They distributed more than 1,000 pamphlets by hand on Monday evening, October 22. The pamphlets, signed by Mossell and other committee members, including church leaders, was entitled "A call to action" and encouraged citizens to "appear at the doors of the theater on Monday night to make an effectual protest."[12] Before the protest, they again appealed to the mayor to shut down the play, and he once again refused. One member of the press warned the mayor, "I don't know the others very well, but that fellow, Mossell, will go through hell."[4]

Mossell and his colleagues carried out the protest as planned, with the participation of 10,000 Black citizens who appeared in response to the circular. Actors in the play were greeted with rotten eggs thrown by Black citizens who gathered on the balcony. While the leaders of the rallying citizens emphasized nonviolence, four Philadelphia policemen battered a Black man with their clubs.[12]

After that opening night with thousands of protestors, the mayor banned the play, conceding that it was causing unrest. But, he added, "If there had been one drop of blood shed last night as a result of this gathering, every man whose name is signed to the Call to Action would have been arrested and held accountable."[12] The management team of the theater issued an injunction against the mayor's decision in the common pleas court that same afternoon. They claimed, falsely, that *The Clansmen* had played in other large cities without inciting unrest. Thomas Dixon, the playwright, protested that his play was based on historical facts, including "the assumption that the Negro has an unbridled lust for women and if permitted to meet white women as equals, he would force them to compromise their womanhood." Mossell countered, "Perhaps the author drew this assumption from the historical fact that hundreds of thousands of mulattoes, during and since slavery, were the offspring of defenseless colored women who were forced to accept white men socially in the slave and ghetto quarters."[12]

At the trial that afternoon, Dixon declared proudly that his father was a member of the Ku Klux Klan. Mossell wrote, "I had a hard time holding back a

colored woman at the trial. She had hidden a raw hide under her coat and wanted to beat Thomas Dixon over the head with it."[12] On October 23, the judge of the common pleas court upheld the decision to ban the play because, he said, driving the Negro out of the country "was undoubtedly one of the ulterior motives of the play."[12]

Dixon refused to accept the judgment and went to the Supreme Court of Pennsylvania. It passed down a decision that banned *The Clansmen* from the state of Pennsylvania forever. Thomas Dixon told the press that he and the actors had been denied their right to free speech and said, "If a Negro mob can suppress freedom of speech in the city which claims the proud honor of being the birthplace of American liberty, our boasted civilization is a farce. …The emblem of the old city of the Liberty Bell should be changed to the picture of a howling, shouting, triumphant Negro mob."[12]

Mossell later wrote, "If free speech is to be preserved, it must at all times aim to safeguard and broaden the scope of men's welfare. Any speech which is aimed at thwarting men's liberties because of their color or caste, is not free speech. The purpose of free speech is not to enslave; but guide men toward better lives than they now have."[12]

A Man of Letters

In addition to leading committees to enact change, Mossell often spent his evenings writing letters to the press and political figures, suggesting changes in the way they portrayed African American citizens. In a 1903 letter to the Philadelphia *Public Ledger* regarding its coverage of Black crime, Mossell wrote, "When similar crimes are committed by white men, as was illustrated by an occurrence in our own city during the past week, they are seldom published under such glaring headlines and are placed in obscure portions of the paper, thus making it appear that the Black men are much more frequently addicted to this form of fiendish crime."[13] In a 1903 letter to the editor of the Chicago *Tribune*, he wrote, "Black men are eight times less likely to commit this crime [of rape] than the white man of Chicago, at least."[13]

In 1938, Mossell sent a letter to President Franklin Delano Roosevelt, asking him to condemn the fact that the reactionary South was opposing an anti-lynching bill. He wrote that it was "a disgrace to the country and a serious reflection on your administration."[14]

Mossell also corresponded frankly with famous orator and presidential candidate William Jennings Bryan in 1901, "on political views which I presented to him with the hope that they would influence his campaign platform for Presidency."[15] At the time, the nation was abuzz with the news that President Theodore Roosevelt had invited notable African American scholar Booker T. Washington to the White House as its first African American social guest. Mossell wrote, "the South was so incensed by the incident that Mr. Washington had to postpone his return home until the sentiments against him subsided."[15]

Bryan, in his column in *The Commoner*, criticized President Roosevelt for entertaining a Black man at the White House. When Mossell wrote Bryan to criticize his column, Bryan replied:

> *I am always glad to know the views of readers and therefore I appreciate your frankness, but my observation is that those who dissent from the theory set forth in the editorial referred do not dissent from it in practice. I have never known a white man to entertain a mixed party of ladies and gentlemen, some white and some Black. …I believe that the white man and the Negro can work out their problems better separately than together.*[16]

In reply, Mossell wrote:

> *The fact that you have "never known a white man to entertain a party of ladies and gentlemen, some white and some Black" is rather surprising, for such incidents frequently occur in most of the large Northern cities. This statement can be easily verified if you care to take the trouble. …It is impossible to see upon what basis you rest your belief, that the white man and the Negro can work out their problems better separately than together. Is it possible that all history is to reverse itself? Two races have never lived together through centuries*

without co-mingling. But, Mr. Bryan, aside from these incontrovertible facts, it is much to be regretted that one who has long been supposed to represent the broadest principles of Democracy should so signally fail at this crucial test.[16]

A Man of Principle

For Mossell, it was important to maintain good relations with institutions, but he did so without reneging on his principles. He would write positive letters when deserved. In 1939, he wrote to the editor of the Philadelphia *Inquirer* thanking him for coverage of the contributions made by Black people in Philadelphia in one of the paper's daily columns. "In these days of financial distress and disparagement, especially for our Negro citizens, your article carried much to inspire and encourage," he wrote.[16]

Figure 3

Mossell distanced himself from his alma mater, Lincoln University, for decades, until it finally added Black professors to its faculty. It was only then that Mossell resumed his relationship with the university, which granted him an honorary doctorate of science in 1940 (Figure 3).[2] Despite their mutually bittersweet relationship, the University of Pennsylvania, when it celebrated its 200th anniversary in 1940, had Mossell carry the colors of his class as the only survivor of the class of 1882.

Preaching activist principles until his passing, Mossell wrote to his granddaughter Gertrude Williams, "If you have never been called a radical, a Tory, Red, Communist, Bolshevik, depending on the era in which you live—you should begin to examine your conscience. It means that you have never done anything for anyone but yourself."[2]

As a physician and as a citizen, Mossell truly was—as one award committee put it—an "uncompromising champion of racial justice."[3]

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Burrell Memorial Hospital: Establishing Surgical Care for Black Appalachians in the Early 20th Century

Tom X. Liu; Katherine L. Howe, MD, MPH; and Michael S. Nussbaum, MD, FACS

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At the turn of the 20th century, African Americans faced significant segregation and discrimination in accessing surgical services. Black physicians and patients both were excluded from white hospitals. Critical demand for surgical facilities in Black communities across the U.S. motivated the development of proprietary Black hospitals, including Provident Hospital, Chicago (1891); another Provident Hospital, Baltimore (1894); Lincoln Hospital, Durham (1901); and Mercy Hospital, St. Petersburg (1923).[1,2]

In Roanoke, VA, then a small city in eastern Appalachia, Isaac David Burrell, MD (Figure 1), a locally prominent physician, died of complications from cholecystitis in 1914. Dr. Burrell died because he was denied surgical care at a local hospital due to his race and had to travel 250 miles by train to the nearest hospital that would operate on him. His partners, a group of Black physicians in the community, were inspired by the tragedy to form Burrell Memorial Hospital (BMH) in 1915. The institution was a vital cornerstone in the community for more than 60 years. The hospital and its founders have remained relatively obscure; however, their contributions to the surgical care of Black Appalachians served as an exemplary model to other Black physicians of the time.

To learn more about Dr. Burrell and his namesake hospital, the authors conducted a systematic review of the historical archives at the Virginia Room at the Roanoke Public Library, examined historical newspaper archives, and conducted 10 interviews with former nurses, graduates, administrators, and physicians at BMH. This article summarizes our findings.

Figure 1

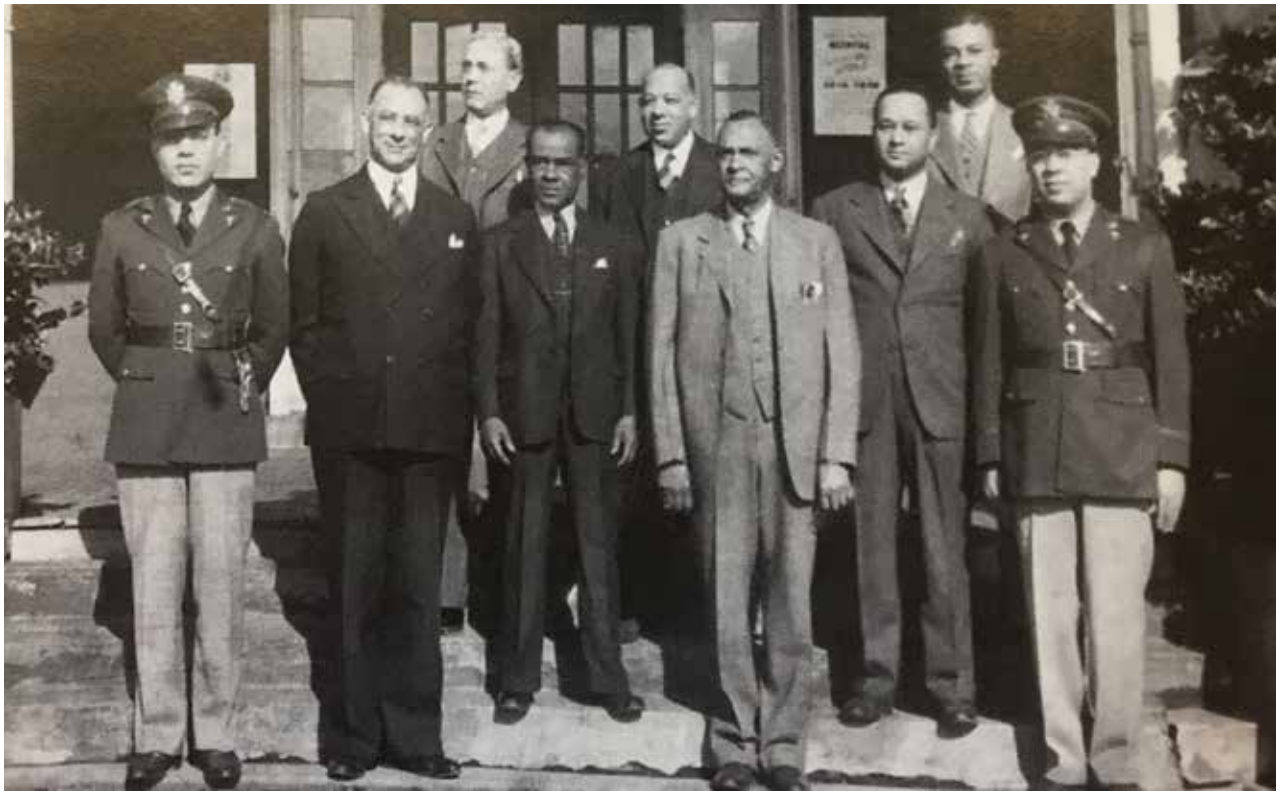

Figure 2

Dr. Burrell and the Beginnings of an Institution

Dr. Burrell was born March 10, 1865, during the Civil War in south-central Virginia. He graduated from Leonard Medical School at Shaw University near Raleigh in 1893 and later moved to Roanoke, where he was a general practitioner and owner of the only pharmacy that served the Black community of Roanoke at the time.[3] Dr. Burrell formed a practice of eight Black dentists and physicians and became a locally prominent physician through his service as founder and president of the local Magic City Medical Society.[4]

Surgical care was even less accessible to African Americans living in Appalachia than it was for their counterparts in major metropolitan areas, where Blacks were more highly concentrated in the early 20th century. Black Appalachians not only were denied treatment at white-only hospitals but also frequently had to travel hundreds of mountainous miles to obtain care.[5] For the 15,000 Black residents of Roanoke and surrounding Appalachia, the closest facility was more than 250 miles away, at Howard University's Freedmen's Hospital.[6] As groups of Black physicians across the country began discussing the need for surgical facilities, Dr. Burrell and his colleagues laid the groundwork for a facility to serve the Black populations of Roanoke and Appalachia.[7]

In 1914, before the plans for the hospital were realized, Dr. Burrell developed acute cholecystitis. At the time, no local hospitals permitted admission of African Americans. His partners petitioned for operating privileges, to no avail. Instead, Dr. Burrell was placed on a cot in a boxcar and transported to Freedmen's Hospital. Although it is unclear whether he died prior to operative management or shortly thereafter, his death galvanized the Roanoke Black community to raise the funds to open BMH in 1915. Dr. Burrell's untimely death highlights the barriers many rural Blacks faced at the turn of the last century.[8]

Burrell Memorial Hospital: A Legacy of Excellence

BMH was not the first Black hospital in Roanoke, but it was the first to succeed. Its predecessors included Medley Hospital, established in 1913, and Charity Hospital, founded in 1914.[9] It is unclear why the first two hospitals closed, but BMH simply may have been better funded. All three hospitals were formed to address the need for a surgical facility for Black residents of eastern Appalachia. Lylburn Clinton Downing, MD, a Black surgeon, was elected as the first superintendent of BMH at the opening of the hospital in March 1915.

BMH was a pioneering institution (Figure 2). In 1965, the Roanoke *Times*, the local newspaper, reflected on the hospital's impact at the time of its 50th anniversary: "From the beginning, Burrell Memorial Hospital attempted to exercise one of the most important functions of a hospital, a teaching institution."[10]

The founders of the hospital recognized its importance in providing not only excellent care to the community but also in offering superior training to future health care professionals. Although the hospital initially was little more than a residential house with many windows that provided optimal lighting for surgical procedures, it grew quickly as a training site for Black nurses. In 1925, BMH gained accreditation as a nursing school, and nurses from Burrell were soon sought-after in operating rooms and hospitals throughout the region (Figure 3). The community was immensely proud of their graduates. According to Yvonne Tinsley, LPN, who was a graduate of the nursing program in the 1960s, "When you went to another hospital and stepped into an operating room, they could tell that [that] was a Burrell graduate."[11]

Throughout the 1930s and 1940s, BMH grew as a leader among the one of more than 100 hospitals in the U.S. that provided care to African Americans

Figure 3

Figure 4

in the early 20th century.[2,12] In 1935, BMH was the first Black hospital in the Commonwealth of Virginia and one of the first Black hospitals in the U.S. to gain accreditation from the American College of Surgeons (ACS), marking it as a center of excellence. (The ACS accreditation program was the precursor to The Joint Commission.[9]) By 1945, only 23 Black hospitals had received ACS accreditation.[13] Members of BMH led the training of the Hunton Life Saving and First Aid Crew that formed in December 1941, reputedly the first all-Black first-response team in the U.S. (Figure 4).

In the course of more than 60 years of operation, BMH inhabited three buildings. Its initial loan of $1,000 financed the conversion of a residence in the historically Black Gainsborough district of Roanoke into a 10-bed facility.[14] As the volume of patients grew, in 1921 the hospital moved into an old schoolhouse, expanding its capacity to 55 beds.

In 1946, the U.S. Congress passed the Hospital Survey and Construction (Hill-Burton) Act, which provided federal funds to states to help finance the construction of health care facilities, both white and Black. The act was a windfall to financially stressed Black hospitals, including BMH. In 1951, BMH used the money to open a state-of-the-art, 80-bed facility with three operating rooms. The first operation performed in this new facility was an appendectomy.

At its peak in the 1960s, BMH was a modern and technologically advanced center where approximately 950 surgical procedures were performed annually. With full-service radiology and pathology services, the hospital grew to be a regional center, drawing in referrals from more than 80 miles away. The Roanoke *Time*s wrote in 1964 that the hospital was the first in the nation to employ a dietitian and social worker on its full-time staff, an example of its commitment to providing well-rounded and interdisciplinary patient care.[10]

Federally mandated desegregation of hospitals in 1964 and the Medicare Act of 1965 exacerbated the many financial difficulties facing Black hospitals across the country.[8] With all hospitals and training facilities open to all Black patients, BMH saw a progressive drain on its patient volume that was impossible to reverse. By 1979, it closed its acute care facilities.

The hospital, however, had been struggling financially since as early as 1930, in part because of the Great Depression, but also because the hospital cared for the majority of low-income and uninsured residents of Roanoke. The hospital remained solvent because of aggressive fundraising. With the loss of its patient base brought on by desegregation, it could no longer stay afloat. In 1990, BMH was converted to a nursing home, and today it is used as a mental health facility.[15] None of the historically Black proprietary hospitals remain in operation today.[16]

Surgeon Leaders of BMH

BMH was established during the Black hospital movement (1860s–1940s), during which approximately 120 hospitals were formed across the U.S. to address the health care needs of Black communities.[17] BMH and its staff proved to be one of the leaders in this movement, particularly Dr. Downing, a surgeon and its first administrator (see Figure 2; Downing is second from left).

Dr. Downing was born in 1889 in nearby Danville, VA, and graduated from Howard University Medical School in 1912. After completing his surgical training at Freedmen's Hospital, he started his own practice in Roanoke. Without the use of a hospital facility, Dr. Downing performed his first operation with the assistance of two other Black physicians on November 8, 1913, in a private home. The operation was the first by a Black surgeon in the region and was recorded simply as an "abdominal procedure."

Dr. Downing devoted the rest of his career to improving the quality of care of Black Americans across the country. He served as the vice president of the National Hospital Association and spoke widely around the country about establishing and operating hospitals for African Americans. He became a member of the American College of Hospital Administrators and later became vice president of the National Medical Association. He recognized the need for Black hospitals to be centers of excellence, writing that hospitals needed "modern equipment, an egalitarian approach to staff activity and organization, and a modest number of beds." However, he was foremost a surgeon, remarking that "no expenses [could be] spared for the operating room."[18]

Another surgeon, Maynard Herman Law, MD, succeeded Dr. Downing as BMH administrator in 1954 (Law is top row, second from right, in Figure 2). Dr. Law also trained at Howard University and presided over BMH during the key years of federally mandated hospital integration. He was known for both his meticulous skill as a surgeon and his commitment to health care for Blacks in the Appalachian region of Virginia. He worked tirelessly for BMH to remain an independent facility despite its financial difficulties, because he was certain that Blacks would not receive equal treatment at white hospitals. He believed that Hill-Burton funds assigned to white hospitals were misappropriated and would be better used to advance care for Black Americans.[19]

Conclusion

BMH was one of more than 100 Black hospitals in the U.S. in the early 20th century. While those in Appalachia were smaller than their better-known urban counterparts, they served a population that otherwise would have had no access to surgical care. Courageous and imaginative Black surgeons did not always have the necessary resources, but they were devoted to providing excellent care despite their limitations.

The story of BMH is the culmination of the shared vision and hard work of pioneering Black physicians in the early 20th century. From Burrell to Downing to Law, they provided high levels of care to Black communities that previously lacked it due to geographic isolation and social and political racism.

Dr. Downing wrote in the *Journal of the National Medical Association*: "A prominent administrator from Washington, DC, visited the hospital a few months ago…and remarked, 'If the Senators in Washington could but see this hospital, which is a vest pocket edition of Freedmen's, they would not regret a single dollar that had been appropriated to Freedmen's Hospital.'"[14]

Today, most Appalachians and marginalized populations across rural America still face diminished access to surgeons and evidence-based care. BMH and the Black hospital movement are important reminders that surgeons have a role in ensuring adequate access to care for all populations, especially patients in rural areas.

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Legends

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2. Key members of Burrell Memorial Hospital in 1940. From left to right: John B. Claytor Jr. (cofounder, general practitioner), Lylburn C. Downing (cofounder, surgeon), John B. Claytor Sr. (cofounder, general practitioner), W.R. Brown (unknown specialty), W.P. Yancey (unknown specialty), James H. Roberts (cofounder, general practitioner), George Moore, Maynard Law (surgeon), Frank W. Claytor (internal medicine). Downing and Law were key administrators in the history of the hospital. Roanoke Public Library.

3. Burrell Memorial Hospital Nursing School was the first Black hospital in the nation to offer graduate training to nurses. After a 15-month internship, nurses were trained to take supervising positions at other hospitals. Roanoke Public Library.

4. First responders from the Hunton Rescue Squad in field training. Dr. L. C. Downing was an early medical director. Roanoke Public Library.

Matilda Arabella Evans, MD: Resolute, Resilient, Resourceful

Cherisse Berry, MD, FACS, and Susan E. Pories, MD, FACS

Matilda A. Evans, MD (Figure 1), was the first African American woman surgeon licensed to practice medicine in South Carolina. A true renaissance woman, she was not only a surgeon, obstetrician, and gynecologist for more than three decades, but she also founded and ran two hospitals and was an educator, humanitarian, public health advocate, and author.

Figure 1

Family Background and Education

The eldest of three children, Dr. Evans was born in 1872 to Anderson and Harriet Evans in Aiken, SC. After her mother died when Matilda was eight years old, her grandmother, Edith Willis Corley, a lay midwife, and her uncle, an herbalist who treated people without access to physicians, became prominent influences in her life. They exposed her to the world of service in health care. She decided at a young age to become a physician, despite having never met a woman in that role. As a child, she played doctor just as other children played house, making "medicines" from leaves and "pills" from clay.

At 13, she was offered a place in the nearby Schofield Normal and Industrial School, founded by Martha Schofield, a prominent Quaker and abolitionist. Matilda was a brilliant student and quickly rose to the top of her class. Ms. Schofield encouraged Matilda to pursue a medical career and helped her obtain a scholarship to attend Oberlin College (OH). She then taught for several years before entering the Woman's Medical College in Philadelphia and receiving her medical degree in 1897 (Figure 2).

Surgical Leader, Educator, and Mentor

After graduation, Evans opened a practice in Columbia, SC. Because no medical facilities during that time would allow an African American physician to admit and treat patients, she started a hospital and nursing school in her home. She built a large clientele of wealthy white women who sought her services for medical problems they wanted to keep confidential. These patients paid her sufficiently, which enabled her to treat poor Black women and children for free.

Figure 2

In 1901, she established the Taylor Lane Hospital and Training School for Nurses in Columbia. When the hospital ran into financial trouble, Evans gave up her home and moved into the hospital. She asked all of her staff to work without pay for 90 days and started farming the land around the hospital to help pay the bills. A fire then destroyed the facility.

Evans then founded the St. Luke's Hospital and Training School for Nurses. She closed the facility in 1918 when she entered the U.S. Medical Service Corps during World War I. Throughout her career, she supported other women who wanted to pursue medical careers. Some of the letters of recommendation that she wrote on behalf of other women are preserved in the Drexel University College of Medicine Legacy Center Archives & Special Collections, in Philadelphia.

Public Health Advocate

Evans was a strong advocate for community medical education and for improved health care for Black children, and she conducted physical exams at Columbia's public schools. She found that many of the children had undiagnosed diseases and ailments. As a result of her work, a program of routine health examinations of children in Columbia's public schools was implemented.

In 1931, she founded the Columbia Clinic Association, the city's first free clinic for Black children. On the day the clinic opened, more than 700 people came in for examinations, vaccinations, and other services. She founded the Negro Health Association of South Carolina, which provided health education to minority families throughout the state. She served as president of the Palmetto State Medical Society in 1922 and as regional vice president of the National Medical Association. An author and editor, she wrote about the life and work of her former mentor Martha Schofield. Evans founded and published *The Negro Health Journal of South Carolina*.

Evans never married. She adopted and raised seven children and served as a foster parent for more than two dozen others. She died in 1935 at the age of 63 after a short illness, leaving a remarkable legacy of service to her patients, students, and community in overcoming the daunting obstacles of a segregated society and limited resources.

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"Surgical Peculiarities of the American Negro," by Rudolph Matas, MD, FACS (1896)

Don K. Nakayama, MD, MBA, FACS

Renowned for his pioneering surgical operations in vascular surgery, Rudolph Matas, MD, FACS (1860–1957, Figure 1), was also famous in his time for a supposed expertise in pathology unique to Blacks. Even though he was the favored surgeon among the ultrawealthy of the Garden District of New Orleans, as professor of surgery at Tulane University his primary practice was at the Charity Hospital, where poor Blacks constituted a major part of his clinical caseload and from whom he established his academic portfolio.[1,2]

Figure 1

One of his interests was the medical and surgical disorders of Blacks, a set of pathological conditions and propensities that he saw as distinct from those of whites. He collected photos of disfiguring tumors and skin conditions that today we recognize as the late stages of untreated infections and unresected fibromas. To Matas, they were evidence of "a racial peculiarity" unique to Blacks.[1] Stephen Kenny, lecturer in history at the University of Liverpool, studied Matas' photos and publications on racial pathology. Far from revealing any scientific insights, Matas, in Kenny's view, only "weaponized notions of Black inferiority…that deepened and extended…damning portraits of Black health."[3]

Black Americans at the Turn of the Century

David McBride, professor of African American history at Penn State University, wrote on the state of public health in Black America at the end of the 19th century and the beginning of the 20th. In his words, the year 1900 represented "a sociopolitical and economic low point for American Black citizenry," locked in poverty in the rural South, without political rights or economic resources.[4] Blacks escaped to the cities and industrial centers of the West Coast, Midwest, and Atlantic seaboard, where the demand for industrial labor promised a better life. In all, 6 million Blacks left the South

between 1916 and 1970, a phenomenon called the Great Migration, one of the largest internal migrations in human history.[5]

City governments and police agencies were unprepared for the unrest that accompanied a growing racial minority and a contemporaneous wave of immigration from Europe. Teeming urban slums and social disjunction led to epidemics of tuberculosis and venereal diseases, especially syphilis, that threatened all strata of society. Today we see the high rates of death and infectious disease as consequences of overcrowding, poverty, and a failure of public hygiene; at the turn of the century, they were signs of racial inferiority and moral depravity.

The huge influx of newcomers competed with the established working classes and led to depressed wages. With their accustomed routines and status in society at risk, white America responded with racism and xenophobia. The turmoil reached a climax with the bloody East St. Louis race riot of 1917 and the Red Summer race riots, 24 in number, that swept the country in 1919.[6]

The Progressive movement had developed in the late 19th century in response to the growing social challenges of a rapidly evolving urban and industrial society. Among its reforms were policies directed at the dire state of public health. Impossible to ignore was the wide health discrepancy between Blacks and whites. Prominent physicians and experts in public hygiene struggled to understand the nature of the "Black health 'threat.'"[4] A scientific field emerged that investigated all aspects of the physique, health, physical and psychological characteristics, and crime patterns of Black Americans. The goal was to address each of the perceived problems of race in America and attack them scientifically.

Matas' Expertise

Among the experts was a young Rudolph Matas. One of a small group that stood at the apex of American surgery, Matas was a contemporary of Halsted and the Mayo brothers and later served as president of the American Surgical Association (1909) and the American College of Surgeons (1925–1926). A medical prodigy, he graduated from medical school at 19 (1879). After his residency at Charity Hospital, he was appointed visiting surgeon to its staff in 1881 at age 21. He was named professor of surgery at Tulane and chief of surgery at Charity Hospital in 1895 at age 35, a position he held for the next 32 years until his retirement in 1927.[2]

Since its founding as L'Hôpital des Pauvres de la Charité in 1736, Charity was dedicated to serving the poor of New Orleans, the surrounding rural parishes, and the bordering parts of Texas and Mississippi. Of the 9,850 patients at the hospital in 1894, 3,750 were Black.[1]

To Matas, the volume of Black patients at Charity made him an expert on the unique aspects of their health problems. He had a special interest on the characteristics of skin among Blacks, especially what he saw as a predisposition to develop benign tumors such as keloids and fibromas. It was an academic opportunity that, in Kenny's words, was "a most fruitful field of investigation for the racial pathologist."[1]

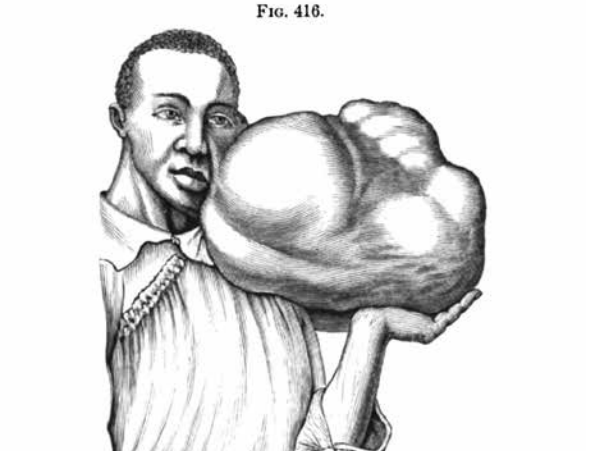

Figure 2

Using data from Charity Hospital discharge summaries, Matas summarized his experience before the American Surgical Association in 1896 in a 128-page article in the *Transactions of the*

Meeting of the American Surgical Association.[1] Titled "Surgical Peculiarities of the American Negro," his presentation was immediately regarded as the authoritative reference on the topic.

Matas covered an entire spectrum of pathological conditions, both medical and surgical, and tabulated the numbers of cases from the records at Charity Hospital on the basis of the race of the patient: "white," "colored," or "mulatto." For example, for "chronic suppurative otitis media," he cited 100 whites with the condition, compared with only 16 "colored." From those data alone, he naïvely concluded, "the figures certainly show that the colored patients are much less disposed to contract this class of troubles than the whites."[1]

A Collection of Photographs

Matas was fascinated by what he saw as a predisposition to abnormally exuberant hyperplasia of connective tissue "at the least provocation,"[7] as evidenced by keloids and epidermal tumors that he saw as unique to Blacks. To reinforce his view, Matas published illustrations from his personal collection of photographs of grotesque skin excrescences, tumors, and swollen extremities so horrifying that they overwhelm the viewer with the suffering and humiliation of the patient.[7]

In fact, his photographs were the end stages of infectious and subtropical endemic infestations involving the skin, subcutaneous tissues, and lymphatic system: untreated yaws, endemic filariasis, lupus verrucosus from cutaneous tuberculosis, and advanced lymphogranuloma venereum.

Kenny researched the original images that appeared in Matas' chapter of a textbook, as well as more than 150 photographs in the Matas papers in the archives at Tulane University.[3] Aside from 60 held in a single album, the photographs were loose in the boxes that held his papers, an indication that they were not used for systematic pathological study. Kenny concluded that, at best, they were a collection of pathological curiosities.

More likely, Kenny suggests, they were "like a circus sideshow…that sought to appeal to the morbid curiosity of lay and medical readers."[3] The images he chose to collect, Kenny argues, reveal Matas' perception that Blacks were fundamentally inferior and confirmed "warped notions of Black bodies and Black health."[3]

Kenny noted the extreme insensitivity to the humanity of the subjects themselves in Matas' objectification of their suffering and disfigurement. Kenny wrote,

> *Many of the photographs are scenes in which the patient's fragility and vulnerability overwhelm any intended coding—be it clinical, pathological, or racial—diagnostic function, or formal reading.*[3]

In Matas' collection was a photograph of a woman with a long-neglected tumor coming off the side of her face (Figure 2) and one of the naked lower body of a man with elephantiasis. To Kenny, their inclusion

> *…raises important issues of agency, consent, privacy, and appropriate use and display not only by historians of race, health, and medicine, but also by museum professionals and readers.*[3]

"Didn't Know What He Didn't Know"

Matas' work, presented before the most elite professional society in surgery and published in a standard textbook of surgery, revealed the racial biases of the scientific world that held currency well into the 20th century. McBride wrote that Matas' work was a standard reference "for medical and sociological research through World War I, postulating race distinctions as the basis for the Black-white health discrepancy."[4] Matas' assertion that Blacks were less susceptible to cancer was still accepted as late as 1938.[4]

From the perspective of 21st-century endovascular surgery, we appreciate Matas' pioneering efforts at aneurysmectomy because we recognize the technical barriers he faced. He devised an effective operation for arterial aneurysm in an era long before angiography, an understanding of vascular

physiology, vascular suture and grafts, and the isolation of heparin.

More disquieting is his other alleged area of expertise, what is today called "racial disparities." Valid conclusions on racial pathology made in 1900 were and are impossibilities, because statistics and epidemiology had not developed to the point where any such conclusions could be made. Matas had neither the tools nor the insight to be an authority on Black health and pathology.

An example of one who "didn't know what he didn't know," Matas' monograph and disturbing collection of photos reveal institutional racism, a relic of the Jim Crow South that his peers accepted and that the profession he once led is trying to correct.

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Surgeons Seeking Justice

Hospital Integration: Rejection of "Separate but Equal"

Don K. Nakayama, MD, MBA, FACS

The integration of American hospitals came about in the wake of the American civil rights movement of the 1950s and 1960s that changed the country. Black Americans had been denied access to the full resources of a health care system that restricted them in a "separate but equal" arrangement woefully inadequate in every respect. A legacy of slavery and Jim Crow, health inequities were so glaring that a doctor and a dentist in North Carolina took on all-white hospitals and biased federal courts to demand remedy.

From the time Hubert Eaton first filed his suit against the James Walker Memorial Hospital in Wilmington in 1956 to the final decision in George Simkins's case against Moses H. Cone Memorial Hospital in Greensboro 1964, a 26-year-old pastor named Martin Luther King Jr. led the year-long Montgomery Bus Boycott (1955–1956); President Dwight Eisenhower forced the integration of Central High School in Little Rock, a move that required the 101st Airborne Division of the U.S. Army and federalization of the Arkansas National Guard (1957); four freshmen from the all-Black North Carolina Agricultural and Technical College protested segregated seating at the Woolworth store in Greensboro, NC, in the first sit-ins (1960); and Freedom Riders rode into Alabama on interstate bus trips to protest segregated accommodations (1961). In a single year—1963—King, jailed without access to his lawyers during demonstrations in Birmingham, AL, wrote his famous manifesto, "Letter from Birmingham Jail" (April); Bull Connor turned firehoses and police dogs on student demonstrators in Birmingham and jailed more than a thousand schoolchildren (May); assassins killed Mississippi civil rights leader Medgar Evers (June); four choir girls were murdered in a Birmingham church bombing (September); and President John F. Kennedy was assassinated in Dallas (November).

Amid this backdrop of nonviolent protest and violent hate, Black activists in the medical and dental communities quietly set the judicial foundation for the social transformation of American medicine.

The Hill-Burton Act and "Separate but Equal"

World War II exposed the dire condition of the health of the citizenry, particularly in the South. More than half of North Carolina's men were rejected for military service because of physical defects, placing it last among the states. It ranked 41st in maternal deaths in childbirth and 39th in infant mortality under one year of age. Especially appalling was the status of Blacks in the state,

among whom the death rate was 46 percent higher than that of whites.[1] In 1938, Surgeon General Thomas Parran called the South "the number one health problem of the nation."[2]

The 1946 Hospital Survey and Construction Act—commonly known as the Hill-Burton Act after its Senate sponsors, Lester Hill (D-MS) and Harold Burton (R-OH)—was a progressive initiative directed at building new hospitals and academic medical centers and upgrading existing facilities. The story of Hill-Burton was discussed in detail by Karen Kruse Thomas, historian at the Johns Hopkins School of Public Health.[2] From 1947 to 1971, $3.7 billion in federal funds were spent by the program, with an additional $9.1 billion given by state and local municipalities.

Half of the money was directed at the 16 states of the South, home to more than three-fourths of the nation's Black population (9.7 million, 76.6 percent). The segregated hospital system of the South was an amalgam of all-Black facilities, many of them second-rate facilities shoehorned into converted residences; biracial hospitals that kept Blacks on substandard wards or floors; and all-white hospitals that unashamedly barred Blacks patients and doctors. All of them were legal under Jim Crow laws that required racial segregation.

To make sure money was available for all types of hospitals, Hill-Burton had an important exemption:

> *An exception shall be made in cases where separate hospital facilities are provided for separate population groups, if the plan makes equitable provision on the basis of need for facilities and services of like quality for each group.*[3]

Without the "separate but equal" clause, the legislation never would have had the support of the Southern bloc of senators and representatives necessary for passage of the act. Hill-Burton thus preserved the racial status quo.

Money from the legislation thus constructed new hospitals that maintained segregation. One example was the new teaching hospital for the University of North Carolina, planned for 1949. It planned as a single edifice with separate wards and dining facilities for each race. In Thomas's words, the new medical center "reinvented segregation for the postwar world."[2] It was a pragmatic approach to support existing Black hospitals. Edward Beardsley, historian at the University of South Carolina, wrote that under Hill-Burton, "Southerners of both races, but Blacks particularly, began to enjoy an access to modern hospital care that they had never known before."[2]

It was for this reason Hill-Burton had the backing of such committed integrationists as Louis Wright (1891–1952), the first Black director of surgery at Harlem Hospital and a chair of the board of directors of the National Association for the Advancement of Colored People (NAACP); Black professional organizations such as the all-Black National Medical Association (NMA) and its offshoot, the National Hospital Association (NHA); and other nonmedical civil rights groups as the Urban League and the National Negro Congress. Wright, however, qualified his support, saying that Hill-Burton money should not be used to further increase the number of segregated hospitals.[4]

Federal funding for the construction and modernization of segregated hospitals only solidified segregation of health care the South. But the very phrase "separate but equal" was a poison pill that would later lead to the integration of all health care facilities throughout the nation.

Brown v. Board of Education

In 1951, Black students at the Robert Russa Moton High School in Prince Edward County, VA, walked out in protest of having classes in unheated tarpaper shacks during the cold winter term while white students had classes in the main brick-and-mortar building.[5] The Legal Defense Fund of the NAACP, led by its director-counsel Thurgood Marshall, filed suit in support of the students, leading to a sequence of legal actions that reached the Supreme Court in 1954 and its landmark decision, *Brown v. Board of Education of Topeka*. In a 9-0 vote, the Court determined that "separate

but equal" violated the Equal Protection Clause of the Fourteenth Amendment. "In the field of public education," the Court wrote, "the doctrine of 'separate but equal' has no place. Separate educational facilities are inherently unequal."[6]

After *Brown*, the NMA, NHA, and activists in the Black medical and dental communities hoped that integration of hospitals would soon follow.[7]

Three Black Medical Activists

Aside from his pragmatic support of Hill-Burton, Louis Wright was steadfast as one of the country's leaders in the integration of health care. His achievements were reviewed in a biographical sketch by P. Preston Reynolds of the University of Virginia[4], and more completely in this book in Chapter 18. A graduate of Clark College, a freedmen's school in Atlanta, Wright went to medical school at Harvard. He ranked fourth in his graduating class, but because of his race he was denied a surgical training position at one of the Harvard programs. Instead, he spent an internship year at the all-Black Freedmen's Hospital in Washington, D.C., a vast comedown from the Harvard hospitals.

He went into practice in Atlanta with his stepfather, where the latter had converted a residence into a proprietary all-Black hospital. When the makeshift facility caught fire, Wright unsuccessfully tried to quell the blaze with only a garden hose. After a year, Wright left to establish himself in Manhattan, where he integrated the physician staff at Harlem Hospital and eventually became its first Black director of surgery.

Wright thus had firsthand experience in the vast difference in resources available to Black physicians and their patients. No amount of money could bring equality to all-Black facilities. The gap was too wide and was growing wider. The only solution was integration.

As chair of the NAACP board of directors, Wright established the goal for hospital integration and made sure that local NAACP chapters opposed the construction of "separate but equal" facilities in their regions. In 1944, Wright created a national health committee to lead the organization's activities against discrimination in medicine.

Figure 1

Among those he assigned to the task were two members of the Howard University faculty, W. Montague Cobb (1904–1990, Figure 1) and Paul Cornely (1906–2002, Figure 2). Cobb graduated in medicine at Howard in 1929. Showing academic promise, he was selected by Numa P. G. Adams, dean of the medical school, to undergo advanced training in anatomy and then return to Howard to teach. Cobb went to Case Western University, where he studied physical anthropology, which at the time was a branch of anatomy. He returned to Howard in 1932 as professor of anatomy, where he stayed to the end of his career, doing groundbreaking research on racial anatomy and child development, fields in which he gained an international reputation.[8]

Cobb was editor of the *Journal of the National Medical Association* for 28 years (1950–1978) during the height of the civil rights movement. A committed integrationist, he promoted academic scholarship and political activity as avenues to achieve racial equality. In a meticulously researched 1948 article in *The Crisis*, the newsmagazine of the NAACP, Cobb outlined the argument against Hill-Burton and the construction of segregated hospitals. He wrote that Hill-Burton gave whites "a means…to resist integration and at the same time contain the Negro problem."[9]

In the article, Cobb documented the inadequacies of a system that relied on only two Black medical schools (Meharry and Howard) to supply the country's Black doctors. Medical schools in the North accepted only a handful of Black students, often in pairs so they could serve as laboratory partners. The South, with the majority of the nation's Black population and one-third of its medical schools, had no Black students outside of Meharry and Howard.

Nothing in Hill-Burton addressed the problem of the near-absence of training opportunities for Black medical graduates, a problem identified by the Commission on Hospital Care of the American Hospital Association.

> *[Many Black doctors] were poorly prepared for the practice of medicine and many others have been denied the privilege of hospital service on racial grounds in the early years of their professional careers. The Negro physician finds it difficult to develop and maintain his proficiency because of lack of access to hospital service.*[9]

Paul Cornely was born in the French West Indies and raised in Detroit. He took his baccalaureate (1928) and medical degrees (1931) at the University of Michigan. After an internship at the all-Black Lincoln Hospital in Durham, NC, he took a position in the department of bacteriology, preventive disease, and public health at Howard He was named chair of the department in 1942, a position he held the rest of his career. He reached national prominence in public health, serving in leadership positions in the American Public Health Association, including its presidency in 1969.[10]

Cornely was the first to systematically study the American Black population from a public health perspective. He documented the disproportionate mortality rates compared with those among whites and correlated it with the difference in the availability of health facilities and Black physicians and nurses.

Figure 2

For example, in 1941 he wrote that between 1927 and 1937, the death rate from tuberculosis in New York City among whites decreased from 70 to 45 per 100,000; for Blacks, it increased from 262 to 300.[11] In a survey of health facilities in 96 counties in the South, Cornely found that tuberculosis clinics for whites were open a mean of 17.3 hours per week per 100 deaths, while those for Blacks were open only 6.7 hours.[12] In 1939, there were only 28 Black physicians employed across 96 Southern county health departments; only two were full-time employees.[13]

To Cornely, the only solution was to impose integration of all health facilities through legal action. Waiting for voluntary integration would be futile. The number of Black medical students in the North had almost doubled to 171 (from 93) in the decade between 1947 and 1956, but it was still less than 1 percent of the total medical enrollment of 18,406. Even after the *Brown* decision, the increase in medical school enrollment among Blacks remained miniscule.[14]

Outside of Meharry and Howard, in 1947 the South had no Black medical students; by 1956, the number had only increased to 43. That year Alabama, Georgia, Louisiana, and South Carolina still had no Black students. Opportunities for Black trainees remained limited. Only 21.5 percent of Cornely's sample of Northern hospitals (55 of 256) and 11.6 percent of Southern hospitals (8 of 69) had Black interns and residents.

Cornely attacked Hill-Burton itself and invoked the *Brown* decision as the legal basis for integration. He wrote:

> *Any federal legislation, such as the Hospital Construction [Hill-Burton] Act, which makes it possible for grants to be given to states that maintain separate facilities for racial groups should be amended by having such clauses stricken from the act. …Just as in education it may be necessary to pursue this matter through the various courts until it reaches the Supreme Court.*[14]

Imhotep Conferences

After Wright's death in 1951, Cobb and Cornely became the leading figures in health care integration. They presented the case for health care integration in scholarly journals and at professional meetings. Cobb, in a 1953 editorial in the *Journal of the National Medical Association*, argued for more activism. "The time is now ripe," he wrote, "for [a] frontal attack upon what is perhaps the greatest of all the discriminatory evils, differential treatment with respect to hospital facilities."[15] He invited the mainstream white medical establishment to join him, calling on organizations like the American Medical Association (AMA), the American Hospital Association, and Protestant and Catholic hospital organizations.

He didn't expect them to respond, and they proved him right. Cobb wrote there were "many moral and legal weapons against hospital discrimination which have been little employed."[15] This warning, written in 1953, foretold the 1954 *Brown* decision and the year-long Montgomery Bus Boycott of 1955–1956.

As the national civil rights campaign began to build, in 1957 Cobb called for a congress of physicians and professional organizations sponsored by the NMA and the national health committee of the NAACP to discuss strategies of hospital integration. He christened the meeting the Imhotep Conference, named after the physician of the 3rd Dynasty of ancient Egypt (c. 2,700 BCE) who was ultimately deified as the god of medicine and healing. Cobb chose the name because it evoked a connection between darker skin and excellence in medicine, and because it translates as "he who cometh in peace."[16] In a time of racial tension, Cobb emphasized that his conference would be a peaceful assembly.

Organizations he may have considered to be his allies—Howard University and the Department of Health, Education, and Welfare (HEW, a precursor to the Department of Health and Human Services)—refused Cobb use of their auditoriums. The first Imhotep Conference was held instead at the all-Black 15th Avenue Presbyterian Church. As expected, the AMA and the major hospital organizations ignored his invitations to participate.[17]

Each year, conference participants reviewed their activities and pledged each other their support.[18] At the 1961 Imhotep Conference, 10 Black physicians claimed that their exclusion from 56 hospitals and five hospital organizations in Chicago was a violation of the Sherman Anti-Trust Act. Black physicians in New York convinced the county medical society to support their application for staff privileges in restricted hospitals. In Illinois, a law was passed denying private volunteer hospitals tax-exempt status when a patient was excluded on the basis of race.

None of these strategies worked. But one avenue held promise: protesting the "separate but equal" provision of the Hill-Burton Act, a concept that had been held as unconstitutional by *Brown v. Board of Education*.

Eaton v. Board of Managers of James Walker Memorial Hospital

An important case was in progress during the 1961 Imhotep Conference that would have relevance to the later challenge to Hill-Burton. Hubert Eaton (1916–1991, Figure 3) was a physician, civil rights activist, and tennis champion. Using his backyard tennis court in Wilmington, NC, he took a teenaged Althea Gibson into his home and coached her into Wimbledon-level competition.[19]

Figure 3

He sued the segregated James Walker Memorial Hospital when he was denied staff privileges, a story he related in his autobiography. Like Wright, who graduated from Harvard but was forced to train at the all-Black Freedmen's Hospital, Eaton attended a mainstream medical school in the North, the University of Michigan, but was relegated to a mediocre internship position at the all-Black Kate Bitting Reynolds Hospital in Winston-Salem, NC.

Eaton started practice in Wilmington, NC, then a town of 50,000. The town had two hospitals: the James Walker Memorial Hospital and the Community Hospital. Hospital bylaws at Walker Memorial prohibited nonwhite physicians. Black patients were in a separate 25-bed annex that had only two toilets and no treatment facilities. Patients who needed X rays, surgery, or a delivery room were wheeled across 30 yards of open space to the main building. As shabby as the accommodations were for Black patients at Walker Memorial, they were far better than those at the Community Hospital, an all-Black, 100-bed facility where the city's Black doctors practiced.

Eaton—a civil rights activist who had previously sued the county over its inadequate Black schools—looked up the city property maps and discovered that Walker Memorial was paying no city or county taxes. He had been told that the hospital, as a private institution, was allowed segregationist policies. Now he found out that the hospital was exempt from taxes and thus received indirect financial support from the county. "It is a wrong that goes deeper than unequal schools for white and Negro children," he later wrote.[19]

Eaton decided to take Walker Memorial to court. He applied for staff privileges again, this time with two other Black physicians whom he had enlisted in his effort. In 1956, they filed suit in U.S. District Court. The hospital argued that it was a matter between itself and the doctors—a private concern outside of federal jurisdiction. The district court judge agreed and dismissed the case, as did the Court of Appeals in Richmond.

In 1958, Thurgood Marshall (1908–1993) and Jack Greenberg (1924–2016) of the NAACP Legal Defense Fund helped Eaton's legal team take the case to the Supreme Court. Eaton's case was a chance to test whether health facilities, like

public schools, were subject to the Fourteenth Amendment. In 1959, the high court decided not to hear the case. However, three justices—Earl Warren, William Douglas, and William Brennan—entered dissents, an indication of growing concern about racial discrimination in hospitals and that Marshall and Greenberg had allies on the high court.[19]

Simkins v. Moses H. Cone Memorial Hospital

Even though they lost, Marshall and Greenburg learned much from the Eaton case. Soon after the case closed, Greenberg received a call from George Simkins (1924–2001), a dentist in Greensboro, NC. He had a patient with an infected impacted molar that he could not treat in one of the city's hospitals, because both he and the patient were Black.

The situation in Greensboro was described by P. Preston Reynolds, a physician and historian at the University of Virginia, who wrote widely on medicolegal cases during the civil rights era and whose article devoted to the Simkins case is the source of all the information in this section.[20]

Greensboro had three hospitals: Wesley Long Community Hospital, an all-white facility; L. Richardson Hospital, an all-Black facility with a mixed physician staff of both races; and Moses H. Cone Memorial Hospital, the city's largest hospital that had a staff restricted to white physicians and accepted Black patients only if they needed specialized services not available at L. Richardson.

Simkins's patient needed a tooth extraction and hospitalization, but L. Richardson had patients on gurneys in hallways and a two-week waiting list for a bed. There were, however, vacant beds at Moses Cone. Because he was Black, Simkins lacked admitting privileges, so the hospital refused to accommodate his patient.

Simkins, like Eaton, was active in civil rights as president of the local NAACP chapter. He knew Marshall, Greenberg, and the Legal Defense Fund from his legal attempts to integrate the city's public school system and municipal golf courses. When Simkins asked for their assistance, the lawyers, fresh from the Eaton case, agreed to help.

What made this different from the Wilmington case was that Moses Cone had received $1.2 million in Hill-Burton Act funds, and Wesley Long had received $1.9 million. The first step was for Simkins to request staff privileges to the two hospitals. After he was refused, he wrote a letter to Arthur Fleming, Secretary of HEW, informing the federal government of the discriminatory actions against himself and his patient and the facts that both facilities had received Hill-Burton funds and were scheduled to get more.

Simkins enlisted six physicians, four dentists, and two patients to broaden community representation in the suit. All had their applications rejected. One patient needed a workup for a gastric ulcer, which required resources only available at Moses Cone and Wesley Long. Because the patient was Black, he was excluded from Wesley Long; his doctor, who was Black, could not care for him if he went to Moses Cone.

The case was filed in district court in February 1962. In a review of the impact of health care on civil rights, attorney David Smith of the Temple University School of Law wrote that the Simkins case hinged, as the Eaton case had, on whether hospitals were private bodies independent from the state.[7] A pro forma state commission separated the federal government and the hospitals by acting as an administrative middleman, receiving federal money, adding the state's share, and then giving the funds to the eligible hospitals.

The Legal Defense Fund argued that the hospitals operated under federal regulations regardless of the status of the state commission. Thus, Moses Cone and Wesley Long were governmental instruments and not private bodies. As Reynolds wrote, "If Hill-Burton funds were used, citizens were entitled to protection under the Fourteenth Amendment."[20] The Departments of Justice and HEW both came out in support of Marshall and Greenberg.

In December 1962, the district court judge ruled in favor of the hospitals. As in the Eaton case, the judge decided that the hospitals were not instruments of the state and dismissed the case. Simkins and the Legal Defense Fund lawyers appealed. On November 1, 1963, the Fourth Circuit Court of Appeals reversed the ruling in a 3-2 split decision in favor of Simkins. The hospitals in turn appealed to the Supreme Court. In March 1964, the high court decided not to hear the case, upholding the appellate court ruling against the "separate but equal" provisions in the Hill-Burton program.[7]

Smith pointed out the irony of the site of the decision. The Fourth Circuit Court of Appeals was located in the building that once housed the offices of Jefferson Davis, President of the Confederacy.[7]

Holding the "separate but equal" provision of the Hill-Burton Act unconstitutional "would not have done much by itself to assure the integration of hospitals," Smith later wrote.[7] The federal government could not forcibly integrate hospitals that had already used construction money. A facility that was determined to remain segregated could simply seek funds from another source. Moses Cone, in fact, had briefly considered sending back Hill-Burton money in order to retain its autonomy.

Simkins laid the judicial foundation, but legislative and administrative steps were required to integrate American medicine. They would come with two transformative laws: the Civil Rights Act of 1964, and the Social Security Act Amendments of 1965 that established Medicare and Medicaid.

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Hospital Integration: Civil Rights Legislation of 1964 and 1965

Don K. Nakayama, MD, MBA, FACS

The 1964 Civil Rights Act, signed into law by President Lyndon Johnson on July 2, 1964, integrated American medicine. For health care, the key part of the legislation was Title VI, a directive that prohibited the use of federal funds in programs and institutions that discriminated on the basis of race, creed, or national origin. Even without a mention of health care, Title VI gave medical activists a legal weapon to guarantee equal access of Black patients, students, trainees, and doctors into hospitals, medical schools, and training programs.

The act of 1964 went far beyond previous iterations (1957, 1960) and the original intentions of President Kennedy, whose administration first authored the bill. The bill's passage was never certain. It required bipartisan support and skilled politicking to negotiate the arcane system of entrenched committee chairs, the longest filibuster in Senate history, and an eleventh-hour attempt to thwart the final vote by adding sex to the list of discriminations covered by the act. What was intended as a parliamentary maneuver to block passage of the bill became the legal basis for judicial and legislative actions in support of women's rights.

But it was another Great Society measure—the enactment of Medicare in 1965—that guaranteed the success of Title VI. With medical care for senior citizens now overseen by the government, all entities that treated the elderly were subject to federal regulations. In an administrative achievement equal to the famous laws that set it in motion, by spring of 1967 essentially all health care facilities in the country were open to all citizens, regardless of race.

Public support, spurred by the tumultuous events of the civil rights movement in 1963 and the assassination of President Kennedy, was the decisive factor for the passage of the measure. As the story below reveals, derived entirely from a book written by former U.S. Representative Charles Whalen (R-OH) and his wife Barbara,[1] the White House and Congress would never have had the audacity to make such sweeping changes in American health care by themselves. Instead, the righteousness of the civil rights movement and the martyrdom of an American President captured the support of the U.S. citizenry that led to the radical transformation of the health care institutions of the country.

Civil Rights Act of 1964

President Eisenhower, who signed two innocuous voting rights acts into law in 1957 and 1960, was criticized for being too passive on civil rights. In the 1960 presidential election, John Kennedy vigorously sought Black support with the assurance

that civil rights would be a priority for his administration. The 68 percent of the Black vote that went to Kennedy was a major reason for his victory. He won the popular vote by only 118,500 votes in the closest race of the century.

Once in office, Kennedy put civil rights legislation on the back burner, knowing that the issue would agitate Southern Democrats and conservative Republicans. A prolonged battle on civil rights legislation would threaten his other New Frontier legislative programs, particularly his top priority of tax reform. If he aroused opposition in the South, a region where he won only 6 of 11 states, his reelection would be in jeopardy. For most of the first two years of his Presidency Kennedy stepped cautiously around the issue of civil rights.

His hand was forced by a nationwide "maelstrom" – the Whalens' term – of street marches sparked by the Birmingham demonstrations in April and May 1963. Attorney General Robert Kennedy, the President's brother, considered civil rights a moral issue. On May 31, 1963, President Kennedy agreed to push for a comprehensive Civil Rights Act "that would try to correct the wrongs of almost 350 years."[1]

He could not hide from the events that soon followed. Within two weeks, on June 11, he had to federalize the Alabama National Guard to push Governor George Wallace aside when he blocked the doors of the University of Alabama to the admission of two Black students. That evening, Kennedy addressed the nation on television and announced his proposed civil rights legislation (Figure 1). Just three hours after Kennedy finished his 13-minute speech, in the early morning of June 12, Medgar Evers was assassinated in his driveway of his home in Jackson, MS.[1]

Any political support he had in the white South evaporated. Freed from the necessity of placating the white South, "Kennedy became more committed to [the cause of civil rights] than to anything else in his presidency," Whalen wrote.[1] Opposing him were Southern Democrats and Republicans, led by Senate Minority Leader Everett Dirksen of Illinois, who anticipated the political damage that was sure to be done to Kennedy in the upcoming presidential election.

Figure 1

The bill, designated H.R. 7152, had eight provisions covering all areas of public life, including voting, public accommodations, public education, and employment in businesses with government contracts. The sixth, logically called Title VI, prohibited discrimination in federally assisted programs. For health care, that applied to any hospital that received construction funding from the Hill-Burton Act.

Title VI attracted much less attention than Title II, the lightning rod of the act that prohibited discrimination in public accommodations—hotels, restaurants, lounges and restrooms in bus and train stations, stores, and theaters. Most thought that Title II would be the first to be cut, as similar passages had been dropped under Eisenhower. But to Kennedy, Title II was the heart of the legislation. He insisted that Senate Majority Leader Mike Mansfield (D-MT) get the legislation passed with Title II intact.

But Kennedy's immediate priority was still the tax reform bill, which was in the Ways and Means Committee. Seven of its 15 Democrats were from the South, including its chair, Wilbur Mills (D-AR). In a coldblooded display of realpolitik, Kennedy privately told Mills the tax bill had

precedence. "I'm not worried about civil rights in the House," the President said. "If it doesn't pass, it doesn't pass."[1]

The hearings on H.R. 7152 went through August. Congress was about to close for its customary Labor Day recess as a quarter million people gathered on August 28 across the Mall at the steps of the Lincoln Memorial, the climax of a summer-long series of nonviolent marches led by Martin Luther King, Jr. After an afternoon full of speeches and song, King delivered his most famous address, the "I Have a Dream" speech, that embodied the entire civil rights era (Figure 2).

Figure 2

When Congress returned after the recess, Emanuel Celler (D-NY; Figure 3), chair of the House Judiciary Committee and a Kennedy ally, began the process to bring H.R. 7152 out of committee onto the floor of the House. After the Labor Day weekend, most schools in the South opened with plans to integrate, anticipating the reality of the new legislation. In Alabama, however, Governor Wallace kept public schools closed in Tuskegee, Huntsville, Mobile, and Birmingham and ordered state troopers to block their doors. Once again, Kennedy federalized the National Guard to allow schools to open and admit Black students.

Figure 3

On Sunday morning, September 15, 1963, the first weekend after the start of school, 19 sticks of dynamite exploded outside the basement of the 16th Street Baptist Church in Birmingham. Four girls, ages 11 to 14, were killed while changing into their choir robes. Twenty-two others were injured by the blast, which was set by three members of the Ku Klux Klan. Angry Blacks took to the streets in a rising that was quelled with shotguns, tanks, and the deaths of two more youngsters.

Celler and his allies, shaken by the bombing and other violence, added amendments that broadened the scope of H.R. 7152. The new proposal covered all elections, including state and local. The range of public accommodations under Title II was extended to cover private schools, law firms, and medical associations.

Far from supporting the stronger bill, President Kennedy was upset, thinking that the Celler had overreached. When the latter tried to get H.R.

7152 out of committee, he met strong resistance, not only from the Southerners but also from Republicans, who saw that the Democrats had boxed themselves in with a bill that could not be passed and didn't want to bail them out.

The infighting threatened the progress of the bill, so Robert Kennedy took over the task of leading the bill through Congress. He immediately trimmed Celler's amendments. In late October, an irritated John Kennedy called a meeting of leaders from both parties in the Senate and House, as well as the Vice President Lyndon Johnson and attorneys from the Justice Department. Now he, the President, would be in control of the legislation. He wanted a compromise bill that could make it through the House and not get filibustered by the Southern Democrats in the Senate.

Figure 4

A new version of H.R. 7152 was written by conservative Republican William McCulloch (R-OH; Figure 4), the ranking minority member of the Judiciary Committee, and his colleague John Lindsay (R-NY). Their compromise bill stepped back from Celler's amendments but was still stronger than the original proposal. McCulloch cajoled his Republican colleagues to support the new bill and send it out of committee over the opposition of the Southern Democrats. In early November, H.R. 7152 was referred to the Rules Committee, chaired by Howard Smith (D-VA), a former judge and dedicated segregationist. Familiarly called Judge Smith from his previous occupation, he vowed never to let the bill reach the House floor.

On November 23, 1963, John F. Kennedy was assassinated in Dallas.

Lyndon Johnson, now president, had chafed as vice president under Kennedy. Johnson took control of the government with the same Texas-sized determination he had exercised as Senate majority leader. The national tragedy aligned the country behind Kennedy's programs. Johnson had an opportunity for legislative achievements that his predecessor, had he lived, could only imagine.

After the limber and caisson moved Kennedy's flag-draped casket from the White House up Pennsylvania Avenue to the Capitol, Johnson and his advisors worked on his much-anticipated address to Congress. Adlai Stevenson, US Ambassador to the United Nations, suggested that passage of the civil rights bill would serve as a memorial to the late president. Johnson agreed. He phoned the leaders of all the major civil rights organizations and invited them to the funeral the next morning.

As Senate majority leader, Johnson had ensured that civil rights legislation in 1957 and 1960 was harmless to the white South. Now president, he became civil rights' most powerful advocate. After Kennedy was buried in Arlington, Johnson began to lobby both Republicans and Democrats to support H.R. 7152. In his address before Congress and the nation, President Johnson said:

> *No memorial oration or eulogy could more eloquently honor President Kennedy's memory than the earliest passage of the civil rights bill for which he fought so long. We have talked long enough in this country about equal rights. We have talked for one hundred years or more. It is time now to write the next chapter, and to write it in the books of law.*

I urge you…to enact a civil rights law so that we can move forward to eliminate from this Nation every trace of discrimination and oppression that is based upon race or color. There could be no greater source of strength to this Nation both at home and abroad.[1]

Johnson maneuvered H.R. 7152 past Judge Smith—the chair of the House rules committee who had vowed never to let a civil rights bill pass his office—for a Christmas Eve vote to get the bill onto the House floor. Johnson had the wind at his back, with public support for the bill at 62 percent and his own popularity at 79 percent.

In a last-gasp maneuver, Judge Smith tried to scuttle the bill by adding "sex" to the list of four types of discrimination (race, creed, color, and national origin). His ploy won the immediate support of the handful of women in Congress at that time, but his intent had been to complicate the issue and halt the bill's progress.

The political maneuvering in the House came to an end, and H.R. 7152 was passed on February 10, 1964, with majorities in both parties (290-130).

On February 17, the bill was read in the Senate for the first time. Anticipating a filibuster by Southern Democrats, Johnson favored wearing them down by keeping sessions open around-the-clock. Instead, Robert Kennedy and the Justice Department decided to end any filibuster by invoking cloture, a vote by two-thirds of the Senate to halt debate.

The House measure was introduced in the Senate after the Lincoln birthday recess. With a filibuster certain, Robert Kennedy and his Assistant Attorney General Nicholas Katzenbach began to muster the necessary 67 votes for cloture. The Southern Democrats were lost to them, so Kennedy and Katzenbach needed the votes of at least 22 of the chamber's 33 Republicans. For that to happen, they would need to convince Minority Leader Dirksen to join their side.

Rather than send the House bill to the Senate Judiciary Committee, which was dominated by Southern Democrats and chaired by James Eastland (D-MS), Senate Majority Leader Mike Mansfield (D-MT) decided instead to put H.R. 7152 directly before the Senate for consideration. On March 9, soon after the chaplain read the morning prayer, Richard Russell (D-GA) was recognized by the acting president of the senate, and the filibuster was on.

Dirksen was key to getting the necessary support from Republicans for cloture. As urgently as Johnson and Kennedy wanted passage of the bill, Dirksen bided his time and made sure all of his alternatives and substitutes were addressed to his liking. Senator Hubert Humphrey (D-MN), floor manager for the bill for the Democrats, made sure Dirksen's ego was stroked at every opportunity.

Outwardly recalcitrant, Dirksen had the political sense to know the public support behind civil rights and the political harm if Republicans were seen as blocking a popular bill. Humphrey convinced Dirksen to whittle his 40 amendments down to 10.

On April 19, Catholic, Protestant, and Jewish seminarians began a 24-hour-a-day vigil at the Lincoln Memorial that would continue in shifts until the bill passed the Senate. The profound commitment caught the attention of Humphrey and his supporters. On May 5, five thousand church leaders gathered at Georgetown University in a rally to support the bill. Also present were the two Senate floor leaders, Humphrey and Thomas Kuchel (R-CA).

Humphrey and Kuchel sat with Dirksen in his hotel suite and worked through his amendments. In mid-May, once he got what he wanted, Dirksen suddenly announced his support for the bill. Now he spoke as if he was its greatest proponent. "No army is stronger," Dirksen said, quoting Victor Hugo, "than an idea whose time has come."[1]

On June 10, 1964, Humphrey and Kuchel had the votes they needed. When Robert Byrd (D-WV) sat down after a 14-hour, 13-minute address, the Senate was called to order. The question was called to end debate—in other words, to invoke cloture. The measure was passed 71-29, four more than the required two-thirds. After 534 hours, 1 minute,

Figure 5

and 51 seconds, the longest filibuster in the history of the Senate was broken.

On June 19, the Senate passed H.R. 7152 with a vote of 73-27. Of 117 amendments considered, only 11 minor revisions were adopted. Celler and McCulloch from the House were in consultation with Humphrey and Kuchel throughout, so reconciliation of the bill in the House was a formality. Before the vote by the House on the Senate's changes to the bill, Celler said, "I hope that we will have an overwhelming vote for this bill…so that it can be said the Congress hearkens unto the voice of Leviticus, 'proclaiming liberty throughout the land to all the inhabitants thereof.'"[1] The House rose in a standing ovation. Leading the applause was Celler's rival, Judge Smith. The House then voted 289-126 to pass the Senate amendments.

On July 2, the Civil Rights Act of 1964 was signed into law by President Johnson (Figure 5).

McCulloch, the Republican from the North who had done so much to pass a bill signed by a Democrat from the South, gave a cautionary warning. He said:

> *How do you tear hatred and suspicion out of the heart of a man? …No statutory law can completely end discrimination. Intelligent work and vigilance by members of all races will be required for many years before discrimination completely disappears.*[1]

Title VI and Medicare

The passage of the Civil Rights Act of 1964 was undeniably dramatic, but when it was enacted, its effect on health care only extended to hospitals that used federal funds through the 1946 Hill-Burton Act for their construction projects. Still outside its reach were facilities like the James Walker Hospital in Wilmington, NC, which never accepted government money—the same factor that allowed it to defeat a suit brought against it by physician

Hubert Eaton for racial discrimination (1959; see Chapter 15). Moses Cone Hospital in Greensboro, NC, which had lost a suit brought against it by dentist George Simkins on the basis that it had accepted Hill-Burton funds (1964), looked for a way to return the money as a way to preserve its autonomy and avoid Title VI requirements.[2]

The final piece to the integration of American hospitals was Medicare, a story told in detail by P. Preston Reynolds of the University of Virginia, who is the source of most of the facts in this section.[3]

Medicare, created as part of the Social Security Amendments of 1965, was signed into law by President Johnson on July 30, 1965. "It was, in a very real sense," wrote David Smith, an expert on health law at Temple University, "the major unacknowledged gift to the American people of the civil rights movement."[2] Medicare transformed how medical care was financed in the country. Every health care entity now had to either comply with Title VI or lose a major part of their income, which now came from the government. In all, some 5,000 health institutions received public health service funds and had to comply with Title VI.

To be certified to receive Medicare funds, a facility had to prove compliance with Title VI. The process thus became, Reynolds wrote, "a critical tool in exposing and eliminating racism in medicine."[3] Implementation was scheduled for July 1, 1966, so doctors and hospitals had only 11 months to show that they complied with the Title VI regulations or risk losing a sizable portion of their income.

Title VI covered all aspect of patient care, medical practice, and medical training. It required full access to all portions of facilities for all patients and medical providers, without regard to race, creed, color, or national origin. This meant patients could not be denied access to any bed or hospital resource; professionally qualified providers could not be denied staff privileges; and residents, nurses, and other health professionals could not be denied training opportunities.

Johnson appointed John Gardner as Secretary of the Department of Health, Education, and Welfare (HEW) in 1966, a crucial time for the Johnson administration when many of its Great Society programs were implemented, including the Civil Rights Act of 1964. Under Gardner, any entity that was not in compliance with Title VI would have their funds cut without delay.

In April 1966, three months before the start of Medicare, only 49 percent of hospitals and 42 percent of hospital beds in the country met Title VI standards. In the South, the percentages were 25 and 11, respectively. Field review teams soon saw that the most sensitive indicator of integration was whether Black and white patients were placed in the same room. They not only made sure that medical services were being used by all patients equitably, but they also checked whether cafeterias, snack bars, and restrooms also were used in common.

From his experience overseeing integration of public schools in the South, HEW Assistant Secretary James Quigley knew the importance of bringing along a local official when he visited hospitals to determine whether they met standards for compliance under Title VI. Many local physicians and administrators wanted to comply with the regulations but needed someone from outside the community as a target where administrators, trustees, and physicians could focus their anger.

Title VI teams encountered three types of hospitals. First were those that believed they were compliant but were not. The least common were recalcitrant facilities that refused to comply and thus refused to participate in Medicare. The most common scenario, especially as the visits began in earnest in May, were hospitals that voluntarily complied with Title VI regulations. HEW got the support of the American Health Association, which produced an instructional film on hospital integration that was sent across the country.

HEW representatives lobbied Congressional delegations from Southern states. By the end of June, 5 of the 12 Southern states had achieved more than 90 percent compliance. Mississippi, at

31 percent, lagged far behind but had started the month at only 6 percent.

HEW got state governments to agree to terminate contracts with hospitals that still refused to submit Title VI compliance forms. By October 1966, there were 43 noncompliant hospitals in the country; by spring 1967, the number was only 16. Gardner himself reviewed each case deemed ineligible for all federal assistance.

One of the major Great Society achievements, Medicare was more than a mechanism to pay for health care for the elderly. Equally far-reaching was its use as tool to dismantle segregation in hospitals, medical schools, and training programs. Together, the Civil Rights Act of 1964 and Medicare were the most important social reforms of the 20th century.

Figure 6

Postscript: Women's Rights

The Civil Rights Act of 1964 had a far deeper impact on American society than its authors and advocates expected. When the final bill was passed, it still contained Judge Smith's addition, "sex," with the original four categories of discrimination. Title VII of the act prohibited discrimination in employment under the administration of a newly created Equal Employment Opportunity Commission (EEOC). When it came to write policies to enforce Title VII, in 1965 the EEOC omitted regulations to end workplace discrimination on the basis of sex and allowed job advertisements to specify whether jobs were intended for men or women. Without Title VII enforcement, businesses continued to discriminate against women in hiring and at work.

In part out of frustration with the EEOC's failures, women activists, led by Betty Friedan (Figure 6), formed the National Organization of Women (NOW) in 1966. After NOW and other women's advocacy groups pointed out the omission, in October 1967, President Johnson issued Executive Order 11375, which banned discrimination on the basis of sex in the federal government and in all businesses under governmental contract, laying the legal foundation against workplace discrimination on the basis of sex in America.[4]

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Legends

1. President John F. Kennedy, from televised speech, June 12, 1963. John F. Kennedy Presidential Library, National Archives. From CBS broadcast.

2. Dr. Martin Luther King, Jr., and colleagues at the March on Washington for Jobs and Freedom, August 1963. National Archives.

3. U.S. Representative Emanuel Celler, 1951. Library of Congress Prints and Photographs Collection. New York *World-Telegram and The Sun* Newspaper Photograph Collection. Photo by William C. Greene.

4. U.S. Representative William McCulloch. Collection, U.S. House of Representatives photography office.

5. President Johnson gives the pen he used to sign the Civil Rights Act to Dr. Martin Luther King, Jr., August 6, 1965. Lyndon B. Johnson Presidential Library, National Archives.

6. Betty Friedan, 1964. Library of Congress Prints and Photographs Collection. New York *World-Telegram* and *The Su*n Newspaper Photograph Collection. Photo by Fred Palumbo.

The Surgeon and the Martyrs: Theodore Roosevelt Mason Howard, Emmett Till, and Medgar Evers

Don K. Nakayama, MD, MBA, FACS

Theodore Roosevelt Mason Howard (1908–1976, Figure 1), a surgeon and entrepreneur, formed the first civil rights organization in the Mississippi Delta in 1951. His organization led the first civil rights actions in the state, a dangerous endeavor that made him and his allies the target of murderous violence.

Figure 1

He practiced in Mound Bayou, an anomaly in the Mississippi Delta in that it was an all-Black town where Blacks were able to vote, hold office, and operate businesses. From his old-style plantation outside the town, Howard escaped to Chicago in the mid-1950s, abandoning activism because of increasing threats on his life. He remained highly influential in the civil rights movement, mentoring and financing such future leaders as Medgar Evers (1925–1963), Fannie Lou Hamer (1917–1977), and Jesse Jackson (1941–).[1]

Falling far short of the stature of Evers or Martin Luther King, Jr., Howard is among the movement's most intriguing personalities. He has received recent attention by historians, including Linda Royster Beito of Spellman College; her husband, David Beito of the University of Alabama[2]; and Richard deShazo of the University of Mississippi.[1] These sources provide the facts below.

Education and Training

Dr. Will Mason, a white Seventh-day Adventist surgeon in Murray, KY, mentored young Howard, who was the son of Mason's housekeeper. Mason paid for Howard's education at Adventist schools, including Oakwood College (1924–1927), a preparatory school in Alabama for Blacks, and Union College (1931) in Lincoln, NE, a baccalaureate college where he was the sole Black student.[2]

Figure 2

Howard developed a gift for public speaking that climaxed in 1930 when he won a national contest in Detroit before an audience of 4,000 that was broadcasted on nationwide radio. As the only Black contestant, he was featured in the *Chicago Defender*—a Black newspaper with a national circulation—giving him a brief taste of fame that he would seek for the rest of his life.

Howard could not hide from racism. In his second year at Union, a new college president introduced a policy of segregation in the school cafeteria, a regulation deemed necessary to retain students from the South. In 1930, on a return visit back home from school, he witnessed the aftermath of two gruesome lynchings.

Howard's teachers thought his talent as an orator predicted a career as a preacher. He decided instead on medicine, attending the College of Medical Evangelists in Loma Linda, CA, once more the only Black student in his class. After his graduation in 1935, Howard interned in St. Louis at the segregated City Hospital No. 2. His first job was as chief surgeon at the Riverside Sanitarium and Hospital, an Adventist facility for the poor in Nashville.[1] He clashed with administrators there, so he was ready for a new opportunity when he was offered a position as surgeon at Taborian Hospital in Mound Bayou, MS, in 1942.

Mound Bayou

Mound Bayou, population 800, was in one of the poorest counties in the U.S. The town was located in the heart of the Jim Crow South, where Black laborers, tenant farmers, and sharecroppers were locked into poverty by discriminatory rent, taxes, and usury. Segregation and disenfranchisement denied them the rights of citizenship.

But the town was one of the few municipalities in the South where Blacks owned businesses and could hold public office. Founded in 1887 by former slaves, Mound Bayou was praised by Booker T. Washington in 1911 as "a place where a Negro may get inspiration by seeing what other members of his race have accomplished."[2] DeShazo wrote, "Mound Bayou had grown to be a prosperous island in a sea of Jim Crow."[1]

The hospital was founded by the International Order of the Knights and Daughters of Tabor, one of scores of Black fraternal organizations in the South.[3] Anxious to rid themselves of the responsibility of providing care for poor Blacks, white planters and doctors helped finance the project. In 1942, more than 7,000 people gathered in Mount Bayou to celebrate the opening of the new $100,000 Taborian Hospital (Figure 2).

Like other hospitals operated by Black fraternal societies, it was supported by subscriptions. Annual dues of $8.40 entitled an adult to 31 days of hospitalization, including major and minor surgery. If worse came to worst, they covered $200 for a burial. More than 25,000 subscriptions poured in the first year, and enrollment reached 47,000 by 1945.[3]

Matthew Walker, assistant professor at Meharry Medical College in Nashville, declined an offer to be the new hospital's chief surgeon. Instead, he recommended Howard as an alternate choice. Tall, flamboyant, and ambitious, Howard prospered at Taborian Hospital—too much so for its administrators. He did as many as six major operations a day, among which he interspersed deliveries and abortions.[1] His belligerence with hospital management led to his ouster in 1946.[3]

Howard simply crossed the road and created another facility, the Freedom Clinic, with its own fraternal society, the United Order of Friendship of America, which poached 5,000 Taborians into its membership. The Friendship clinic and organization were springboards for Howard's entrepreneurialism. He opened the first swimming pool for Blacks in the state, a restaurant and beer garden, and a zoo, all built by his own construction company.

He built the Magnolia Mutual Life Insurance Company, a $7,000 concern when he acquired it, into a $900,000 business when he sold out in 1955. His clinical practice and businesses supported an extravagant lifestyle that included a 1,600-acre estate outside the town limits, a staff of servants and chauffeurs, a collection of fast cars, and a reserve where he raised pheasant and quail for hunting. He also indulged in sexual infidelities that produced several illegitimate children.[2]

An Oasis of Activism

In the midst of the desperate racial oppression in the Delta, Mound Bayou was an oasis where Blacks organized and fought for civil and economic rights. "Two thriving hospitals," the Beitos wrote, "… stood as visible reminders of the wider potential for Black organizational talent and assertiveness.[2]

Howard's business instinct recognized the opportunity to advance civil rights. "One look at Howard," said Myrlie Evers, the wife of Medgar Evers, "told you that he was a leader: kind, affluent, and intelligent, that rare Negro in Mississippi who had somehow beaten the system."[5] In 1951, he organized the first civil rights organization in the Delta, the Regional Council of Negro Leadership (RCNL). Their first action was a boycott of gas stations that did not provide restrooms for Blacks, with bumper stickers that read, "Don't buy gas where you can't use the restroom" (Figure 3).[6]

Howard scheduled the first RCNL annual meeting for the following May. With irrepressible self-confidence, he invited the top tier of Black political and civil rights leaders, entertainers, and celebrities. He was unable to lure Ralph Bunche from his responsibilities at the United Nations to be his guest speaker (Bunche had just received the Nobel Peace Prize in 1950), so he got William Dawson, a Black Chicago politician and Democratic Congressman from Illinois. He got Mahalia Jackson to sing at the event. More than 7,000 Blacks, some on foot and others on mule-drawn carts, came to Mound Bayou for the rally.[2]

In 1954, he hosted Thurgood Marshall, the lead lawyer of the National Association for the Advancement of Colored People (NAACP) Legal Defense Fund. Before a crowd of 10,000, Marshall predicted the favorable Supreme Court ruling, *Brown v. Board of Education of Topeka*, that ended school desegregation just 10 days after his speech.[1]

The rallies were also an irresistible business opportunity for Howard's restaurants and night club. The crass commercialism attached to RCNL meetings repelled Marshall, whose "disdain for Howard was almost visceral."[2] Regardless of the lack of support from the NAACP, the RCNL was highly effective in advancing its causes. By 1954, it had registered 23,000 new Black voters.[2]

Escalation

The desegregation of schools brought on by the *Brown* decision threatened the structure of white society in the South. The 1954 Supreme Court

Figure 3

ruling failed to deter Mississippi's governor and legislature. They resisted all federal requirements to desegregate their school systems.

Just weeks after the Brown decision, six white men met at Indianola, only 40 miles from Mound Bayou, and formed the Association of Citizens' Councils. What started as a semisecret organization quickly grew into a movement that spread throughout the South. Devoid of a formal structure and motivated by racism and blind opposition to the civil rights movement, a myriad of White Citizens' Councils needed no prompting as to what to do. One planter said, "We won't gin their cotton; we won't allow them credit; and we'll move them from their rented houses."[2] A state legislator gave an ominous warning: a "few killings" might "save a lot of bloodshed later on."[2]

Freezing credit was a favorite Citizens' Council tactic. Without credit, poor Black farmers could not pay for the year's seed and equipment. With his entrepreneurial ingenuity, Howard organized "the biggest mail order boom in the history of the South,"[2] connecting Black farmers with suppliers outside of the region who were willing to do business with them. Howard bypassed local banks and arranged for Black businesses, associations, and churches to keep their accounts with the Black-owned Tri-State Bank of Nashville.

The NAACP adopted the strategy. In 1954, Tri-State accepted transferred accounts from the North Carolina Mutual Life Insurance Company (one of the largest and oldest Black businesses), the Brotherhood of Sleeping Car Porters, the Mississippi Prince Hall Masons, the Knights and

Daughters of Tabor, and the national African Methodist Episcopal church. Howard's economic counterattack created financial hardship for white businesses in the South and earned him their enmity.

Emmett Till

David and Virginia Royster Beito described the conflicting but still horrifying details of the Emmett Till lynching and its aftermath.[2] In the early morning of August 28, 1955, two white men killed 14-year-old Emmett Till (Figure 4) after kidnapping him from his cousins' home in Leflore County, MS. Two days before, on a visit from Chicago, young Till and his cousins stopped at a store tended by an attractive 21-year-old white woman. Her looks and race intimidated them. On a dare, Emmett went to the counter, bought some candy, and left.

Figure 4

Accounts then diverge. Till's cousins said he simply said "goodbye," although a speech impediment made it unlikely that the boy, full of nerves, would be able to say anything understandable. The female clerk complained that Till failed to give her the honorific "goodbye, ma'am" required of Blacks in the South, and wolf-whistled as he exited the door. According to his kidnappers, Till forced himself on the woman and put his arm around her waist.

The woman then ran to her car for a gun. The boys scurried away from the scene and tried to keep quiet about what happened. Two days later, in the early morning hours, two white men forced their way into the home where Till was staying and dragged him out the door.

On August 31, a fisherman spied Till's mutilated body bobbing near the surface of the Tallahatchie River. Mamie Till, Emmett's mother, insisted that his funeral be open-casket and his wounds be on full display so "the world could see what they did to my boy": the one-inch bullet hole in the head, with part of his skull missing; his misshapen face, beaten, with an eye and ear missing and tongue grotesquely protruding; and skin discolored and decayed from exposure.[2] An estimated 100,000 mourners filed past Till's coffin at the public viewing.

The FBI looked into the matter and decided that because the incident took place entirely within the state, they had no jurisdiction. To everyone's surprise, on September 7 a Tallahatchie County grand jury approved murder and kidnapping charges against the men. The trial started on September 19 with the selection of an all-white jury. The county's population was two-thirds Black, but none were on county voting rolls and thus were ineligible to serve on the panel.

Howard was the center of efforts to find and protect witnesses. His estate became, in the Beitos' words, "a Black command center" where Mamie Till was a houseguest and terrified witnesses were protected.[2] (After the trial, Howard helped three witnesses resettle in Chicago.) Armed men roamed the compound and stood guard at checkpoints around the property. Caches of weapons were in every room. Howard kept two pistols and a machine gun near his bed.

On September 23, just four days after it started, the jury took a little more than an hour to find the defendants not guilty. This notorious outcome and the national attention the murder and trial received awoke the public to racial injustice. Even at the time, many recognized Till's murder and the trial of his killers as pivotal events of the modern civil rights movement.

Celebrity and Danger

Howard was now in the national civil rights spotlight, recognized both by the Black and white media as one of the movement's leading figures. With his skill as a champion orator, his speeches attracted thousands. The national office of the NAACP overlooked his feud with Marshall and sent Howard on a fundraising tour from Los Angeles to New York City. Howard did his part. "The NAACP," Howard said in one speech, "is the only organization that the Mississippi white man is afraid of."[2]

Klan terrorism and murders of Blacks continued. Howard knew that the local and state authorities would do nothing to investigate the crimes, and if they were tried, the white perpetrators would be acquitted. In a helpless rage, Howard sent a telegraph to the U.S. attorney general demanding that his office take action.

Howard decided that the best way to force federal involvement was to call for a national march on Washington. In late November, he spoke at the Dexter Avenue Baptist Church at the invitation of its newly installed pastor, Dr. Martin Luther King, Jr., 26 years old and just two years into his first full-time pastorate after graduation from Boston University. In the audience was Rosa Parks, a seamstress and NAACP official in Montgomery. Just days later, she refused to give up her seat on a city bus, sparking the year-long Montgomery bus boycott.

Years later, Parks remembered Howard's speech at the first mass meeting after the Till murder and trial. There is nothing in King's writings to suggest that Howard's speech had anything to do with King's epochal March on Washington of 1963, but King later linked Till with the Montgomery boycott and his own martyrdom. In his book *Stride Toward Freedom* (1958), King wrote, "Today it is Emmett Till, tomorrow it is Martin Luther King. Then in another tomorrow it will be someone else."[2]

Retreat and Flight

Howard's relentless criticism of the FBI attracted a secret federal investigation of himself and his activities. His legal troubles and personal problems were common knowledge among both his allies and enemies. The FBI leaked a damning letter by Hoover to Mississippi's congressional delegation. Senator James Eastland (D-MS) said, "It was high time that somebody was putting Howard in his place." Ominously, the senator suggested that unless Howard "mended his ways, [he] was going to be taken care of by some of the Negroes of Mound Bayou."[2] A White Citizens' Council reportedly put a $1,000 bounty on him. Howard's dispute with the FBI cost him his dwindling support among white moderates such as Hodding Carter, II, the progressive Pulitzer-Prize–winning editor of the Greenville (MS) *Delta Democrat-Times*. "I wouldn't want to gamble on Howard's life expectancy right now," Carter said.[2]

Faced with death threats, Howard assured his audiences that he couldn't leave Mississippi at such a critical phase of the civil rights movement. Yet in December, he sold half his property, including his house, and sent his family to his wife's home in Los Angeles. Outwardly, he tried to maintain a presence in Mississippi, continuing his leadership in the RCNL and conducting affairs from his office at the Friendship Clinic. But by early 1956, he was out of Mound Bayou and in his new home in Chicago.

Howard tried to keep the RCNL and his status as a civil rights leader afloat with another rally, not in Mound Bayou but this time in Jackson and headlined by King and Harlem Congressman Adam Clayton Powell, Jr. Both men turned down their invitations. With the loss of his headline speakers and his tiff with Evers and the NAACP (discussed below), fewer than 1,000 people attended the April 1956 rally, an event that only the preceding year attracted ten times more.

Chicago

Having cashed out of Mound Bayou but still famous, Howard easily entered the Black upper crust of Chicago. He had a penthouse overlooking

Lake Michigan. His new medical practice, the Howard Medical Center, charged fees rather than using the subscription model of his Mound Bayou endeavors. He bribed the police so he could maintain an active abortion practice. His lifestyle, already lavish by Mound Bayou standards, became more outrageous in Chicago, with big game hunting and regular visits to Las Vegas and the country's biggest race tracks.

He tried to remain relevant in Black politics, running for Congress as a Republican in 1958. He lost badly, with his opponent receiving more than 72 percent of the votes. But even after his defeat, his home continued to be a required stop for the rising younger generation of activists, including Fannie Lou Hamer, Malcolm X, and Jesse Jackson. Howard made sure Jackson saw the right people when the young activist first arrived in Chicago in 1966 on the behalf of the Southern Christian Leadership Council (SCLC). When Jackson started Operation PUSH in 1971 after a falling-out with the SCLC, Howard served on its board of directors and chaired its finance committee.

In Chicago, Howard's life continued to be embroiled in legal trouble and controversy. He underwent trial for being part of an insurance scam, for income tax evasion, and for medical complications arising from his abortions. Howard, anticipating the legalization of abortion and with his characteristic opportunism, built a $1.5 million multispecialty medical center that was a thinly veiled abortion mill. It was a financial failure even after abortion was legalized following *Roe v. Wade* (1973).

Howard ignored his health, shrugging off high blood pressure and diabetes. A series of strokes led him to reevaluate his life. His long-suffering wife locked him out of the house in 1973 and won a generous alimony in their subsequent divorce. He tried to get his affairs in order in 1975, both financially and with his children, to whom he apologized for not being a good father. In May 1976, Howard was found dead in bed after he failed to show up at the Friendship Center offices for his annual ritual of betting on the Kentucky Derby. His executors discovered that he was financially insolvent at the time of his death.

Medgar Evers

Howard's most important accomplishment may have been hiring Medgar Evers as an insurance agent for Magnolia Mutual in 1952 (Figure 5), a story told in a biography of the civil rights figure by historian Michael Vinson Williams.[5]

Figure 5

Evers grew up in the small town of Decatur, MS, a member of a hard-working and self-sufficient family who made sure that none of their family was in a soup line, their daughters never had to work in a white household, and all seven children would graduate from high school. Young Medgar, anxious to get out of Decatur, dropped out and enlisted in the U.S. Army in 1943. Even though he saw action in Belgium and France, he was blocked from voting when he returned to Decatur after his honorable discharge in 1946.

He completed his unfinished high school coursework and went on to receive his baccalaureate in business administration from Alcorn Agricultural and Mechanical College (1952). With the maturity of a combat veteran anxious to get on with his life, Evers was a success as an agent with Magnolia Mutual. By 1954, he was promoted to agency director for Mound Bayou.

His job took him into the heart of the Delta, where he saw the irony of selling insurance policies to sharecroppers who could not pay the debt from last year's harvest.

Howard put him in charge of RCNL operations, including the gas station boycott that had started the year before Evers was hired onto the agency. He caught the eye of the NAACP leadership, who hired him away from Magnolia Mutual to become the association's field director for Mississippi in 1954. Evers moved to Jackson, MS, where he tried to stay clear of Howard's brash activism while supporting other organizations that became active in the state, such as the Student Nonviolent Coordinating Committee and the Congress of Racial Equality.

When Howard brought his April 1956 RCNL meeting to Jackson he encroached onto Evers's and the NAACP's territory.[2] Evers was furious. In a letter Roy Wilkins, executive secretary of the NAACP, Evers wrote that "bringing of national figures [King and Powell] down here will tend to confuse the people and make them more gullible to the 'hog wash' of the Regional Council."[5]

After Howard's ignominious departure from Mississippi in 1956, Evers emerged as the state's most visible civil rights leader. The NAACP to that point had avoided direct confrontation with white businesses and governmental authorities, preferring voter registration drives and taking issues to court. Under Evers, the NAACP in Mississippi took a more active role with direct confrontations: the sit-in of the Jackson public library by Tougaloo College students (1961), the first Freedom Ride (1961), the integration of the University of Mississippi by James Meredith (1962), and the boycott of stores in downtown Jackson (1962–1963).

In 1963, events in neighboring Alabama captured national and worldwide attention. Bull Connor's police dogs and firehoses attacked Children's Crusade protesters in Birmingham (May 2–5). A federalized National Guard ushered Black students past a defiant state governor to their classes at the University of Alabama (June 11). That evening, at 8 p.m., in a nationwide televised address, President John Kennedy proposed comprehensive civil rights legislation that covered all areas of public life. Finally, Evers and the civil rights movement had the federal commitment they had always sought: voting, public accommodations, public education, and equal access for employment in businesses with government contracts.

Evers was too busy to celebrate, with meetings and chores late into the night. Hungry and tired, he pulled into his driveway at 12:20 a.m. on June 12. He was about to close the car door when he was shot in the back, a bullet from a high-powered rifle tearing through his chest. Evers arrived at the University Hospital shortly after 1 a.m. Martin Dalton, then chief resident in thoracic surgery, was called to the emergency room to meet Evers. Evers was already in profound shock and had a gaping wound in his chest, his lung irreversibly damaged by the blast. When his heart stopped, Dalton opened the pericardium and performed open cardiac massage. Evers did not respond and was pronounced dead.[7]

His assassin was tried in two trials in 1964, each time before an all-white jury. Both ended in a hung jury. In 1989, Jerry Mitchell, a reporter with the Jackson *Clarion Ledger*, uncovered evidence of jury interference that led to demands for reopening the case and eventually to another indictment in December 1990. After legal maneuvering, including appeals to the U.S. Supreme Court, the killer was found guilty in February 1994.

Howard was invited to speak at Evers's memorial, his differences with the NAACP set aside for the occasion. Howard began with an anecdote of a veteran of Bull Run who, in old age, visited the graves of his comrades. A young man challenged him. "How could you have survived such a battle? Did you run?" "Yes, it is true," the old man said. "The only true veterans are the ones who are buried here."[2]

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Legends

1. Theodore Roosevelt Mason Howard. Charles "Teenie" Harris (photographer). William "Bill" Nunn, Sr., and Dr. T. R. M. Howard holding newspaper at desk, possibly in Pittsburgh *Courier* newspaper office, October 1955. Carnegie Museum of Art, Charles "Teenie" Harris archive.

2. Taborian Hospital. Knights and Daughters of Tabor.

3. Bumper sticker from the Mound Bayou boycott, 1952. © Dr. Ernest C. Withers, Sr. courtesy of the WITHERS FAMILY TRUST. Ernest Withers (photographer): "Don't buy gas where you can't use the restroom" bumper sticker campaign, 1952.

4. Emmett Till and Mamie Till Mobley. Smithsonian National Museum of African American History and Culture, gift of the Mamie Till Mobley family.

5. Medgar Evers. Courtesy of the Archives and Records Services Division, Mississippi Department of Archives and History.

Louis T. Wright, MD, FACS, and the Integration of American Medicine

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Figure 1

Louis T. Wright, MD, FACS (1891–1952, Figure 1), was the most prominent African-American surgeon of the first half of the 20th century. Growing up in the Jim Crow South, training in medicine at Harvard, and practicing as the country's most prominent Black surgeon during the Harlem Renaissance, Wright faced racial animus throughout his life. He advanced racial integration of all hospitals, medical schools, and training programs. He opposed any accommodation to segregationist policies, specifically all-Black hospitals. With a commanding personality and holding key positions in both medicine and racial politics, he shaped the integration of U.S. medicine. His efforts came to fruition 12 years after his death, when the Civil Rights Act of 1964 outlawed discrimination on the basis of race in all public and federally supported facilities, including hospitals and medical schools, stories told in the preceding chapters in this section (Chapters 15-17).

Most of the material in this article draws from recent summaries of his work with the National Association for the Advancement of Colored People (NAACP) by physician-historian P. Preston Reynolds[1] of the University of Virginia and a self-published biography by Robert C. Hayden, which is not widely circulated but is available through an internet vendor.[2] Wright became the second Black Fellow of the American College of Surgeons (ACS)[3] and brought other qualified Black surgeons into the organization,[4] an important story by John S. O'Shea, MD, FACS, of Cambridge, MA, and reprinted as Chapter 34 in this book.

Racial Inequities in Health Care

W. Montague Cobb of Howard University studied health care among Blacks in the mid-20th century, and he summarized his grim statistics in a 1947 Presidential commission on race relations summarized by Reynolds.[1] Experts at the time estimated the need for physicians at one per 750 people. For Blacks, the actual ratio was 1 per 3,377; in Mississippi, it was 1 per 18,527. Of the 1.5 million hospital beds in the country, only 15,000—1 percent—were open to Black patients. In some areas, only 75 beds were available for 1 million Blacks, far below the national target of 4.5 beds per 1,000 people. Without access to community hospitals, Black patients were treated in proprietary hospitals owned by Black physicians, themselves barred from practice in established facilities. Of the 112 all-Black hospitals in the U.S. in 1947, the ACS had accredited only 25.

Training opportunities for Black physicians and surgeons were similarly limited. All 26 medical schools in the South, except Howard Medical College in Washington, DC, and Meharry Medical College in Nashville, TN, refused to accept Black applicants. There were 52 schools in the North, but only 82 of the 590 Black medical students attended schools other than Howard and Meharry. Eighty-five of the 116 positions open to Black trainees in the country were offered by only four all-Black hospitals.[1] (The medical education of Black physicians under Jim Crow is covered in Chapter 8.)

Jim Crow laws maintained a separate system for Black patients and doctors in the South, a "separate but equal" principle that the U.S. Supreme Court held as constitutional in its 1896 *Plessy v. Ferguson* decision. Segregation was present to nearly the same extent in the North, where medical schools did not select Black students, training programs chose not to train minority interns and residents, and hospital staffs ignored the applications of Black physicians for privileges.

The confrontation of centuries-long racial discrimination is fundamental to American social discourse. In the late 19th and early 20th centuries, the debate was embodied by two titanic figures in U.S. history: Booker T. Washington (1856–1915) and W.E.B. Du Bois (1868–1963). (A *Frontline* television documentary (1998) available online gives a useful introduction.[5]) Washington preached self-help, individual achievement, and the development of Black institutions that eventually would become integrated into mainstream white society. Saying that Washington's strategy would only perpetuate inequality and white oppression, Du Bois demanded equal rights and access to all institutions through a politically active civil rights agenda. His stance was radically aggressive, given the magnitude of racism and the wide gulf that separated American Blacks from mainstream white society.

Washington's approach appealed to many Black physicians as the more achievable option: Accommodation to the reality of being Black in that era, providing the best care to their patients within the resources available, and embracing a windfall should it come (often from a progressive white philanthropist, a topic summarized in Chapter 9).

Wright and others took Du Bois' stance. They saw the difference in schools and hospitals open to Caucasians that were closed to them but supported by taxes everyone paid. Black patients had far inferior facilities that their doctors owned and kept financially afloat with their own money. To Wright integration in health care was one of the core issues of the civil rights movement. His triumph forever changed American medicine.

Growing Up in Georgia

Wright was born July 23, 1891, in LaGrange, Georgia, a textile town 60 miles southwest of Atlanta. His mother, Lula Tomkins Wright, was a teacher. Born into slavery, his father, Ceah Ketcham Wright, received a degree in medicine from Meharry. The elder Wright, who had abandoned his practice for a Methodist ministry, died when Louis was only four years old. The family moved to Atlanta, where the mother returned to teaching at Clark College, a Methodist freedmen's school.[1] There she married William Fletcher Penn (1871–

1934), who in 1897 had become Yale University's first Black medical school graduate.[6]

Penn was attending Leonard Medical School for Blacks in Raleigh, NC, when he had the opportunity to perform with a local college quartet on a concert tour. While in New Haven, CT, he happened to meet an influential Yale medical school faculty member who helped him gain admittance there in 1893. Penn earned high marks and was editor of the medical school class yearbook. Returning to Atlanta, Dr. Penn, barred from established hospitals, started a proprietary hospital where he could practice.[1]

After marrying Lula Wright, Dr. Penn formed a fast relationship with his stepson and took him on house calls, the boy waiting in the car while his stepfather visited a patient. Car ownership among Blacks was rare at the time, and Penn's vehicle attracted the attention of stone-throwing thugs,[1] evidence of simmering racial violence that would become murderous.


Le Petit Journal

SUPPLÉMENT ILLUSTRÉ

LES « LYNCHAGES » AUX ÉTATS-UNIS

Massacre de nègres à Atlanta (Georgie)

Figure 2

Racial tension exploded in the Atlanta Riot of 1906 (Figure 2). Gangs of white men, estimated in the thousands, swarmed the Black neighborhoods of South Atlanta. They beat innocent passersby, broke windows of Black-owned businesses and homes, and set streetcars and autos on fire. Official estimates were 25 dead in the melee.[7] Du Bois, then a sociology professor at Atlanta University, estimated deaths at more than 100.[2]

Wright, rushing home to safety from school, passed a man hanging by his neck from a rope tied to a tree, a victim of lynching. Upon reaching his house, Wright found his stepfather, rifle in hand, protecting his family and home. Dr. Penn gave the boy another firearm and stationed him at the front door with instructions to shoot anyone who entered the front yard. A sympathetic white neighbor, a handyman who kept the Penn automobile in working order, secreted the family out of the neighborhood to safety.[2]

Wright attended Clark College where he won honors in all academic subjects, managed the baseball team, and acted in school plays. Graduating *summa cum laude* and valedictorian in 1911, he decided on a career in medicine. With the encouragement of Clark professors and his stepfather and brimming with confidence, Wright made his way to Cambridge, MA, to interview for admission to the Harvard Medical School.

The odds for admission, however, were against him. Blacks with aspirations for medical school had only two realistic choices: Meharry or Howard. Schools in the north seldom accepted Black students. In the south there was an assortment of proprietary schools, like the one his stepfather attended before he transferred to Penn, that were destined to be phased out in the wake of the Flexner Report (1910).

Having studied medicine in both a ramshackle freedmen's school and in an Ivy League institution, Dr. Penn was clear in his advice to travel north. Unfortunately, Wright soon burned through the modest bankroll his father and friends had given him for his trip. To make ends meet in Boston, he found work as a hotel porter.[2]

At Harvard

When Wright entered the office of Channing Frothingham, Jr., dean of the Harvard Medical School, it was immediately apparent that there was a misunderstanding. Though light-skinned, there was no mistaking Wright's race. The dean had mistaken Wright's degree as being from Clark University, the graduate research institution in Worchester, MA—not the freedmen's school in Atlanta.

When Frothingham explained that there was an error, Wright insisted that he had entirely legitimate credentials that satisfied the qualifications for admission. The dean agreed to a compromise: An on-the-spot oral examination with Harvard biochemist Otto Folin. With his undergraduate degree in chemistry, Wright passed. He began his studies the day after Labor Day, 1911 (Figure 3).[2]

Figure 3

He confrontations with racism continued at Harvard. On entering his first day of anatomy lab, Wright's fellow students had suspended a cadaver, a Black man, from a beam by cranial tongs inserted in his ears so he looked like a lynching victim. When Wright arrived for his rotation in obstetrics and gynecology, the professor informed him that arrangements had been made for him at a segregated hospital. The attending staff did not believe that white women at the Harvard-affiliated Boston Lying-In Hospital would allow a Black medical student to examine them and deliver their babies. With conviction, Wright stated that he had paid his tuition, and he would take the standard rotation at the main hospital. No one complained.

Wright missed the first day of another rotation when he marched in a protest against the D. W. Griffith film, *The Birth of a Nation* (1915), opposed by the NAACP because of its glorification of the Ku Klux Klan and stereotypical depiction of slaves. His professor excused his absence, saying that attending the protest was the correct thing to do.[2]

Wright showed an aptitude for research and worked with such Harvard luminaries as Walter Cannon and Folin, his ad hoc examiner.[8] He won the Hayden academic scholarship all four years and graduated in 1915 fourth in his class, easily in the group to be honored by election into Alpha Omega Alpha (AOA), the national medical honor society. However, an unknown student member of AOA blackballed him, and classmates with lower marks received the recognition.[1]

A graduate with Wright's accomplishments and aspirations in surgery would normally have continued training at one of the Harvard residencies. But Harvard surgeons, including Harvey Cushing, opposed having a Black trainee. Other Harvard professors gave Wright more exposure to surgery during his clinical rotations, knowing that he would have limited opportunities for adequate graduate training.[2] His stepfather urged him to apply for an internship at the segregated Freedman's Hospital in Washington, DC, one of a handful that trained Black doctors. In 1915, he took the entrance examination and, two weeks later, received his appointment.[1]

Training and Start in Atlanta

Wright excelled as an intern. He published the first article to come from Freedman's Hospital, a study that proved skin pigmentation did not invalidate the

Schick dermal skin reaction for diphtheria immunity and that Black patients who were immune to diphtheria did demonstrate the diagnostic response.[9] At the end of the internship year, he was recognized as the best trainee at the hospital.[2]

In 1916, Wright returned to Atlanta to assist his stepfather, who was having financial difficulty.[1] Wright was physician to Clark College faculty and students and served as football team doctor. Barred from all-white community hospitals, Wright practiced in a converted two-story frame house with 12 beds and a makeshift operating room, a far cry from the Harvard hospitals he was at a year earlier. In 1917, a fire razed the modest infirmary despite Wright's futile efforts to extinguish it with a garden hose.[2]

Many members of the Atlanta Black medical community, mostly Meharry and Howard graduates who felt the sting of inferiority compared with counterparts who had superior educational opportunities, ostracized Dr. Penn of Yale and Dr. Wright of Harvard. Wright would confront this attitude again in Harlem.[2] Some Black patients preferred white physicians, not believing Black doctors were as well trained. W. Montague Cobb, editor of the Journal of the National Medical Association and chronicler of Black medical history, recounted an episode where one patient rejected Wright's services. "Don't you ever come see nobody of mine," she said. "I don't believe a n****r can be a doctor."[10]

Wright had promised his family that he would stay in Atlanta for one year. Oppressed by the racism in the South and unable to ply his profession at the level he desired, he was ready to leave at year's end. His close friend Walter F. White had an opportunity to join the NAACP as an assistant field director. (He later would become executive secretary of the national organization.) White's pay, however, would be a steep cut from his job with Herman E. Perry's prosperous Black enterprise, the Standard Life Insurance Company. Wright advised his friend, "You'd be a damned fool to stay here in Atlanta. Life will mean much, much more to you when you are fighting for a cause than it possibly can if you stay here just to make money. You'll stagnate and die mentally."[2]

Military Service

When his year's obligation to his stepfather came to an end, Wright enlisted in the Medical Reserve Corps of the U.S. Army when World War I began. First Lieutenant Wright was billeted at Camp Upton on Long Island. Among his duties was variolating the enlistees for smallpox by rubbing a solution that contained attenuated virus into two needle scratches on their skin. However, the technique seldom led to a "take," the eruption of small vesicles at the site. He tried intradermal injection, the technique used in Schick tests, and kept track of the results. The difference was remarkable—a 70 percent take rate compared with 8 percent—a result Wright reported in 1918.[11]

In Long Island he met Corinne Cooke, a white teacher and USO volunteer whom he married in 1918, one month before leaving for France.[1] Wright's unit was close to the front lines when a gas shell released phosgene only a few hundred yards away from his station, nearly killing him. The damage to his lungs was a hindrance for the rest of his life.

After his recovery, Wright worked in receiving hospitals in the rear. His commanding officer recognized his surgical talent and leadership. "You're the best doctor in the division,"[2] he said, putting the Black lieutenant in charge of surgeons and nurses of both races on wards of the main triage hospital. Promotion, though, eluded him throughout the war in favor of junior white colleagues. Upon discharge from active duty, Wright finally won his captain's bars. Purple Heart in hand, he disembarked in New York City at war's end.[1]

Harlem's "Medical Renaissance"

Wright and Corrine settled in Harlem, the emerging center of Black economic and cultural life in America. In the 1920s, Harlem attracted artists, writers, and musicians whose works created the "Harlem Renaissance." Blacks gained political identity and clout through their increasing numbers. Social thought and political action

followed, with organizations like the NAACP and the Urban League addressing issues that arose from racism and discrimination.[12]

There was also a Harlem medical renaissance, with Wright at its center. Black physicians, dentists, and pharmacists organized the North Harlem Medical Society (NHMS), a forum that addressed health problems affecting the community and its residents. Wright soon became its leading figure.[2]

Wright's target was the community's largest health facility, city-owned Harlem Hospital. Its patients were uniformly Black, but its medical staff was entirely white. Black physicians who applied for privileges were routinely rejected.[2] Wright pushed his own application for privileges at the hospital up the city bureaucracy. Receiving no response for months, he personally contacted hospital superintendent Cosmo O'Neal. Respecting Wright's military service, O'Neal brought him on staff at its lowest level, an outpatient position without admitting privileges. When Wright arrived for work in 1920, four white staff physicians quit in protest and the erstwhile superintendent was on traffic detail in the ambulance driveway.[1]

Wright and his allies pressed city and hospital officials. Editorials in Black community newspapers urged appointment of Black physicians. Seven more Black physicians received appointments, but like Wright, they were stuck at the lowest rung without admitting privileges.

Headline-grabbing scandals involving graft and patient neglect hit the hospital in 1921, supported one year later by an investigation conducted by the NAACP. Mayor John F. Hylan, who had received 75 percent of Harlem's vote in his latest election, posed a familiar solution: the conversion of the hospital to a segregated Black facility. The option was anathema to Wright, who flatly rejected the mayor's proposal.[2]

Wright converted Director of Surgery John Fox Connors to his cause. Connors, a Harlem Hospital fixture since 1903, had opposed bringing Blacks on the hospital professional staff, believing doing so would be controversial and disruptive. However, he aspired to membership in the elite American Surgical Association, where publications in the surgical literature were a requirement. With help from Wright, Connors got his publications and his cherished membership in the Association. By working together, they became allies, and Wright and his colleagues won full hospital admitting privileges. Racial integration in other hospital programs followed: the nursing school in 1923, and the surgical training program in 1927.[2]

With growing influence, Wright attracted opposition from both races. White physicians who opposed integration resigned. Black physicians accused Wright of favoring graduates from schools in the North and discriminating against those from Howard and Meharry. It was an accusation he had faced before from Black physicians in Atlanta. The hospital board intervened in 1930; 23 white and two Black doctors lost their positions, and 12 Black doctors won appointments. Connors became board president; Wright became secretary. The next year, 72 Black physicians came onto the Harlem Hospital staff, all connected to Wright. He also had final approval on house staff appointments. His biographer Hayden observed that Wright became like a czar, popularly known as "Mr. Harlem Hospital."[2]

A few years earlier, the Columbia-Presbyterian Medical Center had announced its plans for a new facility on Harlem's western border. In 1925, Wright raised thousands of dollars for the project from the Harlem community with the expectation that the new facility would be integrated. Trouble immediately followed the 1928 opening: A Black nursing student was turned away when her race was discovered on her first day, and a Black patient was refused admission.

Wright's and his colleagues' applications for admitting privileges to the new hospital were never answered. Dean Sage, hospital president, avoided responding to queries for three months until he finally asked that the issue be dropped to avoid controversy that would harm his facility's standing in the city's highly competitive medical community.[2]

In April 1930, representatives from the Julius Rosenwald Fund met with the city hospital commissioner and NHMS physicians about the possibility of funding an all-Black hospital in Harlem. A great supporter of Black education through individual grants and all-Black institutions such as the Tuskegee Institute, the charity had also supported Black hospitals in other cities.

Wright, however, was excluded from the discussions. Once he got word of the negotiations, Wright split from the NHMS and, with allies of both races, formed a rival organization, the Manhattan Medical Society, to oppose the Rosenwald project. The new society successfully thwarted the all-Black hospital in Harlem and also a segregated Veterans' Administration (VA) hospital that was planned for New York, similar to one founded in 1923 in Tuskegee, AL.[1] Hard feelings from the conflict, however, plagued Wright for the rest of his career.[2]

When Connors died in 1935, Wright was in line to succeed him as chief of surgery. The city hospital commissioner, however, made the post a rotating assignment among senior surgeons, each serving in turn for two years. Soon after Wright's turn came in 1938, making him the first Black chief of a city hospital service, he suffered acute cavitary tuberculosis of his right lung. He spent the next three years in hospitalization and treatment. On his return in 1941, he was immediately and unanimously elected director of surgery, a position he held until his death. He considered himself lucky to have survived tuberculosis; half of his college class by then had died of the disease.[1]

NAACP

In 1917, upon his return to Atlanta after his year at Freedmen's Hospital, Wright became a charter member of the NAACP's Atlanta chapter—its first in the South—and served as its treasurer. In Harlem, Wright continued to be active in NAACP affairs. In 1931, he was named to the board of directors of the national organization and became the board's first Black chair in 1934, a position he held until his death 18 years later.

At the NAACP national convention in 1936, Wright made discrimination in health care one of the organization's signal civil rights priorities. In 1937 he made clear his priority was full integration; that all-Black health institutions were "separate but not equal."[1] The NAACP helped stop plans for all-Black VA hospitals in Mount Bayou, MS, and Fort Huachuca, AZ.[2] (The latter was the home base of the "Buffalo Soldiers," the famed all-Black cavalry regiments active during the American Frontier Wars in the American Southwest, the Spanish-American War, and actions in the early 20th century, including the pursuit of Pancho Villa.)

Opposition came from an unlikely source: W. E. B. Du Bois, a founding member of the association and editor of its publication, *The Crisis*. He editorialized in January 1934 that the NAACP should accept voluntary segregation "as a practical necessity" if an opportunity arose to improve health care for Blacks. He used Harlem Hospital and the Tuskegee VA as examples of the dilemma NAACP faced: Integration of one hospital but continued exclusionist policies at essentially all other hospitals in the city, and the benefits of a facility dedicated to treating Black veterans. In Du Bois' view, all-Black facilities in Harlem and Tuskegee deserved support. In accommodating segregation in health care, Du Bois broke with the NAACP on a core issue. In the ensuing controversy, he refused to recant his editorial and resigned in July.[2]

After his three-year hiatus in treatment for tuberculosis, Wright resumed work as NAACP board chair. In 1944, an NAACP panel of both Blacks and whites investigating the state of health care among America's Blacks stated that segregation in medicine created "a medical ghetto" that entrenched substandard care and medical education. Later that year, Wright led an unsuccessful effort to deny federal hospital construction funds to segregated hospitals under the Hill-Burton act, then being deliberated before Congress, a story summarized more completely in Chapter 15.[1]

Last Years and Legacy

Wright's respiratory condition precluded an active clinical practice, so he turned to full-time

clinical research. He published 100 articles and book chapters on infectious disease, trauma, and cancer chemotherapy.[13] His health, burdened by aftereffects of his toxic gas exposure during the war and active tuberculosis, slowly deteriorated. More than 1,100 people, including Eleanor Roosevelt, attended a testimonial dinner in his honor in 1952 at the Statler Hotel in New York City; the occasion was the establishment of a library bearing his name at Harlem Hospital. Six months later, Wright died at age 51. He posthumously received the American Cancer Society medal. His wife Corrine and two daughters, both physicians, survived him.[2]

Assuming leadership of the NAACP Health Committee, W. Montague Cobb and the association's Legal Defense and Education Fund, led by Thurgood Marshall, allied with the National Medical Association and the National Urban League to push hospital and medical integration through a series of court challenges. Success followed a decade later with the landmark *Simkins v. Cone* decision in 1963 that declared the "separate but equal" provision in the 1946 Hill-Burton Act unconstitutional, opening hospitals built with federal funds to all patients, Black and white, and prohibiting their staffs from excluding physicians on the basis of race.[14] The U.S. government prohibited racial discrimination in all federal programs in the 1964 Civil Rights Act[15] and the 1965 Social Security Act, which established Medicare.[16] These landmark court and legislative achievements had their beginnings decades earlier, when a young Black student passed an on-the-spot chemistry exam and proved he belonged in the American medical mainstream.

Acknowledgment

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3. Wright as a Harvard medical student. Harvard Medical Library in the Francis A. Countway Library of Medicine.

Desegregation of Medical Schools in the South

Don K. Nakayama, MD, MBA, FACS

Educational opportunities for Blacks in medicine were curtailed in the two decades that followed Abraham Flexner's 1910 report to the Carnegie Foundation on standards for medical schools. Of the seven schools open primarily to Black students at the time of the report, five would close, with Meharry Medical College and the Howard University College of Medicine as the only survivors. From 1920 to 1964—the year of the landmark Civil Rights Act—about 2 percent of all U.S. medical students were Black, and the vast majority were enrolled at Meharry and Howard. Under strict quotas, each year only 10 to 15 Blacks graduated from schools other than Meharry and Howard. One-third of medical schools (26 of 78), all of them in the South or border states, were completely closed to Black students. In 1948, the Committee on Civil Rights under President Truman asserted that a critical shortage of Black physicians contributed in large part to the poor health status of Black Americans. The committee called for the desegregation of U.S. medical schools.[1]

Historian Veronica Gamble of George Washington University wrote on the integration of medical schools in the South in an article that is the source for much of what follows in this chapter.[2] Desegregation of the nation's health institutions was one of the main priorities of the National Association for the Advancement of Colored People (NAACP) and its lead counsel, Charles Hamilton Houston, the dean of the Howard University School of Law. Hamilton's strategy was shrewd: to target state-supported Black medical and law schools, where the issue was not "separate but equal" but "separate and nonexistent." He reasoned that states, especially relatively poor states in the South, could not afford their segregationist educational policies when it came to graduate and professional schools for their Black students. Creating a Black-only law school might only involve hiring a couple of lawyers to serve as professors, using a judge's book collection as a library, and assigning a backroom in a courthouse for lectures. But the creation of a medical school was the real hurdle. One NAACP expert witness pointed out the brilliance of Houston's approach. "What was the state going to do when a Negro applied for a medical education—build him a whole medical school?"[2]

The desegregation of medical schools thus occurred in tandem with law schools. Once segregation in law schools was found to be illegal, desegregation in medical schools was a matter of course. With the precedents set in professional schools, the NAACP would take on the real prize—the

nation's elementary and secondary public schools. Surprisingly, integration of medical schools and public schools in the South would both take place in the same town: Little Rock, Arkansas. The former took place with relatively little notice. The latter roiled the country and became a milestone event in America's racial history.

Law Schools

The NAACP had limited finances, so Houston had to choose his battles carefully. In 1935, Amherst graduate Donald Murray was rejected by the University of Maryland School of Law. The state offered instead a partial scholarship to an out-of-state school that admitted Blacks, specifically Howard University. Murray rejected the offer and, with the NAACP providing him counsel, sued the University of Maryland.

Houston, along with his junior counsel and former star student, Thurgood Marshall, won the case before the Baltimore City Court and then, through a series of appeals before the state's highest court, the Court of Appeals. "Since the State of Maryland had not provided a comparable law school for Blacks," Marshall argued, "…Murray should be allowed to attend the white university."[3] In 1936, the court ordered the law school to admit Murray in its entering class (*Murray v. Pearson*, 1936).

The scope of the decision was limited to Maryland, so Houston looked for a case that could go to the U.S. Supreme Court. In 1935, Lloyd Gaines, an honors graduate of Lincoln University in Jefferson City, MO (a Black land-grant university), was rejected by the University of Missouri law school because of his race. State officials agreed that they were obligated to provide Gaines a law education and began to create a law school for Blacks at Lincoln. They offered Gaines a spot at the new school or a scholarship to an out-of-state law school, just as Murray was offered in Maryland. Gaines rejected both and, with Houston and Marshall representing him, sued for admittance to the school of law at the main university.

Houston lost at the state level but won before the U.S. Supreme Court. In a 6-2 decision, the high court decided in 1938 that the state had the obligation to "provide negroes with advantages for higher education substantially equal to the advantages afforded to white students" (*Missouri ex rel. Gaines v. Canada*, 1938).[2] It was a victory, but the court did not order Gaines's admission and did not decide the constitutionality of segregation. The state rushed the opening of a law school at Lincoln University in 1939. Gaines again turned down admission there, and he and the NAACP went back to court.

The case took an astonishing turn in October, however, when Gaines went missing. By January, he had still not been located. His counsel reluctantly dropped the case. Suspicion of foul play was unavoidable, but to this day no one knows what happened to Gaines.[4]

Houston stepped down as NAACP chief legal counsel in 1940. Marshall, who been with him since 1936, was named director of the newly organized Legal Defense Fund (LDF) of the NAACP. Marshall realized that states would simply continue to open segregated graduate and professional schools for Blacks unless the legality of the concept of segregation was challenged directly.

The LDF filed suit in 1946 on the behalf of Heman Sweatt, a Black student, for admission at the University of Texas School of Law. As Marshall predicted, the regents lost no time and opened a law school at the Houston College for Negroes in 1947, later renamed the Texas State University for Negroes (TSUN). "Heman Sweatt," state Attorney General Grover Sellers said, "will never darken the door of the University of Texas [so long as I am in office]."[5]

Meanwhile, Marshall had a similar case in Oklahoma. In 1948 he won a unanimous decision by the U.S. Supreme Court that the University of Oklahoma had to provide Ada Lois Sipuel with a legal education under the equal protection clause of the Fourteenth Amendment (*Sipuel v. Board of Regents*, 1948). The high court gave state officials

three options: admit Sipuel to the university law school; not enroll any students at the existing law school until one was built for Black students; or establish a separate Black law school. The regents naturally took the third option and created a Black law school in record time: a roped-off area at the state capitol staffed by three lawyers who served as professors. Sipuel saw it as a ruse and refused admission to the makeshift law school. As Marshall prepared to take the university back to court, the regents relented, and in 1949 Sipuel was admitted to the real law school.[2]

Also in 1948, and again in Oklahoma, Marshall successfully argued a case involving George McLaurin, a 68-year-old Black man with a master's degree from the University of Kansas who sued for the right to be admitted to graduate school at the University of Oklahoma. The university admitted McLaurin, who became the its first Black student at any level, undergraduate or graduate. But he found himself relegated to a desk outside the main reading room when he went to the library and a table designated for only his use when he sat down for a meal in the cafeteria. In classrooms, he had a space confined by two-by-four wooden planks. In a unanimous decision, the high court decided that McLaurin could not be separated because of his race in a classroom or on campus (*McLaurin v. Oklahoma*, 1950).[5]

Marshall thus had momentum when it came time to argue the Texas case before the high court. "Equality under a segregated system is a legal fiction and a legal myth," said Marshall.[2] In a 9-0 decision, the Supreme Court decided in Sweatt's favor (*Sweatt v. Painter*, 1950) because the law school at TSUN did not have the same legal educational opportunities that were present at the main university: faculty size, library holdings, and expenditures.

Such details might not be a problem for a school as enriched by oil revenues as the University of Texas. But the court went on to list "qualities which are incapable of objective measurement that make for greatness in a law school," such as "reputation of the faculty, position and influence of alumni, and standing in the community and prestige," which in later discussions became known as "intangibles."[5] It was the "intangibles" that made impossible the achievement of equality in a segregated setting.

Emboldened by his victory, Marshall prepared to broaden his scope from professional schools to all levels of education, "from law school to kindergarten."[5] The law school decisions in Maryland, Missouri, Oklahoma, and Texas set the stage for his monumental triumph: *Brown v. Board of Education of Topeka* (1954), the decision that racial segregation in public schools was unconstitutional and thereby overturned *Plessy v. Ferguson* (1896), the infamous decision that codified the legal basis for racial segregation.

(In 1976 the law school at Texas Southern University, whose predecessor institution was TSUN, was renamed the Thurgood Marshall School of Law.)

Integration of Graduate Schools in Arkansas

State-supported medical schools were like law schools, in that most states just had one. Compared with a law school, a medical school was prohibitively more costly and complex. Leon Ransom, an attorney with the NAACP legal team, asked in 1939, "Will a 'chair of medicine,' without the maintenance of a hospital and clinic…at Orangeburg [South Carolina State University], be equivalent to the medical education afforded at the state university for whites?"[2]

Desegregation of medical schools in the South began in the unlikely venue of Arkansas. Like other states, the Arkansas legislature in 1943 tried to forestall integration in its professional schools by providing tuition grants for its Black students to pursue graduate education somewhere else. Some Black Arkansans availed themselves of the scholarships to get their degrees in medicine at Meharry, where Tennessee, Alabama, and Virginia already sent their Black medical students.

Governor Ben Laney was a staunch segregationist and Dixiecrat but still saw that the state's Black

students needed the opportunity for graduate education. Without the rich endowment of the University of Texas, Laney advocated a regional medical school at Meharry, supported and operated by the Southern states. For his part, he offered to start a regional graduate school in other disciplines at the Arkansas Agricultural, Mechanical, and Normal College for Negroes in Pine Bluff.[2]

Laney's grand plans were rendered moot just months later when the University of Arkansas School of Law admitted L. Clifford Davis, a Black student who had received a grant to attend law school at Howard but applied to return to Arkansas because of the distance and cost of living away from home. Herman Thomas, chair of the board of trustees of the University of Arkansas, and Lewis Jones, university president, had seen the successful legal challenges to segregated law schools in nearby Missouri, Oklahoma, and Texas. They came to the conclusion, Gamble wrote, "that educational inequalities adversely affected Black students… [and] that the changing legal landscape mandated that the University of Arkansas admit qualified Blacks to its graduate and professional programs."[2] Within a month, two more Black students had been admitted to the law school without a court order.

In April 1948, the executive committee of the University of Arkansas College of Medicine decided to admit and teach Black students. The school was ready to accept its first Black medical student.

Edith Irby Jones

In grade school and as a high school honors student in Hot Springs, AR, Edith Irby (Figure 1, 1927–2019) was inspired to become a doctor by seeing the infirm come to the town's celebrated spas, as well as from her own health trouble with rheumatic fever as a child. She graduated *magna cum laude* from Knoxville College in 1948 with a major in chemistry and minors in biology and physics. She found time to be active in her sorority, the school debate team, pep squad, and drama club, all while working part-time as a typist to supplement her scholarship and send money home to her parents. To strengthen her application to medical school, she took advanced courses in clinical psychology at Northwestern. When she aced her Medical College Admissions Test, Irby was accepted to eight of the 12 schools where she applied, including Northwestern and the University of Chicago.[2]

Figure 1

She wanted to attend the University of Arkansas, because it would be cheaper and close to her family. She did not know, however, that the school had never accepted a Black applicant. The admissions committee ranked Irby 28th of the 230 in-state applicants, of whom the top 90 would be offered places in the entering class for fall 1948.

"We have a problem," said H. Clay Chenault, dean of the medical school, to university president Jones. "Proceed according to policy," said Jones. "Admit her."[2] Without objection, official or otherwise, Irby became the first Black student accepted to a state medical school in the South.

In contrast to the first Black law students at the university, who were kept physically separate from their white classmates, Irby was educated on a nonsegregated basis, attending class and working in laboratories alongside white students. She needed

to comply with state laws regarding restrooms and dining facilities, but otherwise she had complete access to white cadavers in anatomy class and white patients on the wards of the hospital.

After her graduation in 1952, Edith Irby Jones—she had married in 1950—wanted to continue her postgraduate training with an internship at the university hospital. Chenault's successor as dean, Hayden Nicholson, asked the university provost, Joe Covington, for advice. Covington replied that state laws on segregation applied only to "motor carriers, railroads, penal institutions, dog races, gambling establishments, and the public school.'"[2] That July, with the same lack of fanfare as her acceptance to medical school, Irby Jones became the first Black intern at a predominantly white hospital in the South.

Just five years later, 1,000 army paratroopers protected nine Black teenagers from angry mobs as they attempted to integrate Central High School in Little Rock.

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Chapter 20

The Harlem Assassination Attempt on Martin Luther King, Jr.

Don K. Nakayama, MD, MBA, FACS

This is an edited version of an article that appeared in *The Pharos* (Spring 2016), courtesy of the Alpha Omega Alpha Honor Medical Society.

On September 20, 1958, in a Harlem department store, a mentally ill Black woman stabbed Martin Luther King, Jr. (1929–1968, Figure 1), in the chest with a letter opener. He narrowly missed death, the tip of the knife only a fraction of an inch away from his aorta. The momentous events in the civil rights movement in the decade that followed, including his assassination in Memphis a decade later, eclipsed the earlier attempt on his life in public memory. But King recalled his stabbing in one of his most famous speeches, his "Mountaintop" oration, where he prophesized his death only hours later.

After his arrival at Harlem Hospital, the surgical team delayed his operation to wait for Aubré de Lambert Maynard (1901–1999), director of surgery, despite the urgency of King's injury. Now a footnote to the episode, Maynard claimed to have done King's surgery. For years he retold the operation in detail, never leaving out the harrowing location of the tip of the blade. While the position of the knife was true, Maynard's account was a fabrication.

Hugh Pearson, a freelance writer who wrote for the *Wall Street Journal* and the *Village Voice*, is the major chronicler of the events in this chapter, including a detailed background of the civil rights movement at the time. His book, *When Harlem Nearly Killed King*, is the source for most of the facts that follow.[1]

King's Visit

King came to Harlem to promote his first book, *Stride Toward Freedom: The Montgomery Story* (1958). It was King's account of the yearlong boycott that began with Rosa Park's arrest on December 1, 1955, and ended with the Supreme Court decision that desegregated the Alabama city's bus system on December 17, 1956. King, not yet 30, emerged from Montgomery as the civil rights movement's most visible figure, with youth, charisma, and heroism.

His trip to New York City began with a television appearance on *The Today Show*, followed by an outdoor rally in front of Hotel Theresa in Harlem. It was a state election year, so politicians maneuvered to share the dais with King, including W. Averill Harriman and Nelson Rockefeller, rival candidates for the New York governorship. Thousands filled the street in front of the hotel.

Also in the crowd was Izola Curry, a Black woman who favored rhinestone-rimmed glasses, dangly earrings, and flashy garb. Neighbors knew the 42-year-old loner from her very public rants against street preachers. The FBI received her

Figure 1

letters demanding to know why communist agents were out to get her. Suspicions that communists backed the growing the civil rights movement helped fuel the increasing political backlash against King and hid the racism behind the opposition to its cause.[2] King, both a preacher and a civil rights activist, thus was doubly suspect in Curry's disjointed reasoning. She wandered in the throng, unconcerned whether anyone listened to her shrill protestations against communists, whites, and especially "huckster preachers" like King.

Manhattan borough president Hulan Jack, who was on the platform at the rally, heard the taunts and heckling. He expressed his fear to King as they stepped off the platform. "Oh God, don't get a bodyguard," King said. "And don't you try to act like one, either."[1]

The Stabbing

The afternoon after the rally, Blumstein's department store on West 125th Street held a book signing in its shoe department. King signed books and chatted with admirers. At 3:30 p.m., Curry made her way through the crowd to face King. She clutched a curved, eight-inch Japanese penknife with an ivory handle, her blue raincoat concealing the weapon in her hand. She also carried a .32 caliber semiautomatic pistol in her purse.

> *"Is this Martin Luther King?" she asked as she walked straight up to King, hands concealed in her raincoat. "Yes, it is," replied King, certain this was just one more of the many fans he had been greeting for four days. Suddenly Curry brought her hand out of her raincoat in an arc. Instinctively, King yanked his left arm up to block the letter opener, cutting his left hand as Curry plunged the blade into his chest. Quickly a bystander knocked Curry's hand away from the blade before she could pull it out and stab King again. "I've been after him for six years!" shouted Curry. "I'm glad I done it!" Curry started to run. A group of women who had been flanking King began chasing her, brandishing umbrellas and shouting, "Catch her! Don't let her go!" Before they could reach her, the store's floor manager blocked their path. Walter Pettiford, an advertising executive for the New York Amsterdam News, the city's principal Negro-owned newspaper, grabbed Curry's left arm and swung her around so that he could grab her other arm. Then he proceeded to lead her toward the front of the store hoping to locate a store detective. As he held her, Curry kept repeating, "Dr. King has ruined my life! He is no good! The NAACP is no good, it's communistic. I've been after him for six years. I finally was able to get him now!" Shortly afterward, I. B. Blumstein himself showed up with a security guard, who handcuffed her.*[1]

At 3:38 pm, a phone on Constance Jenning's desk at Harlem Hospital rang: A man had been stabbed in the chest at Blumstein's and needed an ambulance right away. Minutes later Ronald Adams, a driver, and Russie Lee, a licensed practical nurse, sped down Seventh Avenue toward the store. On their arrival, Lee saw King, who was still seated and alert. Lee, a nurse with 12 years' experience, calmly repeated the instructions not to touch the knife. With care she took King to the back entrance of the store where Adams waited in the ambulance. She gingerly brought King in position in the back of the ambulance. She stayed by his side during the return trip to the hospital.

The Hospital and Surgeons

Harlem Hospital was a 900-bed facility typical of a public hospital of the time. Patients unable to afford a private physician filled the facility. Interns and residents, nominally under the supervision of an attending physician, provided most of the care. But senior staff had private practices at separate offices and other hospitals. Thus, trainees routinely had free rein to manage patients on their own. They had outstanding clinical experience, with a large volume of patients with a wide range of illnesses. Inadequate resources and lack of direct oversight by a fully trained surgeon, however, were undeniable. Knowledgeable patients and their doctors stayed clear of public hospitals like Harlem Hospital when they or anyone they knew needed medical attention.

Among public hospitals in New York, there was a pecking order. Three medical schools sent their trainees to Bellevue Hospital, the largest in New York. Harlem Hospital, recently integrated, had

no such affiliation. It was one of only four training programs in the country where Blacks could receive training beyond their internship year following graduation from medical school. The prevalent view was that Harlem Hospital, with its biracial attending and resident staffs, was several steps below Bellevue.[1] Taking King to Harlem Hospital quickly led to gossip and second-guessing among the public and in the medical community. "Why had they taken such an important figure to Harlem Hospital anyway? Why not Mount Sinai or Columbia-Presbyterian?"[1]

Trauma, however, was one field where public hospitals and their surgeons were superior. The locations of public hospitals in inner cities guaranteed a steady stream of gunshot and stabbing victims. Resident trainees soon became accustomed to life-saving procedures and surgical interventions. Harlem Hospital surgeons wrote authoritative articles on the management of trauma.

One such publication was on stab wounds to the heart.[3] Harlem Hospital surgeons documented a 75 percent survival rate among patients in whom they closed the laceration in the wall of the heart—a bold departure from pericardiocentesis, the prevailing approach to such injuries at the time. Harlem surgeons defended their position in spirited debates at professional meetings. In time, their approach would become accepted practice. Despite the prevailing prejudices of the public and New York surgeons who had gathered unbidden in the facility, Harlem Hospital surgeons were among the best for the injury that most threatened King.

As was routine, the first to respond to King was Charles Felton, a first-year medical resident. He saw the knife and left it untouched. He coolly examined his patient's heart and lungs and conducted an electrocardiogram. Finding King to be stable, Felton reassured him that, for the moment, all was fine. Then a wave of surgeons and nurses pushed him aside.

Among them were two superb thoracic surgeons. Emil Naclerio, MD, FACS (1915–1985, Figure 2), son of Italian immigrants, had trained at the Marquette Medical School in Milwaukee and the Overholt Clinic in Boston. Black surgeon John Cordice, MD, FACS (1919–2013, Figure 3), was junior to Naclerio but no less well trained. A son of a Durham, NC, physician, Cordice attended the New York University School of Medicine, did his residency in surgery at Harlem Hospital, and received additional training in thoracic surgery in Manhattan, Brooklyn, and France. Naclerio wrote an extensive review on the management of stab wounds of the heart[4] and coauthored another with Cordice on those involving the lung.[5]

Figure 2

The emergency department was in an uproar with noise from crowds of doctors, nurses, and the curious and with flashes from photographers' cameras. Governor Harriman, campaigning elsewhere in the city, heard the news and went straight to the hospital. He resolved that King would not die on his watch. Surgeons from other New York hospitals arrived and milled outside the emergency suite, volunteering their opinions and services. More than 40 people offered to donate blood. People packed the sidewalks and streets outside the hospital.

Both Naclerio and Cordice had raced to the hospital as soon as they heard the news—the former from a wedding at the Waldorf-Astoria Hotel, the latter from collecting mail with his

Figure 3

daughter from his new office across the Hudson in Orange, NJ. King lay on a gurney, and the trio waited for an operating room, which was made ready. There was only one holdup. It was unofficial but ironclad protocol that a patient of King's stature required the presence of the director of surgery, Aubré de Lambert Maynard, MD, FACS.

But where was he?

The Chief Surgeon

The chief was miles away taking in a Midtown Saturday matinee, *La Parisienne*, featuring Brigitte Bardot. After the movie, Maynard made his way to make rounds at Manhattan General Hospital in lower Manhattan. The hospital administrator raced to Maynard as he entered the front door and turned him around. The doctor was urgently needed uptown where a very famous patient—he wasn't told who—had been stabbed in the chest. Maynard returned to his car and made the trip up FDR Drive. When he arrived, the crowd blocked his entry. Police created a wedge formation, the surgeon at its center, and forced their way to King's gurney.[6] The surgeon walked by Harriman. "Where have you been?"the governor hissed.[1]

Maynard was a Guyana native who had immigrated to New York at age 14 and had made the most of America's opportunities. He attended City College, which for generations of immigrants had been the springboard into mainstream American society. The only Black student accepted in the entering class of 1926 at Columbia University's College of Physicians and Surgeons, Maynard withdrew when he discovered that Columbia's teaching hospital, Columbia-Presbyterian, would not allow Black students on its wards. He was fortunate to gain admission to New York University, where minority students were more welcome.[6]

After graduation, he was one of the first four Black trainees at Harlem Hospital, the surgical residency program integrated by Louis T. Wright, MD,

FACS, the first African American surgeon on its attending staff and the first to hold its position of director of surgery. Wright hired Maynard upon completion of his residency training to serve as the hospital's inaugural thoracic specialist.[6] Maynard, however, had never and would never pursue additional thoracic training.[1]

A martinet, Maynard earned his sobriquet, "Little Napoleon." Despite being chief of thoracic surgery, and later succeeding Wright as director of surgery, Maynard had the reputation of being a middling surgeon who seldom operated at Harlem Hospital. By the time of the King stabbing, Maynard had long since quit coming in for off-hour emergencies. "The senior attendings never came in for emergencies," said John Parker, Harlem Hospital's chief resident in 1950. "I can't recall Maynard ever coming in for an emergency."[1]

The Operation

It took more than hour from King's arrival for Maynard to appear, but King remained awake, his vital signs stable. With Little Napoleon on the scene, Cordice and Naclerio felt they could proceed. They scrubbed in as Leo Maitland, chief resident, placed a cutdown intravenous cannula into King's arm. King then received anesthesia as the surgeons entered his chest between the right third and fourth interspaces, ligating the internal mammary artery in the process. They saw that Curry had plunged the knife with such force that it had penetrated the thick manubrium. The knife's tip stopped just short of the junction of the aorta and the innominate artery.

While they worked, Maynard held court outside the operating theatre. "Gentlemen, this is a Harlem Hospital case," he said, "and we are accustomed to trauma of this sort."[6] Then, with confidence that would amaze surgeons today, he invited some of his colleagues into the surgical suite to observe.

Naclerio and Cordice, satisfied that King was in no danger, waited for Maynard to scrub in. With the operation mostly completed, they offered Maynard the honor of pulling the knife free. The bone, however, held the blade fast.

> *By now Maynard had scrubbed and entered the surgical field. Naclerio and Cordice demonstrated to him what they had before them. With his gloved hand, Maynard grabbed the protruding unsterile gauze-covered blade of the letter opener, attempting to extricate it from King's chest. But the gauze slipped off and the blade nicked Maynard's glove. It was torn. So Maynard had to leave the surgical field to change gloves.… Maynard returned wearing new gloves. At that point, Cordice took…a Kocher clamp…and placed it on the unsterile protruding section of the blade of the letter opener, which had been covered once more with gauze. Then he handed it to Maynard, telling him, "Look, if you're going to pull on it, pull on it with this." Maynard appeared a bit flustered. He took the Kocher clamp off. Calmly, Cordice took a second clamp and placed it around the blade and invited Maynard to pull the blade out of King's chest…Maynard removed the clamp again. Cordice placed a third Kocher clamp around the blade.… After placing this third clamp around the blade, both Naclerio and Cordice said, "Go on, take it out." Maynard began tugging on the blade. Finally, with a fair amount of effort it came out.*[1]

Maynard then scrubbed out and left the others to close King's chest. The closure was simple, without a tube or drains.

In his memoirs, however, Maynard had a different recollection of the operation.[6] At a press conference, he gave the impression that he had conducted the operation from start to finish. He professed ignorance why Naclerio and Cordice had waited for him to arrive. Recalling his thoughts while at the scrub sink, he came to an odd conclusion:

> *Analyzing the situation while scrubbing up, I realized why no one had proceeded with surgery, which ordinarily would have been done. Preliminary measures had contributed to the stabilization of the patient's condition, so precipitate action had been withheld. In the face of the unprecedented public reaction to the assassination attempt, which brought to the hospital government officials and dignitaries from every level, as well as a concentration of the communication media,*

it was understandable that no one was eager to seize the responsibility, which could be better borne by the Surgical Director. There was a strong deterrent of fear, fear that if anything went wrong or tragedy supervened in the course of surgery—and it could—they would be identified with the failure and, justly or unjustly, blamed. On the other hand, if everything went well with the Surgical Director at the table, those involved would at least have the credit of participating in a lifesaving effort of historic import on a famous man.[6]

In newspaper reports, Maynard contended that removal of the blade required that it be pushed from below; that it had lacerated a number of blood vessels that had created "considerable difficulty"[1]; and that removal of the blade required removal of a portion of King's second rib and part of his manubrium. None of these claims were true. With satisfaction, he noted that his use of Penrose drains to handle possible infection in the area had impressed the chief of thoracic surgery at Columbia.[6] But no drains had been placed.[1]

Both Naclerio and Cordice kept silent in the decades after the stabbing, the former unto his death in 1984. When Maynard, three years before his death, gave another misleading interview in the *Times* in 1996, Cordice decided to set the record straight in a letter to the editor that was never published and first appeared in Pearson's book. Other eyewitnesses present in Harlem Hospital that day confirmed that Naclerio and Cordice were the responsible surgeons who performed King's operation.[1]

The natural tendency to treat the famous, wealthy, and influential with obsequiousness extends to medical care. Baum notes that there is an "ego boost" for doctors that comes when such patients need attention (Baum is "Doctor Whiz" on the Internet). He warns that the patient's notoriety and the doctor's submissiveness may interfere with objective assessment and good medical decision-making.[7] Guzman and colleagues at the Cleveland Clinic define "VIP syndrome" as a situation where "a patient's special social or political status… causes changes in behaviors and clinical status that can lead to poor outcomes."[8] They offer a set of guidelines to help assure that providers treat VIPs in the same manner as they do their other patients.

In King's case, two of the rules were broken: Don't bend the rules, and resist "chairperson's syndrome."[8] Naclerio and Cordice violated both when they decided to wait for Maynard's arrival and delayed care when immediate surgery was required. King's operation is an example of what every chief resident knows: The chair of surgery frequently is the least capable surgeon in the hospital. One rule, however, was observed. King was taken to Harlem Hospital, where he came under the care of two of the most experienced surgeons in the country for his specific injury.

The Speech

King identified Maynard as his surgeon, and many of his statements reflected the latter's embellishments.[1] Not exaggerated, however, was the fraction of an inch between the knife's tip and disaster, a fact that impressed King to his last day. He addressed a crowd in the Mason Temple in Memphis on April 3, 1968, the night before his assassination. As he neared the close of his speech, he recounted the Harlem stabbing. The knife was so close to his aorta, he noted, "that if I had merely sneezed, I would have died,"[9] an observation that certainly came from Maynard.[6] King recalled a letter from a ninth-grade white girl. "I'm simply writing to say that I'm so happy you didn't sneeze," she wrote.[9]

King then used his brush with death and a preacher's cadence to build an emotional account of the milestones of the civil rights movement since the stabbing.

And I want to say tonight—I want to say tonight that I too am happy that I didn't sneeze. Because if I had sneezed, I wouldn't have been around here in 1960, when students all over the South started sitting-in at lunch counters…

If I had sneezed, I wouldn't have been around here in 1961, when we decided to take a ride for freedom and ended segregation in inter-state travel…

If I had sneezed, I wouldn't have been here in 1963…to try to tell America about a dream that I had had…

If I had sneezed, I wouldn't have been in Memphis to see a community rally around those brothers and sisters who are suffering.

I'm so happy that I didn't sneeze.[9]

His oratory soared. A tumult of voices and shouts began to build in response. Men and women stood weeping, unable to control their emotions.[10] It seemed that he somehow knew that he would not be as fortunate the next time. Tears in his eyes, King gave his own farewell. The oration would become known as his "Mountaintop" speech, second only to the legendary "I Have a Dream" speech of 1963.

We've got some difficult days ahead. But it really doesn't matter with me now, because I've been to the mountaintop.

And I don't mind.

Like anybody, I would like to live a long life. Longevity has its place. But I'm not concerned about that now. I just want to do God's will. And He's allowed me to go up to the mountain. And I've looked over. And I've seen the Promised Land. I may not get there with you. But I want you to know tonight, that we, as a people, will get to the Promised Land!

And so I'm happy, tonight.

I'm not worried about anything.

I'm not fearing any man!

Mine eyes have seen the glory of the coming of the Lord![9]

Final Notes

Cordice began to receive the recognition he deserved for his role in King's surgery in the years before his death on December 29, 2013.

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Legends

1. Martin Luther King, Jr. Library of Congress.
2. Emil Naclerio visits King two days after the operation. Pat Candido, New York *Daily News*, Getty Images.
3. John Cordice sits in his home with a photo of the operating room the night Dr. King was stabbed. Tracie Hunte, WNYC News.

Surgery's Leaders

Charles Richard Drew, MD, FACS: An Extraordinary Life

Saptarshi Biswas, MD, FACS, FRCS; Dannie Perdomo, DO; and Don K. Nakayama, MD, MBA, FACS

Figure 1

Charles Richard Drew, MD, FACS (1904–1950), surgeon and researcher, made fundamental contributions to blood preservation and the practice of plasma infusion. He led the first effort at large-scale blood donation and collection, first in New York with the Blood for Britain program of 1940–1941, then on a nationwide scale with the National Research Council and the American Red Cross. As chair of the department of surgery at Howard University and chief of surgery at Freedmen's Hospital in Washington, DC, he trained a generation of Black surgeons. The tragic circumstances of his death at age 46 adds poignancy to his legacy as one of foremost figures in American surgery in the 20th century.

Early Life and Education

Drew was born on June 3, 1904, in Washington, DC, the oldest of five children of a Black carpet layer and a mother who had a teaching degree. Of modest circumstances, his family was well respected in their racially mixed neighborhood. With a mature sense of responsibility at an early age, young Drew—"Charley" to his friends—was only 12 when he managed a crew of six newspaper delivery boys.[1]

While his academic achievements in Washington's Dunbar High School were modest, he lettered all four years in football and track. He was named the school's top athlete in his final two years. He went to Amherst College in 1922, where he lettered as a freshman in football and scored all four years in the New England intercollegiate championships in track. By his junior year, he was the top athlete in both sports, a distinction that by tradition would confer the captaincy for both teams. He was not selected captain of the football team, a decision that was unfortunately no surprise, because the top candidates in both sports the previous year—both

Black—had also been denied the honor. The track team, however, unanimously elected Drew its captain.[1]

Two events inspired a career in medicine: Drew's sister died in 1920, two years before he entered Amherst, from tuberculosis brought on by complications of influenza. In addition, he was hospitalized for an infected football injury, which brought him in contact with his future occupation. Otto Glazer, chair of biology at Amherst, sparked an interest in science.[2]

After graduation from Amherst in 1926, Drew taught biology and chemistry and coached football and track at Morgan College in Baltimore to earn money for medical school. He had six hours of English at Amherst, two short of entrance requirements for medical school at the Howard University College of Medicine. He had an opportunity to attend Harvard Medical School, but they wanted to defer his admission for a year. Not wanting to wait, Drew enrolled at McGill University in Quebec, a decision that led some to speculate that he attended McGill because of the reputation of Canadian schools as more supportive of Blacks, a subject covered in Chapter 2.[1]

An honor student at McGill, Drew was elected to Alpha Omega Alpha. He completed the five-year curriculum for MD and CM (master of surgery) degrees in 1933, ranking second in a class of 137. He took a one-year residency in medicine at Montreal General Hospital, where he worked with John Beattie studying shock and resuscitation.[2]

Drew wanted further training in surgery in America, but because of his race his options were limited to a handful of surgical residency programs at Black hospitals, all of them only recently opened: St. Louis City Hospital No. 2 (approved in 1927); Harlem Hospital, Provident Hospital in Chicago, and Provident Hospital in Baltimore (all in 1934); and Freedmen's Hospital in Washington (1935). The recent approval of a residency at Freedmen's was fortuitous, because Drew's father died in 1935, and training there kept him close to home.

The dean at Howard, Numa P. G. Adams, already had his eye on the young trainee. In 1935, Adams gave Drew an entry position as instructor of pathology. The next year, Drew served both as an assistant in surgery and resident at Freedmen's, followed by a fulltime appointment as assistant surgeon to the hospital in 1937.[1]

In 1935, Adams also hired a white surgeon from Yale, Edward Lee Howes, to act as chief of surgery for five years and modernize the department at Howard. Adams's and Howes's goal was to mentor a young Black surgeon to eventually take over as chair. Drew was the obvious candidate for the position. Funds from the Rockefeller Foundation allowed the protégé to get further training in surgery and do research at New York's Presbyterian Hospital under Allen Whipple in 1938.[1]

Blood and Plasma

Drew had a background in fluid resuscitation and shock in Montreal, so he welcomed an opportunity to work with John Scudder to set up an experimental blood bank at Presbyterian in 1939. They researched all aspects of blood preservation and transfusion therapy. Drew's doctoral research, published in 1940, focused on every aspect that affected blood storage: anticoagulants, preservatives, storage conditions, shapes of containers, and ranges of temperatures.

He found that plasma, unlike whole blood, could be stored without refrigeration. Moreover, plasma did not deteriorate when stored and transported. It could substitute for whole blood during resuscitation in any recipient, without regard to blood type.[3] Scudder described Drew's dissertation as "a masterpiece" and "one of the most distinguished essays ever written, both in form and content."[3]

The relevance of Drew's research became manifest with the outbreak of World War II. Britain's need for medical supplies, including blood and plasma for transfusion, became desperate when the Battle of Britain began in July 1940. Officially, the American government's position in the early years of the war was to maintain political neutrality and avoid military involvement. This did not prevent a

group of New York hospitals, the Blood Transfusion Betterment Association, to unabashedly organize a relief program to support Great Britain's need for blood and blood products. Called the "Blood Plasma for Great Britain Project," it soon became known by the pithier slogan, "Blood for Britain."[4]

Until then, each hospital had its own system to collect blood and use serum and plasma as it was needed. Now they organized a large-scale effort to collect and send serum and plasma overseas. A myriad of questions had to be addressed: the age and blood pressure of donors; should donors be fasting; whether to collect serum or plasma; blood collection by gravity or suction; the concentration of citrate in collection bottles; the shape of collection bottles; how much Merthiolate to add as an antiseptic; the temperature of storage; and the all-important issues of bacteriological and toxicological control.[4]

The call for volunteers went out on August 15, and 20 of 22 donors were accepted at Presbyterian Hospital. By October, nearly 10,000 appointments for donors had been made at eight hospitals. Shipment to England was due to begin in November.

In September, just weeks into the program, the need for a full-time medical director became obvious. "The mounting difficulties which we encountered forced us to take a radical step," wrote DeWitt Stetten, chair of the board that managed the collection project. The board was unanimous in their choice for full-time director: Charles Drew. "Since Drew, who is a recognized authority on the subject of blood preservation and blood substitutes, and, at the same time, an excellent organizer, has been in charge, our major troubles have vanished."[4] By January 1941, in the program's five months of operation, nearly 14,556 people had donated more than 6,151 liters of plasma to Britain.[5]

It became increasingly apparent that America would become involved in the fighting, and with it the need for blood. As a national organization with local chapters, the American Red Cross was the natural choice to organize blood collection throughout the country, even though it had never been involved in blood banking. In February, Drew was named director of the first American Red Cross blood bank at Presbyterian Hospital in New York. The National Research Council (NRC) named him assistant director for blood procurement. Among his innovations was the "bloodmobile," a van roomy enough to collect and refrigerate blood.[6]

United against foreign enemies, the country remained divided by race. A national program of blood donation inevitably highlighted the question of the racial identity of the donor, even though the science of blood typing was long established. The Blood for Britain program labelled its units of plasma by race before delivery overseas.[4] Even after the war, blood banks in Chicago and the deep South continued to label their units by race, a practice perpetuated by the War Department:

> *For reasons which are not biologically convincing but which are commonly recognized as psychologically important in America, it is not deemed advisable to collect and mix Caucasian and Negro blood indiscriminately for later administration to members of the military forces.*[5]

Procurement policies had to be made on a national scale, including the question of racial segregation of blood. When the Red Cross decided in April to adopt the policy of identifying units of blood by race of the donor, Drew resigned his positions with both the Red Cross and the NRC.[7]

Drew kept silent as to why he resigned, leading some Black leaders to wonder what had happened. W. Montague Cobb of Howard University wrote:

> *[It] seems strange that his country could find no further use for the services of a citizen who had been of such vital expert assistance in the critical hour. One hears that it was thought that a Negro would not be acceptable in a high place in a national program.*[8]

Given Drew's thorough knowledge of blood donation and transfusion and his dedication to racial advancement, it is doubtless that official donor policies contributed to his decision to leave

Figure 2

the program. Edward Cornwell, III, professor and chair of surgery at Howard, wrote, "He was not an activist by nature, and he was cautious about publicly criticizing a policy of the Armed Forces during wartime."[9] Later, in 1944, Drew wrote a letter to the director of the federal Labor Standards Association on the issue.

> *I think the Army made a grievous mistake, a stupid error in first issuing an order to the effect that blood for the Army should not be received from Negroes. It was a bad mistake for 3 reasons: (1) No official department of the Federal Government should willfully humiliate its citizens; (2) There is no scientific basis for the order; (3) They need the blood.*[9]

Howard

True to Adams's and Howes's agreement to have a Black surgeon trained at Howard succeed the latter, Drew was named professor and head of the department of surgery at Howard University and chief surgeon of Freedmen's Hospital. His profile on the National Library of Medicine website summarizes his educational mission at Howard.

> *Drew could at last pursue his larger ambition: training young Black surgeons who would meet the most rigorous standards in any surgical specialty and to place them in strategic positions throughout the country where they could, in turn, nurture the tradition of excellence. This, Drew believed, would be his greatest and most lasting contribution to medicine.*[3]

In 1948, Drew's first class of surgical residents passed the certification examination of the American Board of Surgery, with two receiving top marks. To promote the wide acceptance of Black surgeons, Drew advocated for his graduates to hospitals and communities throughout the country. He often paid their expenses to attend national meetings to present their work and searched for training opportunities for his best residents.

Despite his achievements, Drew faced discrimination at the professional level. The District of Columbia chapter of the American Medical Association (AMA) excluded him from membership, which made him ineligible for the national organization. At the time, membership in the AMA was a requirement for privileges at many hospitals and placement in training programs for medical and surgical specialties. Exclusion from the AMA was therefore a *de facto* barrier against racial minorities from appointments to hospital staffs.[3] Drew's acceptance as a Fellow of the American College of Surgeons (ACS) came posthumously, a year and a half after he died. One of his profiles notes that he refused to join the ACS during his life because the organization did not accept other well-qualified Black surgeons.[7]

Drew was recognized in other quarters for his accomplishments. He served as consultant to the U.S. Surgeon General on the status of surgical facilities in the European theater after the war. In 1944, the National Association for the Advancement of Colored People (NAACP) gave him its highest award, the Spingarn Medal, for his work on blood preservation and plasma infusion. He was awarded honorary degrees from Virginia State College (1945) and his alma mater, Amherst College (1947). He was an examiner for the American Board of Surgery in 1948.

Death

In the wee hours of April 1, 1950, Drew and three other physicians started a long drive to Tuskegee, AL, to attend the annual meeting of the John A. Andrew Clinical Society. Drew had a full schedule the day before, with 6:30 a.m. rounds with residents, a mastectomy at Freedmen's Hospital, a two-hour lecture, department business the entire afternoon, and two evening functions with students on campus after dinner with his family. He then saw patients on evening rounds, so he did not get home to pack until 11 p.m.[9]

They had made it to Haw River, a small town on state route 49 just east of Burlington, NC, with Drew taking his turn at the wheel. He apparently fell asleep, and the car drifted off the shoulder of the road and overturned several times. None of the occupants were restrained. Two were unharmed; another suffered fractures of the humerus and scapula and an injury to the knee. Drew, however, suffered crush injuries to the head, chest, and leg.

An ambulance took Drew to Alamance General Hospital in Burlington. Three local surgeons, including brothers Harold (an orthopedic surgeon) and Charles Kernodle (a general surgeon trained in thoracic surgery), met Drew and began intravenous infusions.

Kernodle and his colleagues recognized the severity of Drew's wounds and tried to send him to Duke University Hospital in Durham, 35 miles away. "He was too critical to go to Duke," said Kernodle in a later interview. "They recommended supporting as best we could.…I treat patients to the best of my ability, Black or white, rich or poor."[10]

C. Mason Quick, then an intern at the Kate Bitting Reynolds Hospital in Winston-Salem, a segregated facility for African Americans, confirmed the severity of Drew's wounds and the appropriateness of his treatment. Summoned to check on Drew by Samuel Bullock, one of Drew's friends in the car, Quick was able to get there before Drew died. "[Drew] got fluids and was treated aggressively," Quick told Craft. "The chest was just torn up, practically opened up."

The hospital had no blood bank, so Drew never received a transfusion. Decades later in an interview with Patrick Craft (a family medicine physician in Oxford, NC), Charles Kernodle said he could not remember whether Drew was given plasma. Drew died two hours after his arrival at the hospital.[10]

A myth arose about Drew's death: He had been turned away from a white-only segregated hospital. This story was perpetuated in *Time* magazine (March 29, 1968) and on the hit TV show M*A*S*H (season 2, episode 9). The fable had its roots in a 1959 play by Edward Albee, *The Death of Bessie Smith*, where the famous blues singer dies upon being turned away from an all-white segregated hospital in the South. While it was true

that Smith died after a car crash, she was taken directly to an all-Black hospital, where she died.

John Ford, one of Drew's colleagues in the car, had suffered orthopedic injuries. In a letter to Quick, Ford wrote:

> *We were taken to Alamance General Hospital… where we received excellent care. I informed the physicians on duty as to who Dr. Drew was. They went to him immediately, and of course, there was nothing to be done because of the extensive injuries. His face was blown up like a balloon indicating a superior vena cava syndrome…I have nothing but praise for the excellent care provided me while at that hospital.*[10]

A number of articles by prominent Black surgeons, including Cornwell, have subsequently been written to set the record straight.

In 1989, the attendees of the inaugural meeting of the Society of Black Academic Surgeons (see Figure 2, Chapter 23) met in Durham and made the 30-mile trip to Haw River on state route 49 to the memorial marking the site of Drew's car crash. They were joined by Harold and Charles Kernodle.[11]

Figure 3

Legacy

Drew made fundamental contributions to the biochemistry of blood preservation and plasma processing that provided a scientific basis for large-scale plasma donation in the months before America's involvement in World War II. His administrative leadership helped assure the success of the Blood for Britain program, which became the framework for the blood donor program of the American Red Cross. These achievements placed Drew in the first rank of academic surgeons of his generation.

Today we see many changes that only add to the poignancy of his death: safe roadways designed for freeway speed driving; requirements for modern lifesaving restraint systems; advances in trauma center care; and especially the ready availability of blood products in the care of the injured, the area to which Drew is indelibly associated. His lasting gift is the tradition of clinical service and surgical education at the department of surgery at Howard University. Graduates of the Howard University School of Medicine and its residency in general surgery are Drew's enduring legacy.

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Legends

1. Charles Richard Drew, by Betsy Graves Reyneau. National Portrait Gallery, Smithsonian Institution; gift of the Harmon Foundation.

2. Charles Drew teaching interns and residents during rounds at Freedmen's Hospital, ca. 1947. Scurlock Studio Records, Archives Center, National Museum of American History, Behring Center, Smithsonian Institution.

3. Historical marker, state route 49, Haw River, NC. Photo by Patrick Jordan, Burlington, NC, Historical Marker Database, *www.HMdb.org*.

Surgery's Leaders section photo: Charles Drew teaching interns and residents during rounds at Freedmen's Hospital, ca. 1947. Scurlock Studio Records, Archives Center, National Museum of American History, Behring Center, Smithsonian Institution.

LaSalle D. Leffall, Jr., MD, FACS: The Man and the Mission

Edward E. Cornwell III, FACS, FCCM, FCWAS

This article was published as part of a festschrift for Dr. Leffall published in the *American Journal of Surgery* [2018;215(6):1051–1054] one year before his death on May 25, 2019.

The sheer longevity and productivity of his academic surgical career, the magnitude of his impact, and the quality of his science make LaSalle D. Leffall, Jr., MD, FACS (1930-2019; Figure 1), the perfect honoree of a celebration of his academic work. On March 19–20, 2017, Howard University (HU) hosted a festschrift inspired by his writings. The speakers highlighted the broad spectrum of Dr. Leffall's contributions in mentorship; leadership in American surgery; surgery for cancer of the breast, endocrine glands, and pancreas; and familial polyposis coli.

Most inspirational was the testimony of the presenters in describing the personal characteristics Dr. Leffall brings to his academic discourse: encyclopedic knowledge and recall, charm, eloquence, humility, and total dedication to the patient, his students, and trainees.

"Equanimity Under Duress"

It would impossible for a prelude to a festschrift for Dr. Leffall to completely cover the notable features of his remarkable life and career. Few inspirational figures achieve widespread acclaim for monumental accomplishments. Fewer still can communicate the guiding principles of their lives through an epigram that precisely identifies the person. For instance, a quiz show contestant would quickly match, "We have nothing to fear but fear itself," with President Franklin D. Roosevelt. Likewise, the phrase, "I have a dream," is affixed to the Reverend Dr. Martin Luther King, Jr.

Say the phrase, "equanimity under duress," and several thousand former Howard University College of Medicine (HUCM) medical students, surgical trainees, and of colleagues of every medical and surgical specialty will immediately associate it with Dr. Leffall. To him, "equanimity under duress" was the hallmark of surgical discipline. So impressed was I with Dr. Leffall's signature phrase that I kept it, handwritten on an index card, taped on the wall above the desk where I studied as a surgical resident.

Nowhere is a more precise match between a man and his message. The three words perfectly described his steady, unyielding commitment to the principles of ethics-driven behavior, self-motivation, measured analysis, integrity, and

humanism. These values have helped Dr. Leffall achieve excellence in this noblest profession and obtain the fund of knowledge and technical skill necessary to become a master surgeon, a supreme mentor, the definitive goodwill ambassador for academic surgery, and the most decorated teacher in the 150-year history of HUCM.

Dr. Leffall ranks second only to my father on the roster of the most influential men in my life, an observation that I am sure I have in common with many of his former students, trainees, and younger colleagues. Yet I am uniquely blessed to have marked the measure of the man from my perspective as a mentee who would ultimately be appointed to Dr. Leffall's old job as chair of surgery at HUCM and holder of the endowed professorship that bears his name.

Education and Early Career

Born May 22, 1930, in Tallahassee, FL, Dr. Leffall grew up 20 miles up the road in Quincy and attended its public schools. In 1948, at the age of 18, he graduated *summa cum laude* from Florida A&M. In 1952, he received his medical degree from HUCM, ranking first in his class. After completing his surgical training at Freedmen's Hospital (now Howard University Hospital) in 1957, he completed a surgical oncology fellowship at Memorial Sloan- Kettering Cancer Center (1957–1959).

He began his military career at the rank of captain in the US Army Medical Corps, serving as chief of general surgery at the US Army Hospital in Munich (1960–1961). He received an honorable discharge in December 1961 with the rank of major.

Academic Career

Leffall joined the department of surgery at Howard in 1962 and advanced rapidly in rank to professor and chair in 1970, a position he held for 25 years. Now in his 56th year on the faculty, he taught approximately 5,800 medical students (of 8,400 graduates since the medical school's founding in 1868) and helped train 275 general surgery residents (of 340 residents trained since the program's inception in 1936).

Figure 1

His professional life has been devoted to the study of cancer, particularly among Blacks. He authored or coauthored more than 150 articles and book chapters. As a Black surgeon in a hospital that cared for a predominantly Black population, he saw the increasing incidence of and mortality from cancer among Black Americans. When he was named president of the American Cancer Society in 1978, he launched a program that specifically addressed cancer among Black Americans. It was the first program in the nation that addressed the problems of cancer health disparities. Today, all oncology societies have the issue of racial disparities as one of their major priorities.

He was a leader in the two major Black surgical organizations, the Society of Black Academic Surgeons (president, 1997-1998) and the Surgical Section of the National Medical Association (chair). He was the first Black president of multiple major national professional organizations, including the American Cancer Society (1978), Society of Surgical Oncology, Society of Surgical Chairs, Washington Academy of Surgery, and the American College of Surgeons (Figure 2, 2005–2006). He is also a member of the Institute of Medicine (today the National Academy of Medicine).

Leffall was visiting professor and guest lecturer at more than 200 medical schools and institutions in the U.S. and abroad. He received 14 honorary degrees from American colleges and universities. He was an honorary fellow of many international surgical societies, including the West African College of Surgeons, the Société Internationale de Chirurgie, the College of Surgeons of South Africa, the Royal College of Surgeons of Canada, the Deutsche Gesellschaft für Chirurgie, and the Royal College of Surgeons of England.

He was named the first Charles R. Drew professor in 1992, a chair he holds to the present day. The LaSalle D. Leffall, Jr. Surgical Society was formed in 1995, and the Leffall Chair in Surgery was established in 1996. He received the first Heritage Award from the Society of Surgical Oncology in 2001. The biennial LaSalle D. Leffall, Jr., Cancer Prevention and Control Award is sponsored by the Intercultural Cancer Council and the MD Anderson Cancer Center. The LaSalle D. Leffall, Jr., Komen Fellowship in Health Disparities was established by the Susan G. Komen Breast Cancer Foundation in 2006.

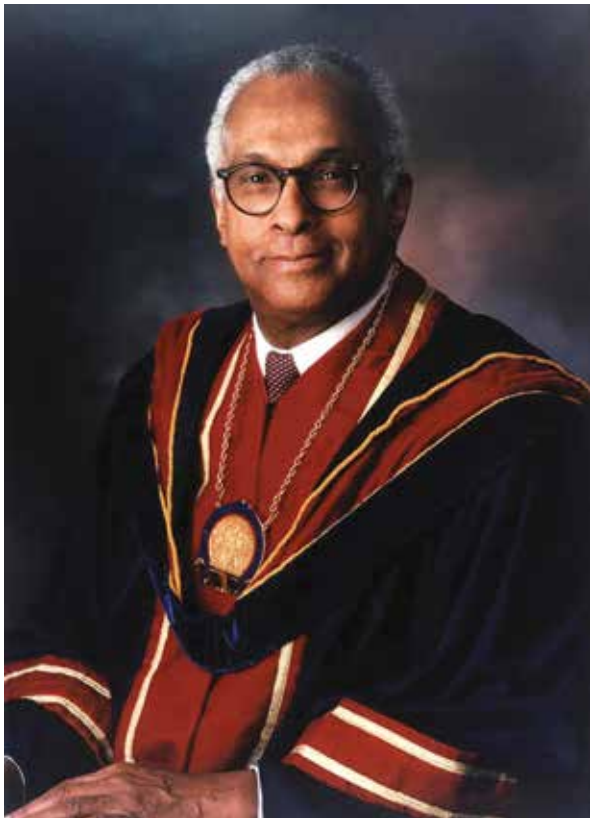

Figure 2

The Howard University Press published Dr. Leffall's memoir, *No Boundaries—A Cancer Surgeon's Odyssey*, in 2005. He also wrote *Equanimity Under Duress: Calmness and Courage in the Battle Against Cancer* (Washington, D.C., Howard University, 2014), and a monograph, *Education, Experience & Exemplars* (2017).

He served the greater Howard University (HU) community as interim senior vice president and executive dean for health sciences in August 2011, and as interim provost and chief academic officer from December 2011 to July 2012. Today he is senior advisor to HU President Wayne Frederick, MD, FACS, who also was one of Dr. Leffall's

students at HUCM and resident trainees at the HU Hospital.

Legacy

It is the personal side of Dr. Leffall that rings most clearly among HU medical alumni (see Chapter 26 for more about the relationship between Dr. Leffall and one of his mentees, Howard University President Dr. Wayne Frederick). I am hard-pressed to name anyone who is so universally admired as him—no small feat in today's conflict-driven world.

There were so many modest details of his life that revealed his humanism. Even after lining up for his famous Saturday-morning office hours that began at 4:30 am, students for decades sang his praises. Third-year medical students rotating on their surgery clerkships would routinely be amazed that this internationally known cancer surgeon could call each of them by name on their very first encounter, without introduction!

At the annual Honors and Oath Ceremony, the graduating class names three to five faculty members who are honored by being invited to stand with the class in their official photograph. In the two hallways in the College of Medicine, Dr. Leffall appears in photograph after photograph, appearing 45 times and every year beginning in 1964. At the ceremony, each department chair takes the podium to announce specific awards. Every year, when it was Dr. Leffall's turn at the lectern, the class stood and applauded.

His insistence on surgical precision extended to the application of the written and spoken word. With a savant's recall for dates, events, and organized letters, Dr. Leffall was always the best public speaker at any occasion, both public and private. His speeches, from ceremonial greetings to major keynote addresses, were brilliant and memorable, performed with clarity and historical perspective, and without notes.

On rounds, he insisted the students give "fast answers." They were rewarded by his "pearls of wisdom," which generations of HUCM students unofficially curated and passed down from class to class.

Dr. Leffall's self-motivation drove him to become an accomplished renaissance man, with wide-ranging interests in jazz, sports, the arts, and literature. His motivation to excel in all of his pursuits was a message to his students to explode stereotypes and transcend boundaries. On hospital rounds and during operations, his conversations would frequently stray beyond surgery into his other interests. To justify his digressions, he said, "Because, ladies and gentlemen, what do people say about doctors? That we are too rigid, that we don't know about anything other than medicine… and then that we don't know enough about that!" It was always amusing to me to hear such a comment from a physician with as encyclopedic a mind as Dr. Leffall.

He was famously punctual—another aspect of his incredible discipline. Trainees arriving on the surgical ward for 6:30 a.m. rounds with Dr. Leffall were expected to be seeing their first patients by 6:27 a.m. When I was one of his medical students in the early 1980s, we whispered that Dr. Leffall arose at three o'clock each morning (he was in his early fifties then) so that he could play tennis before starting his day. We wondered about the logistics of tennis that early in the morning but were far too respectful and awestruck to ask him. We concluded that the only tennis partner willing to play long before dawn against the chair of surgery had to be a third-year HUCM student rotating on surgery!

Dr. Leffall has religiously insisted and demonstrated that the traits of humanism, motivation, and consistency are necessary for high achievement, not just in surgery but in all walks of life. Therefore, for whatever profession, the mission, goals, and objectives of his legendary mantra, "equanimity under duress," can be broadly viewed as a primer for excellence in life.

Legends

1. Leffall with residents. Howard University Hospital.
2. Official portrait as president, Archives of the American College of Surgeons.

Claude Organ, Jr., MD, FACS: A Mentor Supreme

Edward E. Cornwell III, MD, FACS

This article was published as part of a multiauthor tribute in honor of Dr. Organ published in the *Archives of Surgery* [2005;140(11):1051–1052] as a memorial to his life and accomplishments on the occasion of his death on June 18, 2005.

When Claude Organ, MD, FACS (1926-2005; Figure 1), gave me advice, he often started with this preface:

> *The advice I am giving you is the same that I would hope your father would give to my son if he had survived this long and I hadn't.*

He thus overlooked that he did not need to justify giving me, or any other surgeon of my generation, the good fortune of receiving his sage counsel.

Tributes to Dr. Organ will highlight his unsurpassed impact on American surgery by enumerating his positions of influence as chair of two departments of surgery, chair of the board of directors of the American Board of Surgery, president of the American College of Surgeons, longtime editor of *Archives of Surgery*, lecturer to the nation's most prestigious academic medical schools, and honorary member of many international surgical societies.

What I want to highlight instead are two features of Dr. Organ's character that made him the supreme mentor to thousands of surgeons over the past four decades: his unwavering commitment to surgery and his personal integrity. From the very beginning of my training, I witnessed Dr. Organ's commitment to mentoring younger surgeons of any stripe. For the past 15 years, he held court and engaged in fellowship, conversation, and advice-giving at gatherings large and small, for both the most prestigious surgical societies and many lesser ones. Most important were meetings of the Society of Black Academic Surgeons (SBAS) and the Surgical Section of the National Medical Association, where he shared his dedication to the mission of a "more complete society" through academic and clinical excellence.

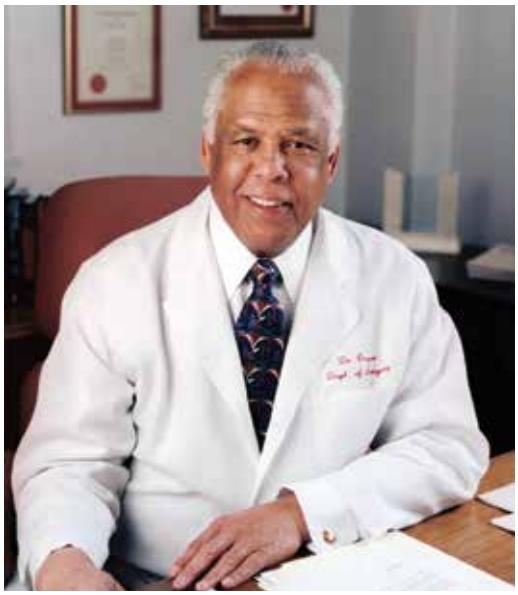

Figure 1

Figure 2

How well I remember the inaugural meeting of the SBAS in Durham, NC, hosted in April 1989 by Duke University School of Medicine and its chair of surgery, Dr. David Sabiston (Figure 2). I had yet to finish my training in trauma and critical care, but Dr. Organ engaged me in a "discussion"—a loose description, because he talked, and I pretty much just listened. He spoke on the role of trauma surgeons and surgical intensivists in academic surgery and the extensive resources that "you trauma gurus" and our patients would consume. In retrospect, his comments were both insightful and clairvoyant. But at the time I was mostly just flattered that he thought I could even understand the issues, let alone have an opinion.

He pushed young mentees to greater heights with a commitment that could be easily taken for granted (see Chapter 33 for Dr. Organ's impact on the career of Andrea Hayes, MD, FACS).

Without fanfare, we always saw him in small side meeting rooms or on couches in hotel lobbies with small groups of residents and junior faculty, giving pointers on the key principles of reviewing an article, of putting together a grant proposal, or of responding to a critique of a recent submission. He once flew from Oakland, CA, to Pittsburgh, PA, to attend an important retreat of the executive committee of the SBAS, then turn around and, within 48 hours, return home to give his daughter's hand in marriage.

If Dr. Organ's commitment was a prerequisite to his excellence as a mentor, it was his personal qualities that made him unsurpassed in that role, a combination that perhaps best explains his impact on American surgery. It is only through his impeccable integrity and exemplary personal ethics that he could use his inimitable style of instruction, mentoring, and encouragement.

He was witty and charming. He had an encyclopedic breadth of knowledge and was extremely quick on his feet. Yet he was gruff and opinionated when faced with mediocrity and imprecision. I came to realize that Dr. Organ at times made sure to show his rougher aspect to hide a softer, more sensitive side. His wry sense of humor took mischievous pleasure in the discomfort he could create with some of his time-honored quips that he made to infuse conscience and consciousness into such sensitive topics as ethnic and gender diversity in surgery, maintenance of quality in surgical education, resident work hours, and the balancing act of professional and personal responsibilities. His style came through in his quotes that his colleagues and mentees remember:

- *You cannot operate on a differential diagnosis.*
- *There has always been equality in demagoguery.*
- *Humility for a parent is only one telephone call away.*
- *You look very well rested!*

The last comment would come with a playful grin, as he was fully aware that it was no compliment to a workaholic anxious that he was not working hard enough despite being less than 24 hours removed from a 36-hour shift.

Over his lifetime, Dr. Organ saw the terms used to refer to Americans of African descent change with time: Coloreds, Negroes, Blacks, and African Americans. Having grown somewhat weary of the most recent name change, he took ironic delight in referring to Dr. Alexander Walt, one of his predecessors as the president of the American College of Surgeons and a white South African, as an "African American."

At Xavier University in New Orleans, LA, Dr. Organ's undergraduate chemistry professor posted names and examination grades for all to see. The practice did not much concern Dr. Organ, as he was always near the top of the class. But there was always one name above his. "I was constantly intrigued by the one student that always outscored me," he said, "so I married her!"

Given his charisma, stature, and strongly held views and principles, one might be surprised by Dr. Organ's legendary generosity with his mentees, but a young surgeon first had to demonstrate that he or she could pass muster. Dr. Organ was intolerant of poor effort, mediocrity, and low standards. At a conference, he once grilled a young surgical endocrinologist with the intensity of an oral board examination on the topics of surgical diseases of the thyroid and parathyroid. With due respect to his questioner, the examinee handled every question brilliantly. His testing session complete, Dr. Organ beamed with pride just as if the young faculty member was his own son. It was just as clear that the latter had won a lifetime supporter.

My most heartfelt sentiments toward Dr. Organ developed over the 10 years we shared on the executive committee of SBAS. Every one of my assistants had standing instructions that I was to be reached immediately if Dr. Organ ever called. I always returned his call as soon as possible. He always answered his own calls, something that I could never get over. Unfailingly, he always asked about my wife, son, siblings, mother, and other friends and family members. His true legacy was his family: his amazing wife, Mrs. Betty Organ, and their seven phenomenal children, whose academic and career résumés are a tribute to parents who practiced what they preached.

Dr. Organ was aware that my wife Maggie and I have an 8-year-old son, Michael, who is our pride and joy and who came to us through the open state adoption system in California. While he has been with us since birth, the process was a three-and-a-half-year ordeal with numerous emotionally wrenching turns. When the adoption decree finally came, Dr. Organ sent Michael a handwritten note that was to be read to him years later, telling him how truly loved he was.

So it was with some irony that it was on Father's Day, of all days, that I received word on my office e-mail of Dr. Organ's passing. I had gone to work early for a few hours so I could spend the rest of the day with my family. All of American surgery owes a great debt to Mrs. Organ and her family for sharing

this American treasure with all of us. We celebrate his life and commemorate his great legacy. Selfishly, I mourn Dr. Organ's passing. The world is a little less bright, a little less witty and perceptive, and a little less kind and gentle without Claude Organ.

Achievements

Born October 16, 1926, in Marshall, TX, his family moved to Denison, TX, a small city in the Texoma region where he completed his secondary education. He graduated *cum laude* from Xavier University in New Orleans (1947). He was accepted to medical school at the University of Texas, only to be turned away on the first day of class when administrators discovered he was Black.[1] They assured him that the school would cover the difference in tuition at another school, so Organ went on to the Creighton University School of Medicine in Omaha in an era when the school had one seat for a Black student each year.[2] He took his degree in 1952 and remained there for his residency in surgery from 1952–1957.

After completing his service in the Medical Corps of the U.S. Navy at the rank of lieutenant commander (1960), he joined the department of surgery at Creighton. He became a professor and was appointed chair in 1971, the first Black man to head a department of surgery outside of Meharry and Howard. He left Creighton to join the department of surgery at the University of Oklahoma (1982–1988).

He was recruited to chair the UC Davis East Bay (today affiliated with UCSF) department of surgery in Oakland, CA, in 1989, with the goal of amalgamating three weak residencies into a single entity. He remained in Oakland until 2003.

He was a director of the American Board of Surgery (ABS; 1979–1986) and served as its chair from 1984 to 1986, a time when there were major challenges to the ABS. During his term, there were a change in directorship, a major controversy on the status of vascular surgery as a specialty within the Board, and the issuance of certifications to doctors of osteopathic medicine who completed allopathic surgical residencies. In addition to these transitions, Organ guided the ABS through a major insolvency crisis, from which the organization emerged with secure financial footing and a reserve.[3]

He was a founding member of the SBAS and was president of the organization (1995–1997). He was president of the American College of Surgeons (2003–2004, Figure 3) and received the highest award of the organization, the Distinguished Service Award, in 1999. He was editor of the *Archives of Surgery* from 1989 to 2004. He was also on the boards of community and corporate organizations, including Xavier University (board president), Howard University, Meharry Medical College, the Urban League of Omaha, Boys' Town, Saint Paul's Company, and Northwestern Bell.[4] He was national director of the Alpha Omega Alpha Honor Medical Society (1979–1989).

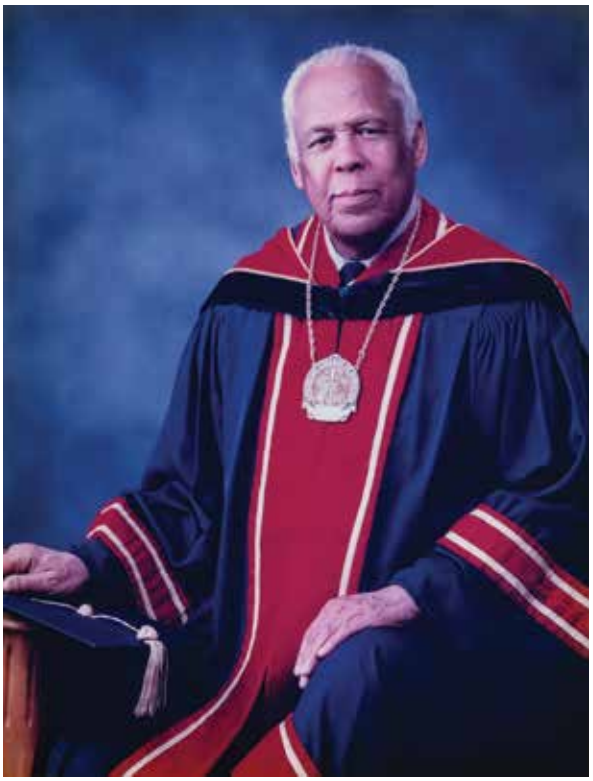

Figure 3

He was the major coauthor of a definitive two-volume history of Black surgery in America, *A Century of Black Surgeons: The U.S.A. Experience*

(1987). He is honored with the Claude H. Organ, Jr., Basic Science Lecture of the Southwestern Surgical Congress (an organization where he served as president in 1984) and the Claude H. Organ, Jr., MD, FACS, Traveling Fellowship of the ACS.

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Legends

1. Claude H. Organ, Jr., MD, FACS. National Library of Medicine.
2. Inaugural meeting, Durham, NC, Society of Black Academic Surgeons. Organ is at the far left, second row from top. David Sabiston is center, first row.
3. Official portrait as president of the American College of Surgeons. Archives of the American College of Surgeons.

Asa G. Yancey, MD, FACS: A Quiet Giant in American Surgery

John H. Stewart IV, MD, MBA, FACS; Golda M. Kwayisi, MD; and Edward E. Cornwell III, MD, FACS, FCCM, FCWAS

This is an edited version of an article that appeared in the *Journal of the American College of Surgeons* (2014;219[4]:842–845). Reprinted with permission.

Figure 1

Asa G. Yancey, Sr., MD, FACS (1916–2013; Figure 1), was a quiet giant in American surgery and a true pioneer as a surgeon, mentor, and civic leader.[1] Following the example of his mentor, Charles Drew, MD, FACS, Yancey established training programs in surgery at the Tuskegee Veterans Administration (VA) hospital in Alabama and the Hughes Spalding Pavilion in Atlanta. He set the example of the surgeon as a civil activist, using his position as medical director of Grady Memorial Hospital to advocate for the health priorities of Atlanta's Black communities. Yancey was also a highly innovative surgeon, and his priority in developing the endorectal pull-through operation for Hirschsprung's disease was only recently recognized as a landmark in surgical history.

The Early Years: Establishing a Foundation for Excellence

Dr. Asa Greenwood Yancey was born on August 19, 1916, in Atlanta, GA, to Arthur Henry Yancey and Daisy Lois Sherard Yancey. He attended school in the Atlanta public school system and graduated as the valedictorian of Booker T. Washington High School in 1933.

His family, especially his father, Arthur, and his brother Bernise, influenced his development as a physician, mentor, and civic leader. Arthur Henry Yancey was born on May 1, 1881, in Cherokee County, Georgia, and moved to Atlanta after studying carpentry at Tuskegee Institute as a teenager. He later worked as a letter carrier with the US Postal Service.

Arthur was an avid writer whose book, *Interpositionullification: What the Negro May Expect*, recounted his experiences and editorialized on the Southern Black experience.[2] He actively opposed the legalized inequalities of Jim Crow, riding his bicycle to work and refusing to use Atlanta's segregated bus system.

Yancey's parents went to Brazil to search for a more integrated society where they could raise their young children. The family ultimately stayed in the U.S., but the elder Yancey still had fond memories of his visit. His father's refusal to settle for unjust treatment set a strong example for Asa Yancey to serve as a civic leader.

Dr. Yancey revered his oldest brother, Bernise (Figure 2). In Asa's words, he was "the icon and role model for every member of the family."[3] Bernise received his AB degree from Atlanta University and received a degree in medicine from the University of Michigan in 1930. He was well on his way to becoming an outstanding physician when he died in August 1930, just weeks into his internship at St. Louis City Hospital No. 2, an abandoned office building that the city had converted into a hospital for Blacks.

Figure 2

A telegraph arrived at the Yancey family home with a chilling, impersonal statement: "BA Yancey is dead. Wire instructions."[3] He was electrocuted while handling faulty X-ray equipment. Asa felt the tragedy throughout his career as a physician. He said that Bernise "was…without a doubt the leader of the family who pointed the way for all of us to attempt to do well."[3]

On graduating from Morehouse College in 1937 with honors in chemistry, biology, and mathematics, young Asa followed Bernise's footsteps and applied to the University of Michigan Medical School. Initially, he was denied admission due to a tardy application, but he was eventually granted admission after the dean, A. C. Furstenburg, learned that he was Bernise's younger brother and took another look at his transcript from Morehouse (Figure 3).

Dr. Yancey was joined by three other Blacks in the class of 1941: Drs. Martin Sutler, C. Waldo Scott, and Maggie L. Walker. Black students at the University of Michigan are singularly important, because the Flexner Report of 1910 resulted in the closing of all the predominantly Black medical schools except for Meharry Medical College and the Howard University College of Medicine. Even into the 1970s, nearly 90 percent of all Black physicians were trained at Meharry or Howard.

All went on to graduate. Drs. Yancey, Sutler, and Scott trained in surgery at Freedmen's Hospital in Washington, DC, under Dr. Charles R. Drew. Upon completion of his training, Dr. Sutler settled in Cleveland, OH, and practiced general surgery. He held appointments at Case Western Reserve University, City Hospital, and Saint Vincent Charity Hospital and served as a trustee of the Cleveland Public Library.[4]

Dr. C. Waldo Scott practiced thoracic surgery in his hometown of Newport News, VA, where he served as medical director and chief surgeon of Whitaker Memorial Hospital, a facility dedicated to serving Black patients in the area. He was one of the first Black surgeons on the East Coast to be certified by the American Board of Surgery. His

son, Robert C. "Bobby" Scott, was the first Black member of the U.S. House of Representatives to represent Virginia after Reconstruction.[5,6]

Dr. Maggie L. Walker, also a native of Virginia, married fellow physician Dr. John Lewis and settled in Chicago to practice medicine and pediatrics.[3]

Figure 3

Dr. Charles R. Drew and Freedmen's Hospital

Dr. Yancey described Dr. Drew as "the most wholesome person you ever wanted to meet…. Just an excellent individual." His reverence for Dr. Drew and the man's positive impact on Dr. Yancey's life were so complete that Dr. Yancey was overcome with emotion when discussing the circumstances of Dr. Drew's untimely death 55 years after the fact.[7]

Dr. Drew's agenda at Freedmen's Hospital was unambiguous and clear. He wanted to train Black surgeons to go out as full participants in society and contribute in all areas of medicine: patient care, research, and education. "The boys who we are now helping to train," Dr. Drew said in 1947, "I believe in time will constitute my greatest contribution to medicine."[7]

Following Dr. Drew's example, Dr. Yancey spent a 9-month fellowship in surgery at the U.S. Marine Hospital in Brighton, MA. With Dr. Ritchie L. Waugh, chief of surgery at the hospital, Dr. Yancey wrote his first scientific paper, "Carpometacarpal dislocations with particular reference to simultaneous dislocation of the bases of the fourth and fifth metacarpals."[3,8]

At the direction of Dr. Drew, Dr. Yancey then went to Meharry Medical College in Nashville, TN, as a fellow in surgery under Dr. Matthew Walker, a close associate of Dr. Drew's. There was an established program in obstetrics and gynecology at Howard that limited the experience of general surgery residents in pelvic and gynecologic surgery. Dr. Walker's practice included gynecological procedures, additional training that Dr. Yancey wanted.

Dr. Walker was one of the first Black surgeons to pass the certifying examination of the American Board of Surgery, an experience made more meaningful as Dr. Drew happened to be in Nashville at the time of the exam. Like Dr. Drew, Dr. Walker was a surgical educator. He established an accredited general surgery training program at Hubbard Hospital and started an outreach program for Blacks of the Mississippi Delta region at Taborian Hospital in Mound Bayou, MS (an interesting summary of the Taborian Hospital and Mound Bayou can be found in Chapter 17.).

Dr. Walker took Dr. Yancey to his first annual meeting of the National Medical Association. From July 1947 to June 1948, Dr. Yancey served as the chief of surgery at Taborian Hospital under the auspices of Dr. Walker and Meharry Medical College. While he was in Mound Bayou, Dr. Yancey saw his first case of congenital megacolon, a condition for which he would make a seminal contribution in surgery.

The Tuskegee Years

With the sponsorship of Dr. Drew, Dr. Yancey was appointed chief of surgery at the VA hospital in Tuskegee, AL, where he developed a teaching program. There were three important facets of

his time at the Tuskegee VA: his relationship with the John A. Andrew Clinic, the development of the general surgery residency program, and his continuing interest in the management of congenital megacolon.

Dr. Yancey also worked at the John A. Andrew Memorial Hospital on the campus of the Tuskegee Institute. The hospital was associated with the annual John A. Andrew Clinic, a postgraduate course in medicine and surgery where outstanding visiting surgeons treated patients, performed surgery, and gave formal lectures, such as Drs. Allen O. Whipple, James Hardy, Louis Wright, Ira Ferguson, and Matthew Walker. It was on the way to the 1950 Andrew Clinic that Dr. Drew met his untimely death in a motor vehicle crash.[9]

The second important aspect of Dr. Yancey's time at the Tuskegee VA was the creation of a general surgery training program there. Under his leadership, the inpatient volume justified the construction of a surgical suite consisting of five operating rooms. In addition to the 194 beds dedicated to the surgical service, there were 339 beds for the medical service, 1,619 neuropsychiatry beds, and 52 beds dedicated to the physical medicine and rehabilitation service. Tuskegee was the fifth-largest hospital in the VA system.[10] With the aid of teaching teams from Emory University led by Ira Ferguson (Chapter 35 gives a complete description of the Ferguson-Yancey partnership) and the University of Alabama, the Tuskegee VA hospital gained full accreditation for a three-year Type II surgical education program. It was a timely achievement, as the Tuskegee VA was a training facility for Black physicians who were returning from World War II. The program trained more than 51 physicians and was the first fully accredited surgical residency program in the state of Alabama for Black physicians.[3]

The third aspect of his experience in Alabama involved the management of Hirschsprung's disease, a condition that Dr. Yancey first saw in Mississippi. Among the wide range of cases he was referred during his tenure at Tuskegee was a 53-year-old man with findings consistent with Hirschsprung's disease. In 1950, Dr. Ovar Swenson in Boston described the first successful operation for the condition, resection of the aganglionic distal sigmoid and rectum. Because of the extent of the resection and dissection deep in the pelvis, the patients risked fecal incontinence and impotence.[11]

Dr. Yancey reasoned that he could avoid both complications by excising the rectal mucosa, telescoping the normal colon through the seromuscular layer of the rectum in the pelvis, and anastomosing it within the anal canal. He used the veterinary hospital at the Tuskegee Institute to practice the procedure on dogs. In March 1951, he performed the procedure on his patient. Unfortunately, eight days after his operation, the patient died of a midgut volvulus. At the time of exploration for the complication, the colon and the pull-through colon-anal anastomosis were viable and intact.

Dr. Yancey described his operation, which he called a "modified Swenson procedure," in the *Journal of the National Medical Association* in 1952.[12] It was the exact operation described 12 years later when Dr. Franco Soave of Italy reported it as a new surgical operation in the *Archives of Disease of Childhood*, a procedure that is today a standard operation for Hirschsprung's disease.[13] The 1952 manuscript supported Dr. Yancey's candidacy for membership in the Southern Surgical Association as the first Black member of the prestigious organization.

The Atlanta Years

Dr. Yancey was appointed chair of surgery at Hughes Spalding Pavilion in Atlanta in 1958, where he started yet another surgery training program. It was the first accredited surgery residency in Georgia for Black physicians. Despite the strong clinical experience it provided, the Hughes Spalding program was closed in 1973.

Dr. Yancey received an appointment as instructor of surgery at the Emory University School of Medicine in 1964. In 1972, he was named the school's associate dean and medical director of Grady Memorial Hospital. He held the position

until his retirement in 1989. While at Emory, he was elected to the Institute of Medicine in 1973 (today the National Academy of Medicine), the American Surgical Association in 1983, and the Southern Surgical Association in 1985.

True to his father's influence, Dr. Yancey made significant contributions as a civic leader. Dr. Yancey began his service as a member of the Board of Education of the Atlanta public school system in 1967, completing the term of Dr. Rufus E. Clement, president of Atlanta University, who had died suddenly from a heart attack. As a member of the school board, Dr. Yancey was one of the key architects of the 1973 Settlement Plan that desegregated Atlanta's public schools.

He urged the adoption of required courses in foreign language, natural science, and English in hope of improving standardized test scores. In 1989, he was elected to the Fulton-Dekalb Hospital Authority. Grady Hospital and the Fulton-Dekalb Hospital Authority opened their first neighborhood health center in 1999 and named it the Asa G. Yancey Health Center in recognition of his contributions to Atlanta's underserved communities.

In keeping with Dr. Drew's spirit of mentorship, Dr. Yancey was one of the original members of the Society of Black Academic Surgeons (SBAS), a group focused on the development of Black academic surgeons and maintaining scientific excellence. He was an icon in SBAS until his death, exposing a third generation of surgeons to his mentorship. The Asa G. Yancey, Sr., lectureship at the SBAS annual meeting is in recognition of his contributions.

In a letter to Dr. Yancey, his mentor Dr. Charles Drew wrote, "I can warn you in advance that the labor will not be appreciated, nor the value of your work understood. Yet it must be done."[7] As we recognize the significance of Dr. Asa Yancey's work, we begin to understand his impact on and contributions to American surgery.

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L.D. Britt, MD, MPH, FACS: "There Is No Quality Without Access"

Don K. Nakayama, MD, MBA, FACS

One of the outstanding leaders in American surgery, L.D. Britt, MD, MPH, FACS (1951–present, Figure 1), was at the forefront of two issues that have confronted the field in the 21st century. In the 1990s, it became apparent that there was a critical workforce shortage of general surgeons and trauma specialists. Britt and his colleagues in the leadership of the trauma professional societies created a new surgical specialty that encompassed trauma, surgical critical care, and surgical emergencies. Christened "acute care surgery" by Britt, it became one of the most popular fellowships sought by surgical residents.

An equivalent achievement was the current research into racial disparities in surgical care and outcomes, a field championed by Britt throughout his career. In a landmark address before the Clinical Congress

Figure 1

of the American College of Surgeons (ACS) in 2017, Britt, standing before the largest professional organization in surgery as its president, set racial disparities in surgical care as one of its foremost challenges. His moral leadership committed surgery to go beyond the traditional boundaries of the doctor-patient relationship and confront racial injustices of society as a whole.

Childhood and Education

Details of his early life and education came from an interview Britt gave as part of an oral history project of the ACS.[1] Britt was born in Norfolk, VA, the son of a family of schoolteachers, including his mother, a grade school teacher for more than 50 years. His father worked for 30 years at the Norfolk Naval Hospital. Britt went to public schools, which were then segregated. "And I don't regret it one day," he said.

> *The teachers were good, and they gave me a good foundation. The focus was on you doing well. There was no safety net, and so the way to do well is through education. And the teachers took a vested interest in you, almost like they were a second mother or uncle. … The emphasis was education, from the beginning of the day to the end of the day. And with my mother being a schoolteacher, my aunts and cousins being schoolteachers, I had a rich environment.*
>
> *I still remember my English teacher…She gave me an English background that I used at the University of Virginia and Harvard, and I'm still using. And so, I don't talk about the segregated South with any sort of regret. That's history. But it gave me a good foundation.*

The Britt family also had to make their way through a segregated health system when they needed medical care. He remembered that when he had to help his aunt or uncle go to the doctor, they would pack a lunch, because the wait might be as long as several hours for a visit that might last only a few minutes.

Britt suffered an injury in a football game, and he went to see their family physician, an internist. "I want my son to see you," the doctor said.

> *And the son came in. He was one of the last residents of Charles Drew (then professor of surgery at Howard University School of Medicine and surgeon at Freedmen's Hospital in Washington, DC). He came in, an African American, tall, good-looking, confident. And I remember turning to my mother saying, "I want to be like him."*

The young surgeon, Oswald Hoffler, became Britt's role model. Later in life they became friends, Hoffler in a long-established practice at Norfolk General Hospital and assistant professor in Britt's department of surgery at the Eastern Virginia Medical School (EVMS). When Hoffler fell ill with sepsis from perforated diverticulitis, Britt tried unsuccessfully to save his mentor's life.

Britt graduated valedictorian from Booker T. Washington High School in Norfold in 1968. He went to the University of Virginia, one of only twelve Black students in the entire school. They studied as a group without distractions, Britt joked, because the college did not become coed until his junior year and its intercollegiate sports teams were not competitive. Britt was selected to the prestigious Raven honor society and graduated with distinction in experimental psychology (1972).

When Britt, a premedical student, asked which medical school was best, his advisor said, "Well, I think Harvard Medical School is the best," but saw fit to add, "Don't set your sights so high." He applied nonetheless and was the only Virginia undergraduate accepted to Harvard that year.

Medical School and Residency

Boston was a difficult place compared with his comfortable undergraduate years in Charlottesville. "I enjoyed the education [at Harvard]," Britt said. "You had the best of the best." But the town was a different matter.

> *It was a divided city. I was insulated under the Harvard umbrella…but if I ventured out into Boston, there were some places I couldn't walk where I could in the South.*

He had an early awareness of the importance of population health and got a master's degree in

public health in addition to his degree in medicine at Harvard (1977).

People said, "why are you getting a [degree in public health]?" I think you have to emphasize not just taking care of patient by patient, but you have to look at the population. It's key.

I said this: We have a great health care system for you, and maybe you, and you, but we don't have a great health care system for the population. If N equals the population, we do not have a great health system [for N]. If you look at our ranking internationally, we're not high.

Figure 2

Britt started his surgical training at the Washington University School of Medicine in St. Louis, where he participated in research into islet cell transplantation. He then continued his training at Cook County Hospital, then part of the University of Illinois College of Medicine in Chicago (UIC) and the site of one of the nation's first civilian trauma centers. "I fell in love with trauma," Britt said. As a resident he managed patients and operated independently, the standard model of resident training at the time and unheard-of in training programs today. "We operated all night long, and we saw some of the sickest patients, and did some of the most complex procedures. And I credit that training experience to my expertise today."

After completing his residency at UIC in 1985, he did a clinical fellowship at the R Adams Cowley Shock Trauma Center in Baltimore. In 1987, he returned to Norfolk as chief of the trauma division at Norfolk General Hospital and the EVMS. Just seven years later, he became the first Black surgeon to be awarded an endowed chair at a major American medical school when he was appointed the Henry Ford endowed chair of the department of surgery at EVMS (Figure 2). He became involved in the Virginia state chapter of the ACS and its Committee on Trauma (COT), advancing rapidly to leadership at the national level as the president of the American Association for the Surgery of Trauma (AAST) in 2011.

Acute Care Surgery

From his position as chair at EVMS and his experience with other national trauma organizations in the 1990s and early 2000s, Britt saw firsthand the alarming decline in interest in general surgery among medical students and the growing shortage of surgeons. In his Scudder oration at the Clinical Congress of the ACS in 2017 (Figure 3), he attributed the crisis to the ascendancy of nonoperative management approaches to injury and the resulting decrease in operations, the poor reimbursement for time spent managing trauma patients, and burdensome night call responsibilities, characteristics of the specialty that were driving young trainees away.[2]

Britt and his colleagues in field recognized that trauma surgeons had unique skills that set them apart from other general surgeons. Just as they responded to injured patients with lifesaving surgery at a moment's notice, they could just as easily respond to emergency surgical conditions and provide critical care.[3]

Figure 3

They toyed with including neurologic, orthopedic, and even obstetric emergencies,[4] but general surgical emergencies (combined with trauma and critical care) provided enough operations and clinical challenges to satisfy the new specialty. Students and residents were attracted to the newly defined scope of emergency surgery, which Britt christened "acute care surgery."[1] In 2007, he was editor-in-chief of the field's first textbook.[5] At the time of Britt's Scudder oration, there were 20 acute care surgery fellowships; he predicted that, in the coming decade, there would be 35 to 40. In 2021 there were 39 fellowships in trauma, acute care surgery, and burns listed on the AAST website.

Racial Disparities in Surgical Care

Britt took up the mantle of leadership of Black academic surgery worn by Charles Drew, LaSalle Leffall, and Claude Organ. Britt was acutely aware that his educational and training opportunities were advanced compared with those of his forerunners—Drew and Leffall trained in segregated hospitals, while Organ was admitted to the one seat Creighton University School of Medicine in Omaha designated for a Black student that year. "If they hand me the baton," he said to himself, "I'm not going to drop it, because they did it when they didn't have the resources, and they had barriers up."[1]

In 2010–2011, Britt was elected president of the ACS, organized surgery's most prominent forum (Figure 4). Appropriately, Britt decided that the theme of his presidency would be addressing racial disparities in surgery. Noting the College's dedication to surgical quality since its inception, Britt adopted the motto, "No quality without access."[6]

At his presidential address, he used a quote by Dr. Martin Luther King, Jr., to describe the necessity of addressing racial disparities in surgical access and outcome. "Of all the forms of inequality," King said, "injustice in health is the most shocking and the most inhumane."[5] While there was a burgeoning interest in disparities in surgical care at the time of his speech, Britt's advocacy of the cause brought the issue to the forefront of academic surgery.

In 2020 Britt, with his colleagues Adele Levine of the Brigham and Women's Hospital and Elzerie de Jager of the James Cook University in Queensland, Australia, published in the *Annals of Surgery* an agenda to address racial disparities in access to surgical care.[7] Using existing surgical outcome measurements such as the National Surgical Quality Improvement Program as a framework, they called for the development of similar validated assessments to measure access to surgical care.

Legacy

Two recent watershed events in American surgery occurred as Britt entered the leadership of its most important organization: the threat of a shortage in the surgical workforce, and the persistent racial disparity in access to surgery and outcome of surgical conditions. To respond to the first, Britt and his colleagues created a new specialty, acute care surgery, that both responded to the need for providers trained for surgical emergencies and inspired a new generation of surgeons to enter an exciting field.

In response to the second, Britt had the boldness to point out that surgery as it was being practiced was at best overlooking, and at worst sustaining, disparities in outcomes of surgical disease. From his position at the center of academic surgery, he challenged investigators to study the causes of racial disparities with the same vigor as they used to look at advanced surgical technology, the human

genome, and carcinogenesis. From his position as the moral descendant of Black leaders who came before him, he challenged all American surgeons to look into themselves and their practices and ask what role they will play in correcting an injustice as old as the country itself.

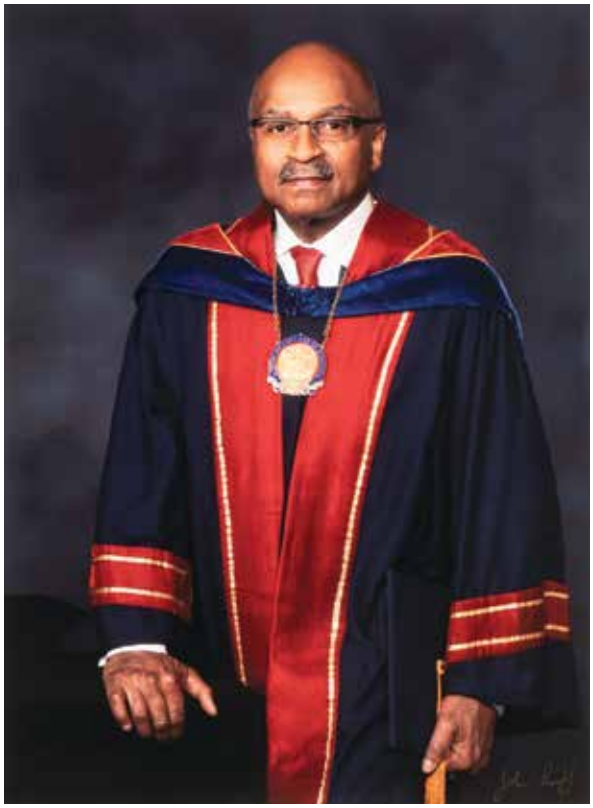

Figure 4

Achievements

Britt was appointed Henry Ford and Brickhouse endowed chair of the department of surgery at the EVMS in 1994, the first Black surgeon to be named to an endowed chair at a major medical school. He served as president of the ACS from 2010–2011. He is on the editorial boards of Surgery, the *Annals of Surgery*, the *Journal of the American College of Surgeons*, the *American Journal of Surgery*, the *Journal of Trauma and Acute Care Surgery*, *Current Surgery*, *The American Surgeon*, and *Shock*. He is a member of the Alpha Omega Alpha Honor Medical Society, the Society of University Surgeons, the Southern Surgical Association, the Société Internationale de Chirurgie, the Halsted Society, and the American Surgical Association.

He served as president of the Southern Surgical Association (2009), the American Association for the Surgery of Trauma (2011), and the Southeastern Surgical Congress (2007–2008). He was on the board of directors of the American Board of Surgery and was vice chair of the board of regents of the ACS.

As past president of the Society of Black Academic Surgeons (1999–2001) and its current executive director, Britt mentored scores of surgeons in both community and academic practices and advised many more residents and medical students. He received the nation's highest teaching award in medicine, the Robert J. Glazer Distinguished Teaching Award, which is jointly given by the American Association of Medical Colleges and Alpha Omega Alpha (Figure 5).

He received an Emmy Award from the National Academy of Television Arts and Sciences for his contribution to the television special *Youth/Violence: A Call to Disarm*. He has been visiting professor at major university departments of surgery and has given more than 100 distinguished lectureships throughout the world.[8]

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Figure 5

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Wayne A. I. Frederick, MD, MBA, FACS: President, Howard University

Don K. Nakayama, MD, MBA, FACS

Figure 1

Born with sickle cell disease in a time when popular belief held that he would die before he reached adolescence, from a young age Wayne A. I. Frederick, MD, MBA, FACS (1971–present, Figure 1), led his life as though he was in a hurry: skipping a grade in school, completing his required courses under the British system by the time he was 14, entering college at Howard University at 16, and getting both his baccalaureate and medical degrees in six years at the age of 22. Training in surgery and surgical oncology slowed him down, but once he chose a career in academic surgery, he resumed a furious ascent up the promotion ladder, not stopping until he was named president of Howard University in 2014. His age? Forty-three.

Frederick is widely regarded as one of the nation's foremost leaders in education. Under his leadership, Howard has sponsored programs to expand opportunities for Black youth in STEM fields (science, technology, engineering, and mathematics), education, and public policy. Throughout his career, he has addressed the public health problem of health disparities among Blacks, especially in his specialty of cancer care. He serves on the governing boards of public institutions and private companies and organizations. He has been recognized for his achievements, including the distinguished alumnus award from the University of Texas MD Anderson Medical Center in Houston (2019), the institution where he trained in surgical oncology.

A native of Trinidad, Frederick was shaped by his experience as a boy weakened by repeated sickle cell

crises that confined him to a hospital bed several times a year. Even though he was isolated from his Howard undergraduate classmates by his young age and his cultural upbringing in the Caribbean, he took it upon himself to assimilate into the Black American culture and historical experience. His mentor was LaSalle Leffall, Jr., Howard's legendary professor of surgery, who inspired Frederick to train in surgery as one of his residents. When Frederick returned to Howard in 2006 after specialty training in surgical oncology and a junior faculty appointment with the University of Connecticut, it was to take over Leffall's surgical practice. Just eight years later, in 2014, the mentee took the reins of the entire university as its administrative leader, using the lessons he learned as a medical student and trainee under Leffall as a moral guide.

Childhood

The details of Frederick's childhood and all quotations came from an oral history conducted by Larry Crowe of the Black oral history archive, The HistoryMakers.[1] Frederick grew up in a middle-class family in Port of Spain. His great grandfather had been brought to Trinidad as an indentured laborer to work the plantations. He managed to acquire land and build a measure of prosperity. His granddaughter, Frederick's mother, was a nurse who married a mounted police officer who tragically died when Wayne was just short of three years old.

Frederick was born with sickle cell anemia. He recalled playing on his tricycle and overhearing his grandmother discussing his illness with neighbors. Riding up to her, he asked what it was. She tried to explain the complicated condition in terms he might understand. "I rode off," he said, "and came back and said to her I was going to find a cure for sickle cell."[1]

Because Frederick was hospitalized three to six times a year due to sickle cell crises, his family lived in an apartment close to the hospital. At the time, the life expectancy of children with the disease was about eight years. His mother made sure his birthday celebrations were especially joyous events, never knowing which of her son's crises would be his last. Healthy children openly fantasize what they plan to do when they grow up. With Frederick, it was a topic that was not discussed. His illness was common knowledge among his friends, who out of genuine curiosity asked him if he was going to die when he was 16.

His frequent hospitalizations left Frederick with strong impressions about hospitals, medicine, and doctors. He recalled the anticipation of being visited on rounds and his disappointment with the news that he would have to stay confined another day, not being told what was going to happen next.

Physicians spoke among themselves in his presence and talked over him to his parents. "Doctors would stand at the foot of the bed," he said, "and never lay a hand on me or address me directly." He rationalized that their lack of communication was because of his young age. But the experience shaped how he interacted with patients when he began to practice medicine himself. "I always keep that in mind," he said. "I try my best to always sit in front of my patient when I go into in the room."[1]

Despite their standoffish relationship with him, Frederick lionized physicians. "I always held doctors that came to see me in awe," he said.[1] His stays in the hospital inspired him to go into a medical career, even though his family had a pessimistic view of his prognosis. But his grandmother, with whom he had an especially close relationship, encouraged him. "She never made me feel that I would not be able to accomplish what I set out to do."[1]

Early Education

Frederick attended Saint Mary's College in Port of Spain, then a private school in the British system. With a selective admissions policy, the school had a particularly rigorous curriculum that required intensive study in a specific area. Frederick chose science and got high-school–level instruction at an age when American children would be in middle school. His mother encouraged reading. When he was 12, his family invested in an encyclopedia. Frederick remembers poring through every volume. "Back in those days it was like getting an Apple laptop."[1]

It was widely held that education under the British system in Jamaica or Trinidad was the equivalent of a college-level instruction in the U.S. Frederick thrived under the system, skipping seventh grade and finishing secondary school, the British equivalent of American high school, at age 14. He took two years of further college-level education at St. Mary's before entering the combined BS/MD program at Howard University, earning his both his baccalaureate and medical degrees (1994) in six years.

Although he and his family visited the U.S., he had never lived away from Trinidad before he went to Howard. He looked too young to be on his own, much less going to college. There was a rumor on campus that he was only 12 years old, because he weighed only 88 pounds and stood 5'6" from his years of illness.

With his upbringing in Trinidad and immersion in an accelerated medical curriculum in the U.S., Frederick was unfamiliar with the Black American experience. During his freshman year, activists occupied the Howard administration building in protest against, among other things, the appointment of white conservative political operative Harvey "Lee" Atwater to the school's board of trustees.

Frederick was perplexed as to the issues involved and began to educate himself about the racial history of America. From friends he learned about slavery in the South and injustices of Jim Crow. Even though he didn't understand American football, he understood the significance when Doug Williams was the first Black quarterback to lead a team to a Super Bowl victory (1988). Speakers at Howard included such prominent political figures as Nelson Mandela and Colin Powell. The social life outside the classrooms completed Frederick's education at Howard.

Training

In medical school, Frederick intended to go into hematology to make good his childhood pledge to his grandmother. But during Frederick's second year in medical school, Wayne Tuckson, MD, a colon and rectal surgeon, invited Frederick to come into the operating room to observe. "I loved everything about it. It just touched me in the right way. And I remember leaving the room and thinking, 'I've got to be a surgeon.'"

But Frederick, quiet and soft-spoken, did not have the brash and assertive personality that he thought was necessary to succeed in the field. Then he met LaSalle Leffall, Jr., at that time chair of the department of surgery and surgeon-in-chief of the Howard University Hospital. "Dr. Leffall was a larger-than-life figure when I got to medical school," Frederick said. "You saw him in the hallway, and your day was made because you just laid eyes on him. He had that type of mystique."[1]

Leffall corrected Frederick of his notion that one had to have a certain personality to be surgeon. "He was a gentleman," Frederick said. "Dr. Leffall was a man of grace, patience, and measure." The young student decided to follow the great surgeon's example. "After meeting him I thought, 'Okay, I think I can be a surgeon if there are these kinds of surgeons as well.'"[1] Frederick joined Leffall's training program in surgery at the Howard University Hospital.

Leffall and Frederick had another special connection—the chief operated on him. Successive sequestration crises and chronic hematopoietic stimulation enlarged Frederick's spleen to the point where it compressed his stomach and inhibited his appetite. After discussion with Tuckson and Leffall, Frederick decided he was better off without his spleen, which Leffall removed during Frederick's first year of residency.

Howard's campus and hospital were located near the high-crime neighborhoods of Washington, DC, which during the late 1980s and early 1990s was known as the "murder capital" of the U.S. During his training, Frederick regularly cared for trauma victims who were dropped off in the emergency room.

> *Those were difficult things to see.…A lot of the patients that I was taking care of looked like me and were my age. That was another thing that really*

formed my opinion about social justice and what I had to do as a physician—not just of the profession, but the society at large.[1]

During residency, and later as a fellow in surgical oncology at the University of Texas MD Anderson Cancer Center in Houston, the long hours taxed his stamina and risked his health.

That physical activity in and of itself could lead to a crisis. When I signed up to do surgery, there was a lot of skepticism as to whether I'd be able to do it, given my sickle cell disease. That was a major question.…But does having sickle cell anemia [cause] any impairment? …I know the answer is no, but it makes it difficult.[1]

Leffall convinced Frederick to adopt his own specialty, surgical oncology. Competition for the top training spots was intense, so the two decided that Frederick's chances for a position would improve if he did well on a visiting rotation at Memorial Sloan Kettering Cancer Center in New York. Because staffing at the Howard University Hospital was so tight, Frederick cobbled together his vacation time and went to New York for a month, promising that he would not take additional time off that year. He performed so well that he earned a training position at MD Anderson in Houston, where he spent four years.

Passing the Mantle

Frederick's first position out of training was at the University of Connecticut Health Center in Farmington, where he began to perform the complex cancer operations he had done in training at Howard and Houston. He remembered one patient with pancreatic cancer involving the portal vein. He performed a Whipple procedure and replaced her portal vein with a graft from her internal jugular vein, an operation he learned at MD Anderson. She survived seven years—far longer than her prognosis predicted.

He earned a reputation as the "go-to" surgeon for difficult cancer cases, consulting on their most challenging and perplexing patients and being asked to assist by other surgeons facing difficult operations. "The breadth of the experience I got there was absolutely incredible," he said. "It set my confidence at a different level and really let me know that the training I received had prepared me well."[1]

Leffall, however, had other plans: He wanted Frederick to return to Howard and eventually take over his practice. Frederick invited his old training program director to Connecticut as visiting professor. As Leffall held the audience spellbound, Frederick remembered their close relationship during medical school and residency. "Seeing him still work his magic in terms of inspiring others made me know that I had to come back to Howard," Frederick said. "He was a man you could not say no to."[1] Frederick returned to Howard in May 2006.

University President

After his arrival as associate professor and associate director of the cancer center, Frederick had a succession of appointments, including division chief in the department of surgery, directorship of the cancer center, associate dean in the college of medicine, and deputy provost for health sciences. Recognizing that his path was taking him to administrative leadership, he took a business degree from Howard in 2011. He was named provost and chief academic officer in 2012, and then, upon the resignation of Sidney Ribeau as president in October 2013, Frederick was appointed interim president of Howard University, a position made official in 2014.

His term as president has not been easy. Shortly after his formal appointment, Frederick had to deal with such nonsurgical problems as a scandal involving the financial aid office,[2] which prompted a no-confidence vote by the faculty[3] and a sit-in by students.[4] He received support, however, from the school's alumni association and its board of trustees, which in 2017 approved a five-year extension of his appointment into 2024.

Frederick has received numerous awards for his leadership and has been appointed to a number of boards of directors of both public institutions and

private corporations, including the Federal Reserve Bank of Richmond.[5] Among his many honors, however, perhaps the most meaningful was his selection in 2020 by the Howard University board of trustees to serve as the distinguished Charles R. Drew Endowed Chair of Surgery as its second recipient, succeeding his late mentor, LaSalle Leffall.

Epilogue

As noted, Leffall intended to give over his operative practice to Frederick once Frederick was settled in Washington. For his final day in the operating room, Leffall scheduled several cases and asked Frederick to scrub in. Together, they finished the list.

As they left the operating room after the last case, Leffall and Frederick found the entire staff of Howard lining the hallways, waiting for Leffall to emerge. Everyone cheered and applauded as he walked past, shaking his hand, patting his back, and hugging him. It was the end of a golden age. With Frederick alongside him, it was the unofficial passing of the mantle.

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Legend

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W. Lynn Weaver, MD, FACS: The Surgeon Who Only Aspired to Be Half the Man His Father Was

Don K. Nakayama, MD, MBA, FACS

This is an edited version of a memoir of W. Lynn Weaver, MD, FACS, that appeared in the *Transactions* of the American Surgical Association, available at: *https://americansurgical.org/transactions/Fellows/Memoirs/WilliamLWeaver.cgi*.

William Lynn Weaver, MD, FACS (Figure 1), died on May 25, 2019, at age 69, a loss to his many family and friends in Atlanta and in academic surgery across the nation. The apex of his professional career was his tenure as chair of surgery at Morehouse School of Medicine (1996–2009), where he built a multispecialty academic department of surgery and a well-regarded training program in general surgery. A leader in the African American academic surgical community, he was president of the Society of Black Academic Surgeons.

Lynn was a world-class raconteur, a talent well-known among his friends that was revealed to the public late in this career as he neared retirement. His most popular stories were about his experiences growing up in the difficult first days of the racial integration of public schools in his hometown of Knoxville, TN, where he was one of a group of 15 students to integrate the previously all-white West High School.

Understandably, young Lynn struggled socially, psychologically, and academically. During that

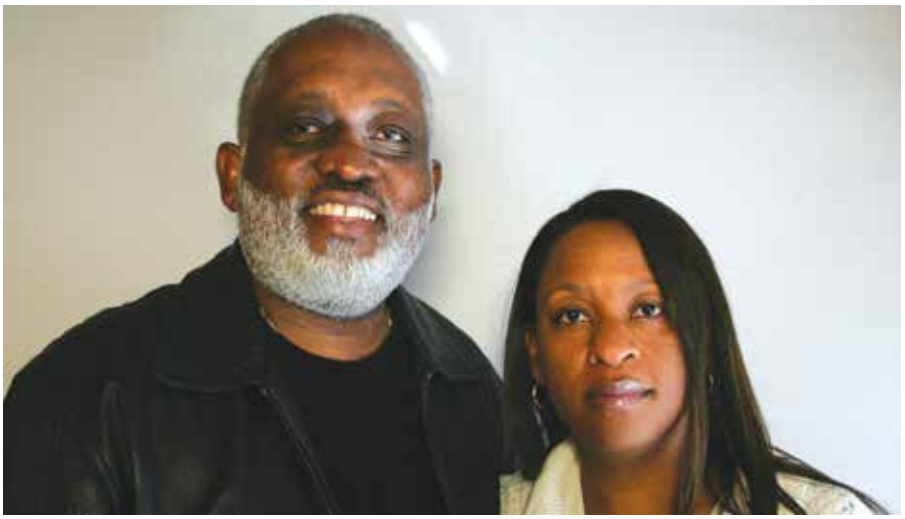

Figure 1

difficult stage in his life, he received support from his father, who worked as a chauffeur and janitor while raising his family in Mechanicsville, a working-class neighborhood in Knoxville. Incredibly, Lynn told the story without choking with sentiment, the only sign of emotion a collection of tears at the corners of his eyes.

My father was everything to me. And it's actually kind of difficult talking about him without becoming very emotional. Up until he died, every decision I made, I'd always call him. And he would never tell me what to do, but he would always listen and say, "Well, what do you want to do?" And he made me feel that I could do anything that I wanted to do.

I can remember when we integrated the schools that there were many times when I was just scared, and I didn't think that I would survive, and I'd look up and he'd be there. And whenever I saw him, I knew that I was safe.

…When I was in high school, I was taking algebra, and I was sitting at the kitchen table trying to do my homework. And, I got frustrated, said I just can't figure this out…so my father said, "What's the problem?" And I said, "It's just algebra." And he said, "Well, let me look at it." And I said, "Dad, they didn't even have algebra in your day." And I went to sleep.

Around 4 o'clock that morning he woke me up and he said, "C'mon son, get up." He sat me at the kitchen table, and he taught me algebra. What he had done is sit up all night and read the algebra book, and then he explained the problems to me, so I could do them and understand them.

And to this day, I live my life trying to be half the man my father was. Just half the man. And I would be a success if my children loved me half as much as I love my father.

StoryCorps, the Peabody Award-winning organization devoted to recording oral histories, visited the King Center in Atlanta in 2007 to interview African Americans about their experiences; among them was Weaver's story about his father, excerpted above. In a tribute to Weaver on the occasion of his death, StoryCorps wrote of the interview, "It was one of the most memorable and popular StoryCorps stories ever broadcast." No other StoryCorps subject had been interviewed more than twice. Weaver was featured four times.

Another of his StoryCorps stories related his first day at West High.

As soon as we got into the school, the principal was calling the roll. He said, "Bill Weaver," and I said, "My name is William." And he said, "Oh, you're a smart [n-word]." I'd been in school maybe thirty minutes and he suspended me.

I don't remember a day that a teacher did not tell me that I didn't belong.

With aspirations for a professional career, Weaver and his brother were on the football team, nicknamed the "Colonels," whose emblem was a Confederate flag. Their pregame entry was running through a giant Confederate flag as the marching band played "Dixie." Weaver and his Black teammates chose to run around the banner instead. In an away game against an all-white rival team, Weaver's brother tackled an opponent and broke his collarbone. At the end of the game the crowd, inflamed by the injury, crossed the field to the West High sideline. Warned by his coach to keep his helmet on, Weaver and his teammates were backed against a fence and blockaded from the team buses. "I was pretty afraid," Weaver recalled.

And then a hand reaches through the fence and grabs my shoulder pads. I look around and it's my father. And I turned to my brother, I said, "It's okay; Dad's here."

The state police came and escorted us to the buses. The crowd is still chanting and throwing things at the bus and, as the bus drives off, I look back and I see my father standing there and all these angry white people. And I said to my brother, "How's Daddy going to get out of here? They might kill him."

We get to the high school and the most incredible feeling I think I've ever had was when my father walked through the door of the locker room and

said, "Are you ready to go?" As if nothing had happened. And I wanted to tell him, "Dad, don't come to any more games," but selfishly I couldn't. I needed him there for me to feel safe.

After hearing Weaver's first broadcast on National Public Radio, the principal of West High School, the school that he had integrated more than 50 years previously, reached out to him to visit the school as an honored alumnus. When Weaver received the message, he simply ignored it. For a half-century since his graduation, he could not bring himself even to drive by the building.

But the West High principal finally contacted him by phone. She had been touched and inspired by his story and his example, she said. A lot had changed in the time since he graduated. The current students and faculty would want to hear his story. So in March 2018, Weaver, his wife Kay, three of their children, and a number of his old classmates and football teammates returned to the school auditorium. The day was declared "Lynn Weaver Day" by the mayor of Knoxville.

The event was recorded by another StoryCorps podcast. Weaver addressed the student body from the auditorium stage, a place where he had never stood during his years at West High. Jasmyn Morris, the StoryCorps interviewer, said "Lynn took the opportunity to challenge students and faculty to do better."

I would say to you look to your left, look to your right. Somebody next to you, somebody in this auditorium is being harassed, is being excluded because of their race, their religion, their sexual orientation, or their economic status. You can change that.

And I want everybody at least to think about, how can you make a difference in somebody's life? You're never too young to stand up, to walk out, to kneel for those who are not as well off as you are. So make West proud and make yourself proud.

One of his most powerful messages came at the end of his story of nearly getting assaulted by a hostile all-white home crowd at a football game as a member of an integrated visiting team. He concluded:

Normally when you're with a team you feel like everybody's going to stand together; and I never got that feeling that the team would stand with me if things got bad. I think a number of the white students who were there with me would say now, "If I could have done something different, I would've said something." But that's what evil depends on, good people to be quiet.

Links to Weaver's StoryCorps appearances are listed below. Do not miss the second one, a tribute to his middle school teacher who not only helped him get through three difficult high school years but aided him in a way that was not revealed until decades later. The last was recorded by the American Medical Association and is about an experience with a dying patient. Please share them with your family and residents.

W. Lynn Weaver Podcasts, Interviews, and Videos

William and Kimberly Weaver, StoryCorps. *https://storycorps.org/stories/william-and-kimberly-weaver/*. Lynn Weaver talks with his daughter, Kimberly (Figure 1), about his father, Ted Weaver, who worked as a janitor and chauffeur in Nashville, Tennessee.

Lessons Learned, StoryCorps. *https://www.youtube.com/watch?v=76yHFpWzuIw*. Weaver tells the story of his first days integrating the segregated high school in Knoxville. "Dr. William Lynn Weaver succeeded in spite of some teachers and because of others, in particular one whose largest contribution took decades to be revealed. 'Dr. Hill [his middle school teacher], I believe saved my life.'"

Dr. Weaver remembers integrating his high school football team in Knoxville, Tennessee, StoryCorps. *https://www.youtube.com/watch?v=9iYErDBXLMw*. Weaver was part of a small group of Black teens who integrated an all-white high school in Tennessee in 1964.

A Christmas memory about a stolen bike and an unexpected lesson about generosity, StoryCorps.

https://www.youtube.com/watch?v=8DiYQwDrxxA. Dr. William Lynn Weaver grew up during the 1950s and 1960s in Mechanicsville, a Black working-class neighborhood in Knoxville, Tennessee.

High School Reunion: Part I, StoryCorps. *https://storycorps.org/podcast/high-school-reunion-part-i/*. This story felt like it existed at the heart of the rest.

High School Reunion: Part II, StoryCorps. *https://storycorps.org/podcast/high-school-reunion-part-ii/*. We join Lynn as he makes the trip to West High School for the first time in over five decades.

Inspirations in Medicine, William Lynn Weaver, MD, American Medical Association. *https://www.youtube.com/watch?v=jXoPXY5QciU*. Dr. Weaver treats a patient with mesenteric infarction and bilateral lower extremity amputations from peripheral arterial emboli.

Achievements

Weaver took his baccalaureate in pharmacy at Howard College (1974) and received his medical degree from Meharry Medical College (1978). He interned at the Fitzsimmons Army Medical Center in Denver and trained in surgery at Madigan Army Medical Center in Tacoma. After completing his service in the Medical Corps of the U.S. Army at the rank of major, he was chief of general surgery at the VA hospital at the Blanchfield Army Medical Center at Fort Campbell, KY. He joined Eddie Hoover in the department of surgery at the State University of New York Buffalo School of Medicine as professor and chief of surgery at the VA hospital (1992–1996). He was chair of surgery at Morehouse School of Medicine (1996–2009), then joined the Ross University School of Medicine as senior associate dean (2013–2018). He ended his career as chief of the VA hospital in Fayetteville, NC. In addition to his presidency of the Society of Black Academic Surgeons (2009–2010), he was a Fellow of the American College of Surgeons and a member of the American Surgical Association and the Southern Surgical Association.

Legend

1. W. Lynn Weaver with his daughter Kimberly at a 2007 StoryCorps event in Atlanta. Photo credit: StoryCorps.

Hughenna L. Gauntlett, MD, FACS: A Trailblazer for Black Women in Surgery

Andrea Hayes, MD, FACS, and Claude H. Organ, Jr., MD, FACS

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Dr. Hayes is now chair of the department of surgery at the Howard University School of Medicine.

Hughenna Louise Gauntlett, MD, FACS (1915–2010; Figure 1), was the first Black woman to be certified by the American Board of Surgery (ABS). In life, she was a model of humility. Her accomplishments revealed strength and leadership in a life directed by a higher force.

Gauntlett was born in Costa Rica in 1915, where her grandmother, Mary Elizabeth Spencer, was a nurse and midwife. She not only delivered babies but also provided most of the routine health care in the community. Despite her grandmother's role as a health provider, Gauntlett did not remember wanting to follow her footsteps, as either a midwife or a doctor, when she was a young girl.

Her course to a career in medicine started literally by chance. "My mother had played the lottery, which was highly forbidden in the Seventh-day Adventist tradition, but she won," Hughenna said. "Her winnings were only a few thousand dollars, but they were enough to move the family to Jamaica."

With their new wealth, Hughenna attended the best secondary school in the Caribbean. In secondary school, a two-mile walk from their house, Gauntlett became interested in a young man who planned to study medicine. As the "obligatory significant other," she announced that she would become a nurse. Although the young man did not go on to medicine, young Hughenna did.

She chose medicine instead of nursing for an entirely pragmatic reason: It would be her ticket to the United States. Jamaica had a strong university-based nursing curriculum but no medical school. She reasoned that her application to immigrate to the U.S. would be approved if she told authorities that her goal was to study medicine, but she would be rejected if her plan was to go to nursing school. She was right. Her application was approved, and she moved to New York in the dead of winter, 1940.

Gauntlett adjusted to the weather just as she adjusted to being one of a few women in her premedical class of 60 students, of which she was the only Black member. As a student in the United States, she was not allowed to work. Her father helped her with bus fare and money for food. She found some work in a factory downtown where her aunt was employed but did so at the risk of being discovered and deported.

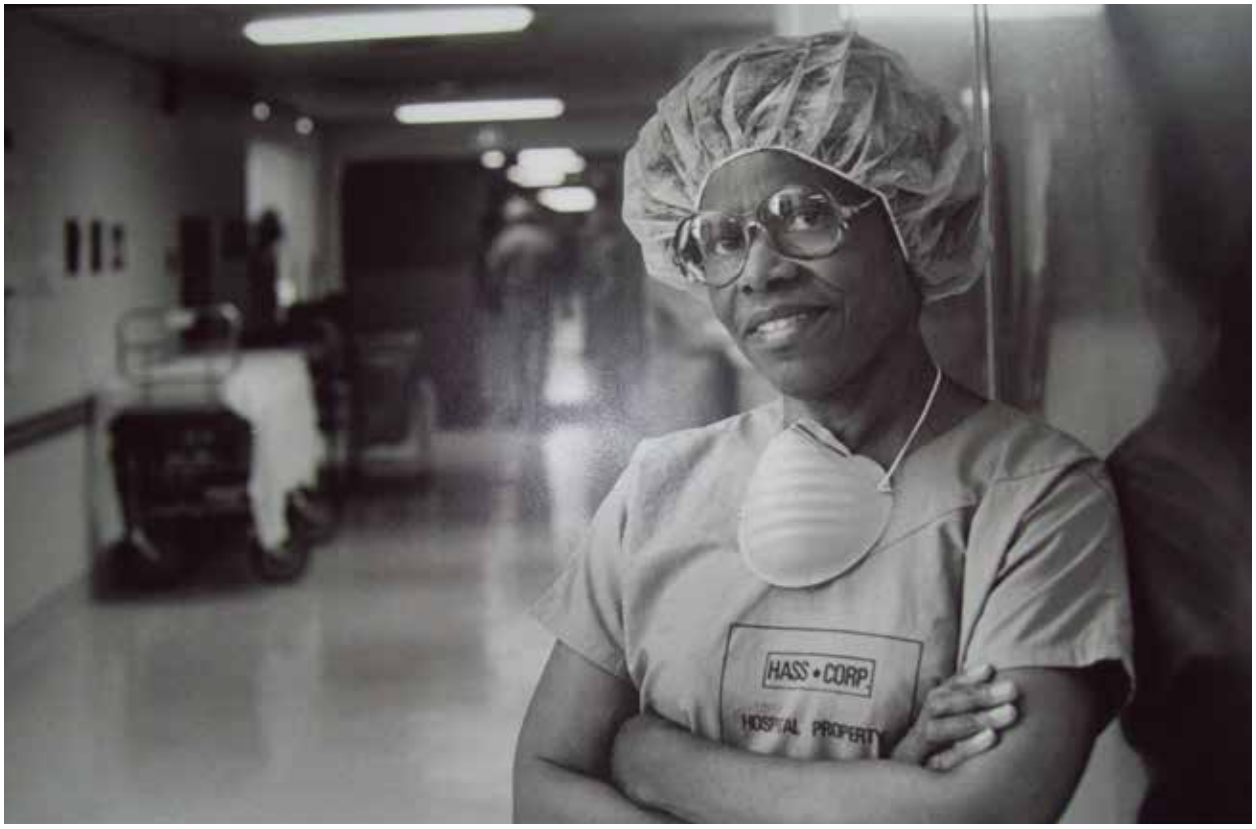

Figure 1

She was accepted to the Atlantic Union College, an Adventist school where she worked to pay her tuition and fees. A board member of the college, impressed by her intelligence and potential, recommended that she enter medical school a year early, in 1946, to avoid the flood of veterans returning stateside after the war. Entering school early would also save her one year's living expenses. She was several credits short of the prerequisites for acceptance to medical school, specifically a semester of organic chemistry, a year of physics, and a government course. She took the chance and applied to several medical schools, including the College of Medical Evangelists of Loma Linda, where she was accepted.

Neither her college in Massachusetts nor the colleges in New York offered any of the required courses in their summer programs. Gauntlett wrote to the registrar at Loma Linda and explained her problem. The college had just hired a physics professor who agreed to open a course just for her. A similar arrangement was made for organic chemistry, and she took a correspondence course to satisfy the government requirement. By summer's end, she had passed all three courses.

She arrived at Loma Linda in September 1946 eager to begin but met another roadblock: The campus dormitory was restricted to men only, even though somehow a few women were allowed to board there. Forced to live off campus, she had to spend more time commuting than other students. Gauntlett found a room with a white family, which she described as "one of the most blessed things that happened to me in my life." They did her laundry, cleaned her room, and provided her with meals when her funds ran low, which was a common problem.

Gauntlett studied hard and got high marks, an achievement she thought particularly important because she knew that her performance might affect future women students, both white and

Black. In her medical school class of 96, there were eight women and two Black men. Her experience at Loma Linda was largely free of racism and exclusion, but a few incidents occurred. On one of her clinical rotations, a nurse—the wife of a classmate—counteracted her orders and reversed some of the tasks she completed. Such incidents did not deter her.

Gauntlett completed her basic science years at Loma Linda and did her clinical rotations at Los Angeles County Hospital and White Memorial Hospital in Los Angeles. Acquaintances who didn't know the length of the premed and medical school curriculums would ask if she was still in school whenever they saw her. "I am here, and I will be here to the end," she said. Gauntlett graduated from medical school in 1950 and did an internship at Sydenham Hospital in New York City.

Her interest in surgery actually developed while she was in private practice. After her internship, she joined the practice of Kathleen Jones-King, another Black woman medical pioneer, in the Watts neighborhood in southern Los Angeles. They saw many patients with surgical diseases. Gauntlett became frustrated that she had to refer them to other physicians for treatment. She began to assist in the operating room and discovered that surgical technique came easily for her. "What I did in the operating room did not seem difficult to me," she said. "It was like it came naturally." Other surgeons recognized her ability and encouraged her to become a surgeon.

Her life went on. While her practice with Jones-King was very busy and rewarding, it involved house calls, long hours, and meager pay ($3 per office visit and $5 for house calls). Her annual income was about the same she received as a resident. In 1952, Gauntlett married Frank Antonio Santos. One year later, she gave birth to twins, Alfred Augustine and Arthur Dwayne.

After a few years in private practice, she decided that surgery would give her more time with her family. A postgraduate surgical course at Loma Linda solidified her decision to apply for formal residency training in surgery.

She interviewed at Los Angeles County Hospital, but the application committee dallied. Some committee members asked how she planned to fulfill her family responsibilities, giving her the impression that they viewed her as less qualified than male applicants.

When she applied to the training program at California Hospital in Los Angeles, she impressed the selection committee with her perseverance and intelligence. The room was silent after Gauntlett left the room. John Gifford, chief of staff at the hospital, finally broke the silence and asked, "Well, what shall we do with Dr. Gauntlett?" The committee voted to accept her into their residency in surgery.

At California Hospital, she encountered difficult situations regarding her race. When Gauntlett was a junior resident, a radiologist bypassed her and called the attending physician directly to see a positive finding on a preoperative chest radiograph. Luckily, the radiology technician had called her beforehand and told her about the positive finding before her boss summoned her to the viewing room to evaluate the radiograph. In another incident, Gauntlett entered the room of a patient to complete a history and physical examination, and the patient refused to speak to her. Gauntlett mentioned the occurrence to the attending physician. When she next made rounds the patient was cheerful and gracious.

Upon completion of her surgical residency at the California Hospital and the Kaiser Foundation Hospital, she was approved to sit for her surgical board certifying examination in 1968. One of her examiners was Frank Allbritten, Jr., former chair of surgery at the University of Kansas. "I think you are the first Black female to come through here," he said. Gauntlett passed her exam and was certified by the American Board of Surgery in May 1968 as its first board certified Black woman surgeon. Two years later she was initiated as a Fellow of the American College of Surgeons.

She stayed on to practice at California Hospital, where she became chair of the general surgery department in 1980. Upon her retirement in 1986, she lived in Oceanside, CA, and continued to teach gross anatomy as a volunteer. Her backyard and greenhouse boasted many species of orchids. She was honored by the Association of Women Surgeons in 1993 with its Olga Jonasson Distinguished Member Award. Her husband, also a physician, died in 1991.

She accommodated her family life with her surgical training and practice. She took her children with her when she had to go to the hospital, which was usually not a problem. However, on one occasion she was in surgery when a nurse called into the operating room to report that there was a dispute between her twin sons as to the ownership of a particular toy. The exposure to her work influenced her sons; today both are surgeons in practice in Texas: one is a general surgeon near Wichita Falls, and the other is a thoracic surgeon in Laredo.

Hughenna Gauntlett died in 2010 at the age of 94 and is remembered for her talent, intelligence, and perseverance. She was an example to the surgical community as a trailblazer for Black women in surgery.

Editor's note: This article came from an in-person interview conducted by Dr Hayes before Dr. Gauntlett's death.

Legend

1. Hughenna Gauntlett. Private collection.

Surgeon Scientists

Vivien Thomas: Surgical Researcher and Innovator

Don K. Nakayama, MD, MBA, FACS

Figure 1

Vivien Thomas, LL.D. (1910–1985; Figure 1), made fundamental contributions in shock research and devised innovative surgical operations to ameliorate congenital heart anomalies. He was more than a remarkably gifted laboratory technician who worked for Alfred Blalock (1899–1964) at Vanderbilt University, and during the latter's tenure as professor and chair of surgery at the Johns Hopkins University School of Medicine and the Johns Hopkins Hospital. What started as a typical employee relationship soon evolved into a partnership where they discussed ideas and projects that Thomas researched in the laboratory. The technician's innovative work led to the spectacular achievement of the Blalock-Taussig subclavian-to-pulmonary artery shunt, the first operation to ameliorate the physiological consequences of cyanotic congenital heart disease from tetralogy of Fallot.

The long relationship between Thomas and Blalock, chronicled by Thomas in his autobiography,[1] became one of the great stories in 20th century American history: the Black carpenter's son who was denied a college education and acceptance into medical school because of his race and the economic hardship of the Great Depression, and the world-famous white professor and chair of the most famous department of surgery in America, who together shaped our understanding of shock and the treatment of congenital heart disease. Author Katie McCabe made the story widely known in her award-winning *Washingtonian* magazine article that inspired a Hollywood movie (*Something the Lord Made*, 2004, Joseph Sargent, HBO).[2]

The undeniably moving tale overshadowed a basic fact of surgical history: For decades, Thomas was the world's most skilled and innovative surgeon in the nascent fields of cardiothoracic and vascular surgery. Generations of Johns Hopkins Hospital

professors and residents learned the fine details of thoracic and vascular surgery in his animal laboratory, and hundreds of surgeons from outside the institution went to him to learn how to perform his operations. While his erstwhile colleagues at Hopkins honored him with a portrait and an honorary degree, they denied him recognition as a coauthor, listing him on the author line in only a small fraction of the research works to which he had contributed so much. Thomas' book is the source of nearly all the facts that follow.[1]

Boyhood

Vivien Thomas was the fourth child of a northeast Louisiana family headed by a master carpenter who tired of the annual spring floods that inundated their small hometown. They moved to Nashville, TN, where work was plentiful and the public school system, while segregated, provided a good education for the children. If they wanted to pursue higher education, there were several Black colleges in the area, including Meharry Medical College, which for young Vivien was a nearby reminder of his aspiration to become a doctor. Teachers and parents together worked seamlessly to make sure schoolwork was done and authority was respected.

Every afternoon after school and on Saturdays, Vivien and his older brother worked for their father. They learned carpentry in the same stepwise manner Thomas would later use to train his own trainees in surgery: first sawing and nailing; then installing locks, doing finishing and trim work; and once their work could be trusted, installing inside stairways and bannisters. They were paid laborer's wages by the hour and were expected to pay their mother a share for cooking and cleaning. At 14, Vivien had to buy his own clothes.

At 18, he took on an extra job with the maintenance crew at Fisk University to save money for tuition and books for his own college education. He planned to attend Tennessee State College because he could walk the two-and-a-half miles to its campus. He even budgeted for extra footwear given the added mileage. He was ready for classes in the fall of 1929, but he delayed his entry and planned to start after the first of the year.

Vanderbilt

The Crash of 1929 in October forced all of the Thomases to pool their resources, including Vivien's savings, to keep the family afloat. Laid off from his job at Fisk and idle because his father's carpentry work had dried up, Thomas had to find a paying job to contribute to the family coffers. He set aside his own plans for Tennessee State, much less medical school.

A friend worked in a medical laboratory at Vanderbilt University, so Thomas asked whether there were any openings. Yes, there was an opening for a laboratory technician in the department of surgery with a young surgeon, barely in his thirties, named Dr. Blalock. As Thomas remembered his friend's description of him, "the guy was 'hell' to get along with and [his friend] didn't think I'd be able to work with him."[1] The warning did not sway Thomas.

In February 1930 he caught up with Blalock in his office, which was an annex of the latter's research laboratory. With an ever-present cigarette and bottle of Coca Cola in hand, Blalock briefly inquired about Thomas' work history and family. Satisfied with Thomas' responses, Blalock hired him on the spot. He set the parameters of their working relationship from the start. Blalock said:

> *As time goes on, I'm getting more and more involved with patients and hospital duties. I want to carry on my research and laboratory work, and I want someone in the laboratory whom I can teach to do anything I can do and maybe do things I can't do. There are a lot of things that haven't been done. I want someone who can get to the point that he can do things on his own even though I may not be around.*[1]

Blalock offered him $12 per week, far less than the $20 Thomas was getting at Fisk, but promised him a raise if things worked out. Thomas could not afford to be choosy, so he took the job while privately planning to work through the winter, until times got better, and he could get his job at Fisk back in the spring.

Figure 2

Over the next two or three weeks, Blalock and the other technicians in his lab showed Thomas every step of Blalock's lab routine: fetching a dog from the kennel, positioning the dog (still awake) on his back on the table, injecting Novocain so glass cannulas could be inserted into a cutdown incision in the femoral vein, and administering barbiturate intravenously so the animal would be sedated for a cutdown into the femoral artery (Figure 2). The cannula was connected to a manometer that traced the measurements onto a large rotating drum, its surface covered with soot to make the tracing visible. Depending on the experiment, the dog then would either be sacrificed for necropsy and postmortem measurements or recovered and returned to its cage.

Blalock became increasingly scarce as Thomas learned the routine. One day, the surgeon arrived in time only for the necropsy, long after the experiment was completed. In fact the only time Thomas could count on Blalock's presence was at the necropsy; otherwise, he might show up unannounced or not at all. Blalock expected him to take notes, which they reviewed whenever he got there.

After two months, Thomas made a mistake that set Blalock off on one of his legendary profanity-filled tirades. The tantrum convinced Thomas he couldn't work for Blalock. Just 20 years old, he took off his lab garb and put on his street clothes. He crossed the hall into his boss' office, where the surgeon seemed surprised to see him and acted as if nothing had happened.

Thomas threatened to quit if Blalock was going to react in the same manner every time he, Thomas, did something in error. He hadn't been raised to take such abuse, and he wasn't going to take it from Blalock, despite the risk of financial hardship. Blalock apologized, promised to watch his temper and language, and asked Thomas to return to work.

> *Dr. Blalock kept his word for the next thirty-four years.…Neither of us ever hesitated to let the other know, in a straightforward man-to-man manner, what he thought or how he felt.…I think this incident set the stage for what I consider our mutual respect throughout the years.*[1]

Thomas conducted Blalock's experiments on the physiology of shock, studies that suggested improvements in resuscitation from injury that enhanced Blalock's academic reputation and ultimately led to his offer from Hopkins.[3-5] Things were going well, so in May Thomas reminded Blalock of his promise of a raise. The surgeon promised to look into getting his technician more money, but by October there was still no answer. Thomas contacted his old foreman at Fisk, who said he had a job waiting for him and to bring his tools to work the next day.

Once more Blalock was taken aback when Thomas told him that he was leaving the lab. Blalock thought work in the lab was better than being part of a maintenance crew. The hours in the lab were regular, and the work was indoors and involved no heavy lifting.

But the pay was simply not a living wage. It took Thomas some weeks of detective work, but he

discovered that lab technicians received much more in salary than he was getting. He asked the business manager for the department and was informed that at Vanderbilt, an institution of the South, all Black men were classified as janitors. Thomas got Blalock to agree for a substantial raise, more than half the difference between the amount he was earning and what he had been getting at Fisk. Substandard wages, especially given the skills Thomas was developing, were a common theme throughout Blalock and Thomas' working relationship.

Research in Surgery

Thomas' great achievements in surgery began in 1935 when Blalock wanted to go beyond acute experiments and test how various alterations of anatomy affected cardiac physiology. The professor wanted to start with adrenalectomy. Thomas thus had to learn how to perform major operations: observing aseptic technique, dissection, minimizing blood loss through hemostasis, operating efficiently and safely, and caring for the animals to assure complete recovery for later tests and experiments.

In short, he underwent the same training Vanderbilt's white surgery residents received, only Thomas got it one-on-one from the professor himself. Because he had innate surgical talent, his subjects were dogs and not human patients, and Blalock was habitually an impatient man with a demanding schedule, Thomas got free rein much more quickly than the residents at Vanderbilt University Hospital. He was soon doing procedures of increasing complexity on his own with just the assistance of his fellow technicians.

Among Blalock's wide-ranging experiments into the pathophysiology of shock were the effects of the adrenals on responses to cardiac output and the extent to which neural impulses to the kidney affected renal function. Removal of the adrenal glands, located deep in the retroperitoneum, was a big but straightforward operation for an experienced surgeon.[6]

Denervation of the kidney, however, was trickier. Thomas and Blalock decided it was simpler to remove the entire organ from its bed, and thus all of its neural attachments, and transplant it into the neck, where it was more accessible for measurements of blood flow and urine output.[7]

Thomas therefore had to learn techniques of vascular anastomosis, which would form the basis of his later operations on the great vessels. To suture an anastomosis between two blood vessels he used Alexis Carrel's triangulation technique, for which the French surgeon won the Nobel Prize in 1912. With no one to train him, Thomas had to work out the details himself. He tried several brands of suture material before deciding that the 5-0 braided silk woven by J. A. Deknatel and Son was least traumatic to the vessel wall. Johnson and Johnson made slender needles that worked best in his hands, but the eyes were so tiny that threading them required more guesswork than visual acuity. The needles, moreover, were too long for the precise back-and-forth of suturing blood vessels, so he cut each one to a fraction of its length and refiled a sharp point with an emery board.

To keep the inner surface of the anastomosis smooth, the vessels had to be everted where they met. Standard clamps crushed the vessels, irreversibly injuring them and making them inappropriate for anastomosis. Thomas settled on short bulldog clamps like those used by Carrel. Rubber tubing covered the jaws so they occluded but did not crush the vessels they secured. The clamps worked, but their short handles and springs cluttered the field and tended to snag the fine suture at the most inconvenient points of the procedure.

Around 1938, Blalock became interested in the physiology of pulmonary hypertension. In an attempt to increase the blood pressure in the pulmonary artery, Thomas connected a systemic artery, the left subclavian, to the main left pulmonary artery.[8] The pressure, however, remained unchanged, and the dogs were unaffected by the new hookup. Even though the results were disappointing, it would be an important operation in surgical history: the subclavian-to-pulmonary artery anastomosis in dogs later became the model for the Blalock-Taussig shunt operation in humans.

The final key animal model crucial to the development of the Blalock-Taussig shunt was performed after Blalock and Thomas moved to Baltimore, MD, to join the Johns Hopkins School of Medicine in 1941. Edwards Park, chief of pediatrics at the Johns Hopkins Hospital, mentioned to Blalock the problem of coarctation of the aorta. Blalock set Thomas to work on creating a model of the condition, and a possible operation to correct it. Unable to come up with a model of coarctation of the aorta where the dog survived, at Blalock's suggestion Thomas divided the thoracic aorta and restored circulation by taking the left subclavian and connecting it end-to-side to the aorta to bypass the obstruction. The operation worked, and the dogs survived with the altered circulatory pattern.[9]

The important technical hurdle was creating an end-to-side anastomosis where one vessel—the aorta—was immobile. Unable to easily see the back side of the anastomosis, Thomas placed a continuous everting suture loosely across the rear one-third of the anastomosis, then pulled on each end to bring the back side of the cut end of the subclavian down to the aorta. Today surgeons call the technique "parachuting," a term never used by Thomas in his writings. With the back one-third of the anastomosis thus secured, the remaining two-thirds that the surgeon could see could then be approximated, a stay suture holding the middle of the remaining part of the anastomosis open as the third to either side was closed with a running suture.

Thomas proved that the subclavian artery, once divided in the chest, had sufficient length to reach a good distance inferiorly. His parachuting technique gave him a way to complete the far side of the anastomosis where one vessel was fixed in position. For his experiment of coarctation, it was the aorta. For the human patient undergoing a Blalock-Taussig shunt, it would be the pulmonary artery.

Using his techniques, he could complete a vascular anastomosis that withstood arterial pressure. There might be a small amount of bleeding from the suture line, but he found it was easily controlled with simple digital pressure using his gloved finger. William Rienhoff, Jr., then an associate professor under Blalock, believed that a vascular anastomosis was in fact "not a hard operation, it's easier than an intestinal anastomosis—blood clots."[1] His remark was a tongue-in-cheek observation that microbe-laden succus and stool from an intestinal leak tended to continue unabated and lead to sepsis, while bleeding from a vascular anastomosis often stopped by itself when clot formed and plugged the hole. But given the small size of the vessels of the upcoming shunt operations for cyanotic congenital heart surgery, Thomas' operation would be anything but easy.

At the time, Thomas was the only surgeon in the world doing a substantial volume of vascular surgery. Performing these operations almost every day, Thomas perfected his vascular technique. He used sutures and needles that, to his touch, were best suited for the task, and needles that he fashioned himself. He found the best way to orient the cumbersome bulldog clamps so they were less likely to interfere with suturing. Among his many innovations, the most important was the parachute technique that allowed sutures in the back wall of the anastomosis to be placed precisely, under direct vision, before the two edges were brought together. Importantly, he determined the geometries of the incisions into the blood vessels: how long to make the incision in the recipient artery to receive the round opening end of the graft with precision, without stenosis or redundancy, so that the connection was made exactly the first time without the need for improvisation at the most crucial moment of the operation.

The Blalock-Taussig Shunt

In 1943, Thomas was asked to join a meeting between Blalock and Helen Taussig, director of the cardiology clinic at the Harriet Lane Home for Invalid Children at the Johns Hopkins Hospital. She described the complications of tetralogy of Fallot and asked whether there was a way to surgically augment circulation to the lungs. Blalock and Thomas both realized that the solution was their failed dog lab model for pulmonary hypertension.

As was their standard experimental approach to such clinical problems, Thomas set about to recreate the complicated anatomy and physiology of tetralogy of Fallot in an experimental animal, a steep step up from hammering the hind limb of anesthetized dogs to induce traumatic shock, studies that they were still doing. "I had asked the professor why he didn't find some easier project," Thomas wrote later. "He replied that all the easy things had been done."[1]

With some urgency, Thomas tried to modify the old subclavian-to-pulmonary artery model so that the animal would survive with pulmonary hypertension: constricting various branches of the pulmonary vessels, removing lobes of the opposite lung, and creating side-to-side and end-to-side pulmonary vein-to-pulmonary artery fistulas. All of them failed. Either the animal would survive without ill effect, or it would die of pulmonary insufficiency or hemorrhage.

After each attempt he looked after the animals, coaxing the sickest of them to survive so that he could later see whether the subclavian-to-pulmonary artery anastomosis would work. In so doing, he mastered skills in thoracic and vascular surgery that no surgeon operating on human patients possessed. He became the surgeon most qualified to perform the first subclavian-to-pulmonary artery anastomosis on a human patient for tetralogy of Fallot, and, equally important, manage the postoperative recovery.

There was no question, however, who would perform the actual operation. Blalock had planned to learn the operation in Thomas' lab by first assisting with the procedure, then performing the operation once or twice with Thomas assisting him. But in late November 1944, one of Taussig's heart patients began to deteriorate so rapidly that her condition became urgent. A decision had to be made whether to forego further attempts at creation of an animal model and simply try the operation on the suffering little girl. Blalock had assisted Thomas only one time and had not yet done the operation as surgeon as he had planned.

Instead, Thomas got a call from the professor with instructions to meet with Elizabeth Sherwood, the operating room (OR) supervisor at Hopkins, and to be sure she had all the necessary instruments for the groundbreaking operation. Thomas discovered the Hopkins supply room lacked several items, including the seven-inch long Adson forceps he used as a needle holder and the nerve hook and smooth bayonet forceps that kept the loops of continuous suture from getting tangled in the constricted field. Most importantly, he had to supply his custom needles and silk suture from the supply he kept in the animal lab.

When the day of the operation arrived, Thomas stayed away from the Hopkins OR because he hadn't been invited to attend. "I might make Dr. Blalock nervous," he joked, "or even worse, he might make me nervous."[1] But as Blalock entered the OR after scrubbing, he spied Clara Belle Puryear, one of the chemistry technicians in Hunterian Laboratory, among the throng in the gallery that had gathered to witness the historic operation. "Miss Puryear," Blalock said, "I guess you'd better call Vivien."[1]

Word went out to find Thomas. Not wanting to begin until Thomas arrived, Blalock spotted him as he entered the tiered gallery and jostled his way to a seat next to Puryear. "Vivien," the professor said, "you'd better come down here."[1] Thomas made his way into the pit where he donned a cap, gown, and mask. Blalock made him stand on a step stool behind him where he could peer over the professor's right shoulder into the field (Figure 3).

Blalock was assisted by two of his most trusted trainees, William Longmire and Denton Cooley, resident and intern in surgery, respectively. As Blalock entered the left chest and exposed the left subclavian artery and pulmonary artery, Thomas saw the vessels were less than half the size of those of the dogs on which he had been working. The left subclavian was divided as far as the exposure would allow. Once bulldog clamps were placed on the pulmonary artery, Blalock made an incision into the vessel. It was "the point of no return."[1]

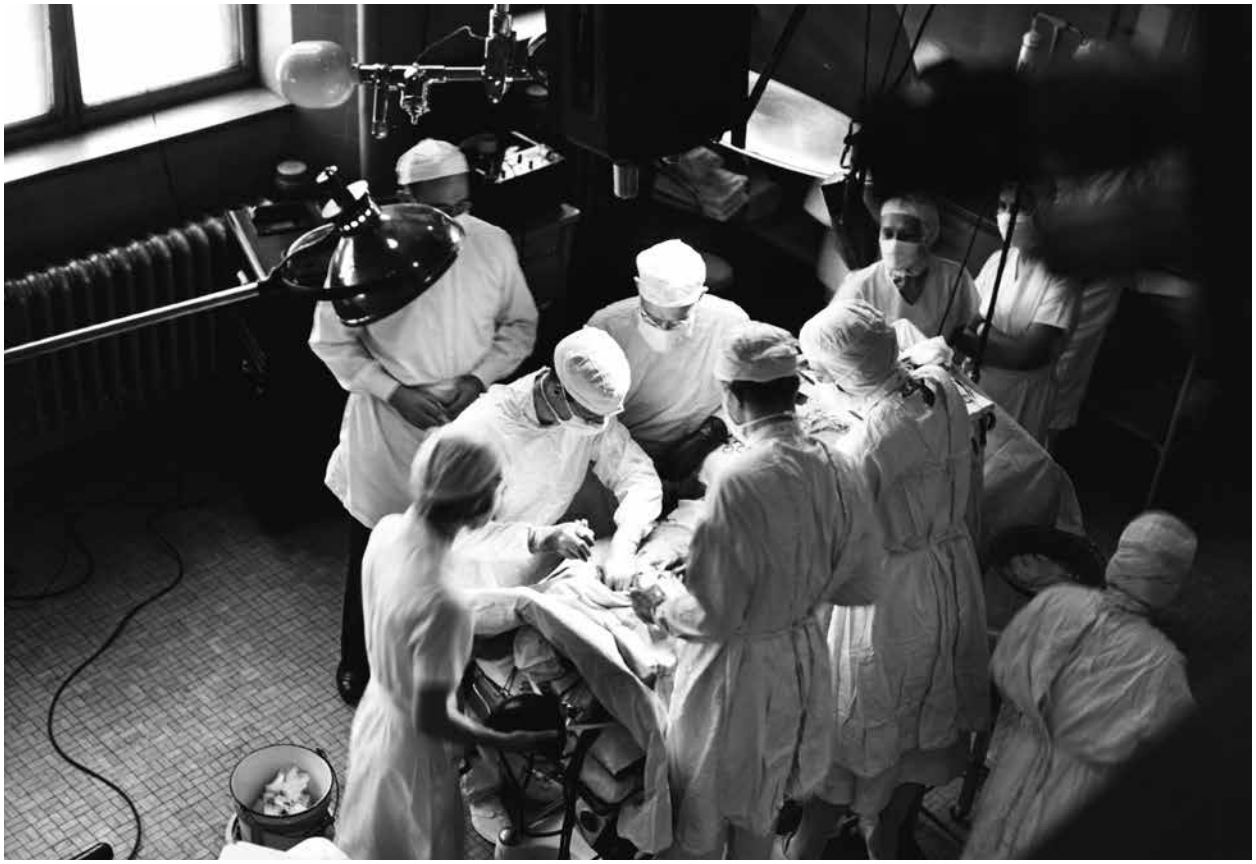

Figure 3

Blalock began with the running suture onto the posterior aspect of the incision, sutures only one millimeter apart and loosely applied. The two vessels came together using the parachute technique that Thomas had so often done in his animal work. The rest of the two-thirds of the anastomosis were then completed, the needles oriented in such a way to evert the endothelial surfaces. From his position over the professor's shoulder, Thomas gently coached Blalock through the arcane surgical choreography. At times Blalock had the needle pointed in the wrong direction. "I would say, 'the other direction'" Thomas wrote.[1] On a later operation, Blalock placed a suture in the wrong direction when Thomas let his mind wander. They discovered the error and had to replace the suture. "Well," Blalock said in his characteristic whine, "you watch and don't let me put them in wrong."[1]

Once the anastomosis was completed, the bulldog clamps were removed. Blalock placed his finger onto the vessels, hoping to feel a thrill from blood flowing past the anastomosis. Already anxious, Blalock's worry increased further when he could not feel one. Rather than second guessing his original work, Blalock went ahead and closed the chest with Longmire and Cooley. After her surgery the little patient struggled at first but began to rally. After two weeks of hospitalization she was discharged from the hospital much improved, her skin no longer blue but pink in color, verifying that the anastomosis was indeed open, and blood was circulating through the lungs.[9]

As news spread of the breakthrough operation, families flooded Taussig's cardiology clinic, hoping that their child might receive the miraculous surgery. Blalock continued to demand that Thomas be present for each operation. In addition, Thomas had the responsibility of drawing preoperative arterial blood samples by direct femoral artery puncture and running them down to Puryear in

the laboratory where she did the blood counts and chemical analyses.

As the operations quickly became daily events, Longmire and Thomas sought a more consistent supply of suture and instruments. J. K. Deknatel and Son began manufacture of 5-0 and 6-0 braided silk with swaged-on short, curved needles that satisfied Thomas' specifications. It was difficult to place a bulldog clamp on the proximal pulmonary artery, so they came up with a vertically-oriented vascular clamp. Blalock called it the Murray-Baumgarner, the name of the company they got to make it. The company itself marketed it as the Blalock clamp. By rights, however, it should have been called the Thomas clamp.

Throngs of surgeons from around the world came to Hopkins to observe and learn how to do the operation. Because the field was so restricted, the "visiting firemen," as they became to be known,[1] had no realistic chance to learn anything in room 706, familiarly called the "heart room," or simply, "706,"[1] where Blalock did his operations. Their only instructions were to not block the light and not stand between the professor and an electric fan that was a feeble attempt to cool the OR during the hot summer months.

Instead, they were relegated to the Hunterian Laboratory where Thomas gave them an opportunity to practice on dogs, a chance that Blalock himself had eschewed before his landmark operation on a human child. An entire cohort of the world's elite surgeons thereby learned the subclavian-to-pulmonary artery shunt not from the famous Hopkins professor, but from his Black lab technician.

"Something the Lord Made"

Once the Blalock-Taussig shunt was being performed on a regular basis, Thomas was relieved of his duties drawing arterial blood samples and coaching Blalock in the operating room. He was assigned another malady of a completely different sort, transposition of the great arteries. A great many children did not survive the first days of infancy, as the main connection between the aorta and the pulmonary artery, the ductus arteriosus, closed as it was programmed by nature to do. Without an open ductus, mixing the two circulatory systems ceased and the systemic circulation was deprived of oxygenated blood.

Thomas first tried to reestablish venous return of oxygenated blood to the right ventricle, the systemic ventricle in the bizarre inversion of anatomic function. Thomas took a close look at the heart and found that the right pulmonary veins were adjacent to the right atrium, a simple matter to join together for a master surgeon like Thomas. His repeated attempts at connecting the two structures all failed, as his anastomosis invariably constricted and closed off, killing the animal by depriving it of oxygenated blood.

A resolution of the problem was suggested by the handful of patients with transposition that survived because they had an accompanying atrial or ventricular septal defect that allowed oxygenated blood from the pulmonary circulation to mix with the systemic circuit. As Thomas studied his heart specimens at necropsy, he noticed that the interatrial septum adjoining the right border of the heart was membranous. He reasoned that its surgical removal would open an artificial atrial septal defect that was large enough to allow survival.

How he could create a hole in the septum without interrupting the circulation was in the back of his mind as he rummaged through a box of instruments "that dated back to the days of Halsted and Cushing."[1] One had an unusual configuration that immediately inspired the solution to his problem: a clamp with a broad 3.5 cm "U"-shaped curve. Thomas visualized the "U" isolating a segment of the heart at the interatrial septum while allowing blood flow to continue in the chambers of the heart distal to its jaws. It had no ratchets, so the pressure on the tissue might be adjusted freely without damaging what it held. Its 18-centimeter-long handles made it easy to manipulate at a distance away from the immediate surgical field. It was perfect for the task Thomas had envisioned.

Once the jaw was in place, parallel incisions opened the right auricle above the septum and the confluence of the right pulmonary veins below. Once the chambers were drained of the small amount of blood they contained, a small bit of the septum came into view. Thomas gently pulled on it as he eased the side-biting clamp so that more of the septum came into view. Guided by only his intuition and nerve, he thus exposed what seemed like enough of the septum to snip a defect about a centimeter-and-a-half by one centimeter. He then sutured the rear aspect of the septum, being sure that, like his arterial anastomoses, the surfaces everted so that the endothelium from both sides were brought into approximation, then closed the opening in the heart. He closed the chest and anxiously waited to see how the dog would recover. The animal seemed not to be affected by the procedure.

For reasons of his own, Thomas decided not to tell Blalock about his project. In all, he performed the procedure on seven animals, all of them when the professor was either out of town or after his midday visit to the laboratory. Each time he was assisted by Rowena Spencer, a medical student in his laboratory, who later became Hopkins' first female surgical intern. Each of the animals survived.

Thomas knew the operation was a success. Once he was certain all of the animals would survive, he told Blalock about his project. Thomas used red and blue colored pencils to diagram how his operation allowed blood to mix. Blalock, who had assigned Thomas the task and was very interested in transposition, immediately grasped the significance of Thomas' breakthrough. "Let's autopsy one," the professor said. Thomas had never examined one of his animals postmortem, because none of them died after the procedure. He sacrificed one, harvested the heart and lungs, and handed the dissecting scissors to Blalock.

> *As Blalock slit the right atrium open the interatrial septum came into view, a moderate-sized hole joining the two chambers. For several minutes the professor's fingers probed the defect, sliding from one atrium to the other, feeling the smooth endothelium that was concealed beneath the translucent surface. Dr. Blalock finally broke the silence by asking, "Vivien, are you sure you did this?" I answered in the affirmative, and then after a pause he said, "Well this looks like something the Lord made."*[1]

Blalock had Thomas show him how to do the procedure, then train another of his residents, C. Rollins Hanlon, on the procedure. Hanlon took the experience and began to do direct anastomoses of a cuff that included the orifices of the right pulmonary veins directly to the auricle, and then the superior vena cava, each time using the unique curved clamp that Thomas had salvaged from the old box of discarded instruments. Two articles were published: the author line on one listed Alfred Blalock and C. Rollins Hanlon; the other, C. Rollins Hanlon and Alfred Blalock.[11, 12] Neither Thomas nor Spencer's names had been included.

Which might explain Thomas' desire to keep his project secret. After what was close to two decades of working with Blalock, Thomas knew his boss and his boss' residents' penchant for leaving his name off the author line. Thomas had set things up so that the experimental work on transposition was undeniably his, and once more Blalock and Hanlon proved him right.

Authorship

For decades Thomas was never listed as co-author on any of Blalock's publications. They worked in a manner described, in a tongue-in-cheek way, by Blalock's close friend and counterpart in internal medicine at Vanderbilt, Tinsley Harrison. According to Harrison, there were three phases of research: "(1) the planning, 'We need to do …'; (2) the work, 'You do …'; and (3) the report, 'I did …'"[1] Such was the pattern in Blalock's early shock experiments, where Thomas acted as a laboratory technician, placing the cannulas and recording the pressure tracings and measurements at necropsy. Blalock listed himself as sole author on most of his articles on shock.

Once the preparations became more complex and depended on the survival of animals who had undergone complicated operations, the success of many experiments depended on Thomas' skill as

a surgeon and whether an animal could survive complicated alternations of its anatomy.

Yet for all of his pivotal work on tetralogy of Fallot, coarctation of the aorta, and transposition of the great vessels, Thomas was never listed as co-author. The original 1939 report of a left subclavian-to-pulmonary artery bypass in a dog lists Sanford Levy as co-author with Blalock.[8] Blalock appropriately added Taussig's name to the landmark article describing their eponymous operation, because she had made the original suggestion of an "artificial ductus" in patients with tetralogy of Fallot.[10] He added Edwards Park's name to the experiments on coarctation simply on the basis of their casual conversation of the problems posed by the condition. Park insisted that his name be removed because he thought he did not deserve the recognition.[9]

Thomas' work on transposition was thereby an act of academic larceny.[11] At the celebration unveiling the portrait of Thomas in 1971, C. Rollins Hanlon, then long past his Hopkins days and at the time the Executive Director of the American College of Surgeons, was one of the dignitaries chosen to speak and honor Thomas at the occasion.

At the conclusion of the event, Thomas was invited to respond and thank the speakers. He mentioned how kind Hanlon was to add him, Thomas, as co-author on a paper published in 1950 that described using a ventilator for the delivery of vapor anesthesia in dogs.[13] But Thomas then said something more.

> *I could not resist the temptation to add that I thought he should [also] have included me in two other papers, [Hanlon's articles on experimental atrial septal defect]. I had expected some reaction to the comment but was surprised by the amount of laughter and applause from those in the audience who knew I was referring to the operation for transposition.*[1]

More than two decades had passed, but the slight was still fresh. The audience knew that academic larceny had been committed. Rowena Spencer, who helped Thomas in his secretive studies on transposition, noted a "bitterness about racial tenderness [that] was an undertone throughout his autobiography."[14]

In 1949, Raymond Heimbecker of Toronto, ON, began work in the Hunterian laboratories on reversal of capillary blood flow as a possible solution to arterial insufficiency. In one of the drafts of the manuscript reporting their research, the Canadian included Thomas as co-author.[15]

> *To my knowledge, none of Dr. Blalock's numerous co-authors of laboratory reports had ever acted or thought along this line. The Professor, for whatever reason, did not remove it; as a result, this was the first paper on which my name appeared as co-author with that of Alfred Blalock, MD.*[1]

The year was 1951; Blalock and Thomas had worked together 21 years. Without irony, it was a Canadian, someone from a country set apart from racial injustice in the U.S., who first acknowledged to the academic world Thomas' contributions to science. (Heimbecker later was professor of surgery at the University of Western Ontario and chief of thoracic surgery at University Hospital in London, ON.)

A Workshop for Research and Training

When Blalock and Thomas arrived at the Hunterian Laboratory at Hopkins in July 1941, they found the place was filthy; in Thomas' words, "almost revolting."[1] It needed new ventilation equipment to clear the air of the stench of the animal rooms in the basement. The supplies and instruments were old and outdated. There weren't any of the manometers and recording devices to do physiological research that he had at Vanderbilt.

The lab was nominally under the directorship of Edgar Poth, who delayed—or in Thomas' eyes, ignored—the latter's efforts in setting up Blalock's lab. Poth put off Thomas' requests for new equipment, telling Thomas he had to make do with the instruments and suture they had on hand. Blalock, impatient for Thomas to begin his experiments, asked why there was a delay. When informed about Poth's slow walking of Thomas' requests, Blalock exploded. "Who the hell does he

think he is? I run this department. Tell him … ," then he broke off, unable to articulate his thoughts due to his anger. He scribbled a note in longhand, which read, "Dr. Poth – get anything Vivien asks for my work."[1] Without folding it, he waved his note at Thomas to give to Poth. Thomas neatly folded it, put it in an envelope, and left it on Poth's desk. The next day he began to get the requested instruments and equipment.

Blalock and Poth feuded until the latter left Hopkins the following June. Thomas was the one to suffer. As he worked, he received no help from other workers in the lab.

But Thomas attracted the attention of the laboratory staff for other reasons. First, he was Black. Until his arrival the laboratory was staffed entirely by white technicians. Second, they noticed his extraordinary independence. To him it was no big deal, a reflection of the unique relationship he enjoyed with his boss. Blalock discussed experiments with him two or three times a week, a break from his routine that seemed to refresh him. Thomas and Blalock exchanged phone calls, and Thomas had access to the professor's private line, a privilege that upset his office staff.

Third, Thomas was doing the operations himself, often extraordinarily complicated operations that demonstrated his considerable talent, experience, and skill. Technicians wanted to learn how to operate from Thomas. When it came time for Hopkins graduates to set up their own laboratories at other institutions, they sent their best technicians to the Hunterian Laboratory to be trained by him.

The most tangible manifestation of Thomas' unique status came when Blalock asked him to come to his office in lieu of their usual in-person visit in the lab. Thomas changed out of his lab attire into a suit coat and tie, put on a long white coat, and walked to their meeting using a shortcut through the main hospital corridors. Until then, most Blacks at Hopkins were all the housekeeping department and wore blue uniforms. "A Negro with a long white coat?" Thomas wrote. "Something unseen and unheard of at Hopkins!"[1]

Supported by Blalock's total trust and dependence on him, Thomas became de facto director of the Hunterian Laboratory. Katie McCabe, in her article on Thomas' life, noted that technically, a non-MD could not hold the position of laboratory supervisor. But everyone knew who ran the place.[2]

Knowing that their experiments depended on scrupulous technical surgery and perioperative care, Thomas and the technicians who worked under him performed with the same surgical discipline as those on Blalock's clinical services. Under his administration, the Hunterian Laboratory at Johns Hopkins became an ideal environment for groundbreaking research in other areas, specifically cardiac resuscitation. The labs were the site of the development of open and closed chest cardiac massage and internal and external electrical cardioversion.

Generations of Hopkins residents proudly proclaimed that they were trained in surgery by Vivien Thomas. J. Alex Haller, Jr., later professor of surgery at Hopkins, recalled an experience he had as a surgical intern working in the lab on a project with Alfred Casper, a lab technician who was observing Thomas to prepare for setting up a lab for the National Heart Institute in Bethesda, MD. They got into some troublesome bleeding from the pulmonary artery in one of his experiments. Only in his intern year, Haller was able to stop the hemorrhage and completed the procedure. Casper mentioned how well Haller had handled the situation. "Well," Haller said to Casper, "I was trained by Dr. Blalock."

A few weeks later, the two found themselves in the same situation, but this time Haller was unable to control the bleeding vessel. Casper took over, applied some clamps, and promptly got them out of trouble. "I certainly appreciated everything you did," Haller said when they were done. "You knew exactly how to handle your hands very well, too."

> *"He looked me in the eye with a little twinkle and said, 'I trained with Vivien."*[1]

Epilogue

At the end of World War II, the wages of skilled carpenters skyrocketed, driven by the postwar building boom. Only 35, Thomas saw a chance to have an income where he could send his two daughters to college, an opportunity long denied him. He simply told Blalock he was leaving, assuming that any counteroffer would only fall far short of what he could earn as a craftsman. Two days before Christmas 1946, the professor visited Thomas in his office in the laboratory. "I hope you will accept this," Blalock said, handing him an index card from his pocket. "It's the best I can do – it's all I can do."[2]

Thomas had to look twice at the figure written on the card. The trustees had designated a special personnel category for him and doubled his salary. Money, for once in his life, was no longer an issue. Thomas continued work at the Hunterian Laboratory for another 15 years after Blalock retired in 1964.

Late in life, dying from ureteral cancer and confined to a wheelchair after an unsuccessful disc operation that failed to relieve him from back pain and restricted him in a stooped 45-degree angle when he tried to stand, Blalock expressed regret that he did not send Thomas to medical school when he had a chance. He repeated this a number of times to several of his residents as they came by to visit their old chief in retirement. Henry Bahnson, one of Blalock's residents and later chair of surgery at the University of Pittsburgh, noted that Blalock comforted himself with the rationalization that "Vivien was doing famously what he did well, and that he had come a long way with Blalock's help."[2]

McCabe noted, however, that benefit also went in the opposite direction: Blalock had come a long way with Thomas' help. The Black lab tech became the master technician, proving to the world what miracles could be achieved through surgery. And as often as not, Blalock's own residents received more training and technical insights from their time with Thomas than standing across the table from their chief.

Rowena Spencer noted that had Thomas been able to reach his goal of becoming a doctor he would have been restricted in the racially confined Jim Crow South. "'If only' Vivien had a proper medical education," she wrote, "… as a Black physician in that era, he would probably have had to spend all his time and energy making a living among an economically deprived Black population."[14]

The alumni of the surgical residency at Hopkins, who famously called themselves "the Old Hands," tried to make up for what Blalock failed to do to recognize the contributions of Thomas to the field and their own training. In February 1971 they gathered from all corners of the country on the occasion of the presentation of his portrait, commissioned by the Old Hands, to the Johns Hopkins Medical Institutions. Five years later, in May 1976, they met again to give Thomas another thunderous ovation as he stood before them in an academic gown of gold and sable as the new recipient of an honorary Doctor of Laws degree from the Johns Hopkins University. Finally, in January 1977, Thomas was formally recognized for his role as teacher of surgeons when he received the formal appointment as Instructor in Surgery, full time, in the Johns Hopkins University.

In contrast to Blalock, who travelled the world as the originator of the famous operation, Thomas never strayed far from the Hunterian Laboratory, aside from an occasional trip to Nashville to visit family and old friends. From a ramshackle building that smelled of filthy laboratory animals and waste, and later a spacious state-of-the-art facility full of the latest research equipment, Thomas met and earned the respect of the surgeons who trained at Hopkins and the many "firemen" who visited there, many of them the world leaders in the field.

Of all the notables who came to Hopkins during his tenure, there were two who had special meaning for him: Koko Eaton and Levi Watkins. Eaton was his nephew, who Thomas lived to see admitted to the Johns Hopkins University School of Medicine. Thomas died in 1985, just short of the young man's graduation in 1987.

Thomas had a special kinship with Watkins (Figure 4). He graduated with honors from Tennessee State University, the college to where Thomas, as a schoolboy, had planned to walk before fate denied him the opportunity. Watkins became the first Black graduate of Vanderbilt University School of Medicine and the first Black resident in cardiac surgery at Hopkins. (Chapter 38 profiles Levi Watkins's life.)

Figure 4

Watkins and Thomas bumped into each other at the hospital cafeteria not long after the former arrived as an intern in 1971. "You're the man in the picture," the young man said, referring to Thomas' portrait that had just been hung alongside Blalock's.[2] Thomas smiled at the recognition and invited Watkins to come to his office. Watkins later said:

> *I felt very close to him. From the very beginning there was this deeper bond between us: I knew that he had been where I had been, and I had been where he could not go.*[2]

Like generations of Vanderbilt and Hopkins trainees before him, Watkins did research under Thomas' mentorship. Only now Thomas confined himself to administrative work, leaving the surgical preparations to other technicians on his staff. Watkins worked on an implantable defibrillator that triggered a shock to bring the heart back into rhythm whenever it began to fibrillate. "It was my first research project when I joined the medical faculty," Watkins said, "and Vivien's last."[2] In February 1980, just months after Thomas' retirement from the lab in 1979, Watkins performed the first placement of an automated implantable cardioverter defibrillator in a human patient, yet another landmark operation at Hopkins.

Both were men of their era. While Thomas led a quiet life within the boundaries set by the injustices of the American South, Watkins was a political activist who grew up in Montgomery, AL. At age 11 the latter participated in the Montgomery bus boycott led by the new pastor that had just arrived from Atlanta, 26-year-old Dr. Martin Luther King, Jr. The year Thomas retired, Watkins was named to the admissions board of the medical school. Thomas noted with special satisfaction the increasing number of Black students admitted to Hopkins. Watkins remembered that Thomas would drop in as if to check on him out of a father's concern that the young surgeon's politics was not putting him at a professional or political disadvantage.

McCabe noted that Watkins was "everything Vivien Thomas might have been had he been born 40 years later."[2] When Thomas died of pancreatic cancer in 1985, any of the Old Hands would have been honored to speak at the funeral. It was 41-year-old Watkins, just starting his academic career, who Clara Thomas, Vivien's wife, chose to give the eulogy.

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Legends

1. Vivien Thomas at Hopkins. The Chesney Archives of Johns Hopkins Medicine, Nursing, and Public Health, Johns Hopkins Medical Institutions.

2. Thomas in laboratory, Vanderbilt University Hospital. Joseph W. Beard papers. Duke University Medical Center Archives.

3. Thomas (upper left, partially obscured by lamp) standing behind Blalock in the operating room theater, Johns Hopkins Hospital. The Chesney Archives of Johns Hopkins Medicine, Nursing, and Public Health, Johns Hopkins Medical Institutions.

4. Levi Watkins, Jr. (left) and Thomas (right) with third year medical student Reginald Davis holding child in front of Johns Hopkins Hospital administration building (1979). The Chesney Archives of Johns Hopkins Medicine, Nursing, and Public Health, Johns Hopkins Medical Institutions.

Surgeon Scientests section photo: Thomas in laboratory, Vanderbilt University Hospital. Joseph W. Beard papers. Duke University Medical Center Archives.

John C. Norman, Jr., MD, FACS, Pioneer in Heart Assist Devices

Don K. Nakayama, MD, MBA, FACS

John Clavon Norman, Jr., MD, FACS (Figure 1), was the first director of the Texas Heart Institute (THI) Cullen Cardiovascular Surgical Research Laboratories in Houston under Denton Cooley in the 1970s, a period when they were world leaders in the development of left ventricular assist devices (LVAD) and the clinical application of the intra-aortic balloon pump (IABP) for heart failure.[1,2]

Then in 1981, at the forefront of one of the most competitive fields in biomedical research at one of its gaudiest institutions, Norman simply quit. He was enigmatic about the reasons for his departure, but in retrospect there are signs that he suffered from what medical professionals today would recognize as burnout. Although married with a daughter, he lived alone for weeks at a time in the hospital, operating, caring for patients, coordinating the research in his laboratories, serving on research committees and study sections, writing papers, and applying for grants. Ben Eiseman, professor and chair of surgery at Colorado University, who worked in Norman's lab at Harvard, remembered him as being like a "steam engine on a river boat with the safety valve tied down."[1]

Norman had enormous intellectual gifts, and he himself suggested that he was compelled to overachieve because of insecurities about his race. Aside from his significant contributions to cardiac surgery, his enduring legacy is his leadership in opening predominantly white institutions in medical education and training to more than token numbers of Black students and trainees.

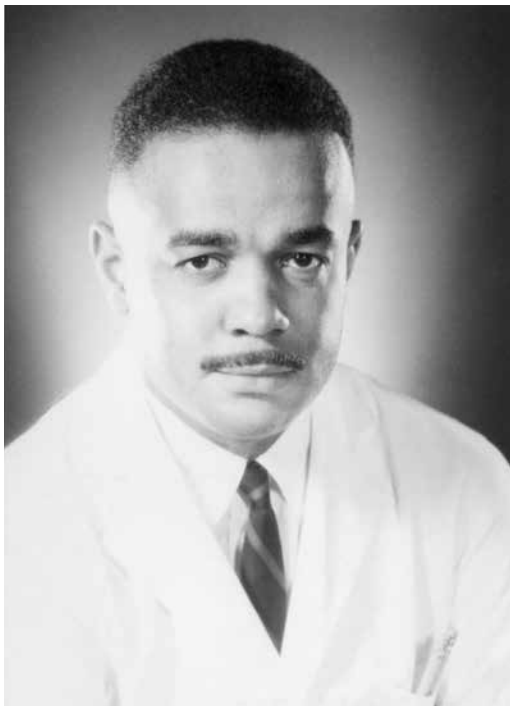

Figure 1

The outline of this chapter and most of the quotations come from Atlanta surgeon Brian Organ's comprehensive profile that appeared in his father Claude Organ's compendium of Black surgeons, *A Century of Black Surgeons*, published in 1987.[1] Cooley provided details of Norman's professional accomplishments in a memorial that appeared in the *Texas Heart Institute Journal*, a peer-reviewed periodical that Norman founded during his stay there.[2]

Early Life and Education

Norman was born in 1930 in Charleston, WV. He was an only child. His extraordinary work ethic came from his father, John C. Norman, Sr., the state's first Black licensed architect. The senior Norman's perfectionism served his business well, and he attracted jobs throughout the state. Both Black and white businesses and families contracted for his buildings and homes, on an array of jobs from auto showrooms to hospitals. One of his most ambitious projects was a complex that served as the center of Black commerce in segregated Charleston and included a 77-room hotel, movie theater, restaurant, beauty shop, and business offices.

His mother, Ruth Stephenson Norman, a graduate from Howard and Columbia Universities, taught English for 53 years at Garnet High School, the town's sole secondary school for Black students. John Sr. and Ruth had complementary personalities. He was taciturn and businesslike, working six days a week driving his car to jobs from Morgantown near the Pennsylvania border to Huntington far downriver on the Ohio. Ruth was the outgoing one, regularly hosting social events in their craftsman-style house designed and built by her husband. Black opera stars Marian Anderson, Paul Robeson, and Roland Hayes, excluded by the state's Jim Crow laws from public accommodations, often stayed the night at the Norman home while on tour.[3]

The Normans gave their son, who they called "Jack," their undivided support. He had a youngster's mischievousness and an enthusiasm for basketball. In the classroom, he was a perfectionist like his father, intolerant of mediocrity. He won a three-state merit scholarship prize offered by the Pepsi-Cola company, represented his church at an interdenominational summer camp, and graduated valedictorian at Garnet High. His gift for public speaking led his mother to hope for a future as a professor or a lawyer. His father encouraged his son to follow him in architecture. Jack, however, aspired to become a doctor.[1]

He entered the freshman class at Howard University at age 15 but transferred to Harvard College, from where he graduated in 1950 *Phi Beta Kapp*a and *magna cum laude*, missing summa designation because he had only been there two years. Most important to his future ambitions was his place in the entering class at Harvard Medical School (Figure 2). He was in such a rush to start that he turned down a chance at a Rhodes Scholarship, a decision he regretted because it might have forced a break in his frenzy to become a surgeon. "The hiatus of the Rhodes," he said, "might have altered everything that followed."[1]

In medical school Norman was what students today would call a "gunner," an aggressively competitive student who did everything to get the highest marks. Lights out at the dorm were at midnight, so he took to going to the bathroom to get extra reading time, looking to get an edge. He was in a study group where the members took turns typing out notes from class. Norman made certain his were the best and most thorough. Harold Urschel, former chief of cardiothoracic surgery at Baylor Medical Center is Dallas, remembered Norman's zeal for high marks antagonized his classmates. "People felt him to be aggressive instead of the smooth, cool Harvard man," Urschel said.[1]

Harvard's outstanding faculty in surgery, which included Edward Churchill, Robert Gross, Oliver Cope, and J. Englebert Dunphy, inspired him to pursue a career in surgery. In 1953 he worked in the laboratory of the professor and chair of surgery at Harvard, Francis Moore, who was his idol. Upon graduation from Harvard Medical School in 1954, he aspired to a residency training position in surgery at the Peter Bent Brigham Hospital with Moore or at the Johns Hopkins Hospital.

Figure 2

Despite his considerable academic achievements, he was denied positions at both institutions. "Jack," a classmate said, "I don't think they're ready for you yet."[1] One of his advisors recommended that Norman return to Charleston to practice general medicine.

It was the first time Norman encountered a roadblock. He accepted a surgical residency at Columbia, a rigorous clinical program but with a department not known for its research. There he began his habit of staying in the hospital for weeks at a time, even though he was newly married. He took a two-year hiatus for military service as ship's surgeon in the U.S. Navy at the rank of lieutenant commander (1957–1958).

Upon his return, he finished his residency in surgery (1961) and decided on extra training in cardiothoracic surgery. Denied a position at Columbia, he contacted Churchill, who arranged a training fellowship for him under the sponsorship of the National Institutes of Health at the Queen Elizabeth Hospital in Birmingham, England (1962–1963), under Alphonsus "Pon" D'Abreu. There he worked with biomedical engineers involved with early cardiac pacemakers, resulting in one of his first publications in cardiac surgery.[4] He returned to complete his training in cardiothoracic surgery at the University of Michigan under Herbert Sloan (1963–1964).

When it came time to find a job, Norman encountered yet another setback. "Norman realized things would not be entirely easy for a young Black surgeon wanting to do cardiothoracic surgery," wrote Organ in understatement.[1] He quoted Norman, who identified the problem as "the guys," the clique of white surgeons who dominated surgery at elite institutions and their favored trainees:

> *The guys know you are bright. The guys know you can operate and that you are looking for a job. All the guys had inside tracks; they had jobs lined up for them. And you're sitting there wondering, "Well,*

what happens to me? What the hell? … All five of the residents with me had jobs arranged for them, except for me.[1]

Using his $2,000 in savings, he hit the road and interviewed at the Cleveland Clinic, Memorial Hospital in New York, and University of California, San Francisco. Everything fell through. Through George Zuidema, who he trained under at Michigan, Norman heard of an opening on the Harvard Surgical Service at the Boston City Hospital. He flew to Boston, interviewed, and found himself back in Boston and at Harvard (1964).

Harvard

He threw himself into the job with his characteristic intensity. Few clinical cases came his way, leaving him with ample time for research. The Sears Laboratory of the department of surgery was fallow, so he was able to set its agenda according to his interests. Next door to his workshop was the Thorndike Laboratory of the department of medicine, where productive researchers from the Harvard hospitals and Boston universities provided him with plenty of opportunities for new ideas and collaboration.

Two such projects were his studies on hepatic perfusion and splenic transplantation for hemophilia. At the suggestion of Eiseman, then chair at the University of Kentucky, he studied extracorporeal perfusion of a pig liver as a means of sustaining liver function in patients with massive liver failure.[5] During his studies he noted that the pig liver generated factor VIII, as did the pig spleen.[6] He took the observation and transplanted the spleen in dogs with hereditary factor VIII deficiency, the canine equivalent of hemophilia, and found that it corrected the bleeding tendency (Figure 3).[7]

The projects were novel and creative, but another opportunity proved irresistible. In 1964, the National Institutes of Health began funding projects to come up with devices to replace or assist the failing heart. Norman responded with an energetic program to create animal models of heart failure, to test prototype devices in the experimental animals, and to evaluate power sources for the devices, which included some that used nuclear energy.[8] He was particularly skilled in grantsmanship and negotiating the tricky pathways of federal regulations, a necessity in the development of a mechanical heart designed for humans. He positioned himself on study sections and advisory committees where he had a say in setting research and funding priorities.[1]

Figure 3

Houston

By chance, in 1971 Norman and Cooley were seated together on a plane returning from an international conference in Moscow. The men shared superhuman energy and ambition: Cooley, to build the biggest heart institute in the world; Norman, to create an implantable artificial heart powered by nuclear energy. By the time the plane landed in New York they had laid the groundwork for a surgical research institute in Houston, to be headed by Norman.

Norman brought his thorough knowledge of both the field and the arcane demands of governmental agencies. He had tired of operating on experimental animals. He spoiled for a chance at testing LVAD on patients. With Cooley, he had his opportunity.

THI became the first site approved for the clinical implantation of LVAD, winning the priority over other sites, including Harvard. In December 1975, Norman and Cooley implanted the first LVAD in a human.[9] From 1975 to 1978, they implanted abdominally positioned LVAD in 22 patients who could not be weaned from cardiopulmonary bypass,[10] and in 1978 used the device as a bridge to transplantation in a 21-year-old man.[11]

Norman oversaw a staff of 30 researchers and staff and administered more than $1 million in federal and corporate funding each year, the equivalent of more than $3 million today. His institute created prototype LVAD devices, devised power systems, and generated funding streams that supported their institute's programs. Because the patients were vulnerable to potential technological faults and unpredictable mechanical failures, he organized a dedicated team of biomechanical engineers as a clinical support service to test and monitor the mechanical devices placed in patients. The team also supported IABP, helping to perfect the clinical application of the still-new apparatuses in heart failure.[12] He directed the research of more than 1,000 fellows and residents and served on national research councils for the President, National Institutes of Health study sections, and the American Heart Association's Council on Cardiovascular Surgery.[1]

Norman had more than 700 articles in the medical literature, more than 450 of them from his 11 years at the THI. He authored five books. "If you don't write anything," Organ quoted him, "no one will know you were here."[1] In 1974, Norman founded and edited a journal based on the clinical and research work at the THI, titled *Cardiovascular Diseases: Bulletin of the Texas Heart Institute*. Beginning with 10 short articles and a mailing list of 2,000 physicians, it began to attract articles from outside the THI by its second year. In 1982, the periodical was renamed the *Texas Heart Institute Journal*, a title that today is referenced by PubMed with more than 1 million visits to its archives each year.[2]

Burnout

Then, in 1981, Norman decided to quit. "We had reached a critical mass there," he later said.[1] Stephen Igo, who joined the research laboratory a year after Norman's arrival and outlasted him at the institute, had a simpler explanation. "He was tired," Igo said.[1]

The modern term for Norman's malady is burnout. He couldn't sustain the 80- to 100-hour work weeks, performing surgery and rounding on patients, running the lab, writing articles and grant applications, and keeping track of federal regulatory agencies and study sections. Cooley wrote:

> *He was a complex, rather eccentric man, a workaholic and demanding taskmaster who expected his team to work long hours. During his time at THI, he had no local residence but lived in the windowless laboratory and slept in a hospital room at night. For days on end, he neither left the hospital nor was aware of what the weather was like outside.*[2]

Norman himself provided an insight into his extraordinary drive to succeed in an address to Black students during the orientation week at Harvard Medical School in 1969.

> *Minority group students and physicians may be… knowingly questioned and needlessly challenged that they are equally capable.…[Based] on personal experiences, [Blacks] may be needlessly overdriven. However, the overdrive phenomenon, based on insecurity, uncertainty and free-floating anxiety, is not new in minority groups, nor is it uncommon in conventional first-year medical students. It is to be expected and accepted for what it is, a reasonably healthy response to a challenging set of new situations within this "[Harvard Medical School] community."*[13]

Being Black, however brilliant and motivated, he lacked the advantage of lineal descent, in social connections and academic sponsorship.

> *This is where I think other groups have an edge over us. It would have been far easier for me to…become an architect, come back to Charleston and pick up where my father left off than to choose the route that I did. Lineal descent can give you such a tremendous edge if you know everybody, the last three governors, last six mayors, and you grow up on the playground with kids who now run the city council, and you know everybody in the state and your roots are deep. It is a tremendous edge. In Texas, Cooley will always do better than DeBakey; he's from Texas.*[1]

Another high-energy, driven man, Cooley moved easily within white Texas society, supported and lionized at the highest levels, in and out of the hospital and operating room. Norman, who could be as well-spoken and charming as Cooley, was socially isolated, living alone in the hospital and his laboratory, far away from his wife and daughter and his parents, who were so important to his childhood and early education.

It was a potentially self-destructive response to the successively higher barriers he faced as he progressed in medicine: getting into Harvard College and Harvard Medical School; rejection by his preferred training programs in surgery and thoracic surgery; rejection once more when he tried to land his first job; then research at two high-intensity institutions, first at Harvard, then in the white-hot area of cardiac surgery with its hottest star, Denton Cooley. Once he was beyond exams and diplomas, he had to compete against surgeons of equal intellect and ambition. He responded with a strategy that had always been successful for him: he would out-work "the guys."

But now he was in academic surgery, where advancement depended on whether you could get along with your colleagues and superiors. It was a difficult task for a medical school "gunner" whose aggressive perfectionism led professors at Harvard, Hopkins, and Michigan to turn a cold shoulder.

And always there was the issue of skin color. Without other Black colleagues, mentors, and sponsors, who would help him get his own heart institute or a position as chair at a major department of surgery? He had goals that probably were never mentioned.

> *My path had not encountered a minority in medicine at all. Where were Sam Kountz, Claude Organ, LaSalle Leffall? How would I ever find them? Where were the guys? Where were the role models? How were we going to get together and compare notes?*[1]

Still, he claimed he did not need a Black role model. He then summed up his career in defiant, declarative terms, again mentioning "the guys" with whom he wanted to be included.

> *But I didn't need a (Black) role model. Frannie Moore was my role model. Robert Gross was my role model. Olive Cope was my role model…You want to be one of the guys.…All the guys were hard-charging, bright. I haven't done anything out of the ordinary. I knew I wanted to do well at Harvard College, and I did. I knew I wanted to pursue medicine and I did. I wanted to do the most challenging thing in medicine, which was surgery, and I did. And I wanted to do the most challenging thing in surgery and that was cardiothoracic. And I did.*[1]

That he was able to sustain the high level of productivity well into mid-career reflected the intensity of his drive to succeed and his abilities.

After Houston, he had a series of appointments at heart and research institutes and departments of surgery in Washington, DC; Newark, NJ; Huntington, WV; Chicago, IL; and Lexington, MA. He gave invited lectures on his work on LVAD and energy sources to symposia throughout the world, including the Hastings Lecture to the National Heart, Lung, and Blood Institute of the NIH in 1984. In 1985, he was honored by the Congressional Institute for Space, Science, and Technology of the U.S. House of Representatives for his contributions to biomedical engineering, biological science, and medicine. On the occasion of his death in 2014,

his home town of Charleston named a two-block segment of a downtown street John Norman Street to honor a father who built much of the Black part of its business district and the son who contributed so much to cardiac surgery.[14]

Black Medical Education

Organ noted that any profile of Norman needed to include the latter's writings on Black medical education. While at Harvard, Norman was asked about the status of minority faculty and students at the school. "I didn't know much about the subject," he said, "since there were no minority students or residents, and the minority faculty could be counted on one hand."[1]

To address the problem, in 1969 Norman and organizers from Harvard, the Boston *Globe*, and federal health agencies convened a national conference. Invited participants included deans of medical schools, members of Congress, and other national leaders of health-related institutes. Called the National Conference for Medicine in the Ghetto, Norman gave the introductory address, "Medicine in the Ghetto," that later was published in the *New England Journal of Medicine*. He outlined the history of Black people in America and the genesis of health inequities to that time, specifically addressing medical care and education.[15]

The immediate result of Norman's conference was the admission of 17 Black students in the entering class of Harvard Medical School in the fall of 1969. Until then, there were never more than two Black students in any given year. It was in this context that he gave his orientation address to the incoming Black students at Harvard. He was asked to speak to them about the problems that they might face during their medical education. Rather than make predictions, he instead begged the question.

> *It remains to be demonstrated what these problems will be. The minority group members of this class of 1973 represent the first serious effort of our medical school, after 200 years, to produce such personnel… the Harvard Medical School, thus far, has tolerated, if not created, an institutional structure whose outcome has denied the existence of the Negro.*[13]

Norman closed his address at the National Conference for Medicine in the Ghetto with the following observation on the social consequences of racism in medicine.

> *The medical problems of the ghetto have evolved and exist as monuments to one of the most unjust aspects of our society.… They will continue to exist and increase until we realize that outward appearances belie ambitions, motivations, aspirations, anxieties, and capabilities. They will continue to exist and increase until all of us realize that each little yellow, white, red, black, or brown baby represents the hopes and fears of generations, and that the future of each is predicated one equal measures of opportunity, challenge, empathy, understanding, compassion, and dignity.*[15]

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Legends

1. John C. Norman, 1968. Smithsonian Institution Archives, Science Service records, image no. SIA2009-0589.

2. John C. Norman, Jr., Doris Sewell Norman, Ruth Norman, and John C. Norman, Sr., on the Harvard campus at his graduation from Harvard Medical School, 1954. Norman family collection, West Virginia State Archives.

3. John C. Norman with beagle subjects undergoing spleen transplantation for canine hemophilia, 1968. Smithsonian Institution Archives, Science Service records, image no. SIA2009-0588.

Samuel Kountz, MD, FACS: Transplantation Pioneer

Erin Chang, MD; Kaylene Barrera, MD; Lisa Dresner, MD, FACS; Gainosuke Sugiyama, MD, FACS; and Devon John, MD, FACS

This is an edited version of an article that was previously published as part of a collection of papers from the poster competition of the Clinical Congress of the American College of Surgeons, October 16–20, 2016, Washington, DC.

Samuel Kountz, MD, FACS, had spectacular professional career in renal transplantation in a life tragically cut short by a debilitating illness and early death at age 51 (Figures 1 and 2). He performed groundbreaking research in organ preservation and the management of graft rejection. As chair of surgery at Downstate Medical Center in Brooklyn, he created a leading transplant center in an inner-city hospital. He supported nationwide reforms to assure that minority and underserved populations had access to renal replacement therapy and transplantation.[1]

Early Life and Education

Born in Lexa, AR, on October 20, 1930, Kountz was one of two Black students to graduate from the University of Arkansas School of Medicine in 1958. During his residency at Stanford University in 1961, he became the protégé of Roy Cohn, MD, FACS, chair of the department of surgery there. Together, they went to St. Bartholomew's Hospital in London under a Rockefeller Foundation grant to study transplantation (1962–1963).[2]

Under a Giannini Fellowship Award, Kountz went on to conduct research in transplantation and immunology at Hammersmith Hospital in London.[3]

Revolutionizing Renal Transplantation

Kountz was appointed Assistant Professor of Surgery at Stanford after residency training. Under an appointment as a Fulbright Scholar, he performed Egypt's first kidney transplant in 1965.[3] Folkert Belzer, MD, FACS, recruited him across town to the University of California, San Francisco (UCSF) to serve as his associate and assist in the development of a renal transplantation team that performed more than 200 renal transplants, researched tissue typing, and developed standard procedures to prevent and treat graft rejection. Their most enduring contributions were in the area of organ preservation. Their work led to preservation solutions and perfusion devices that are part of standard procedures in renal transplantation today.[4]

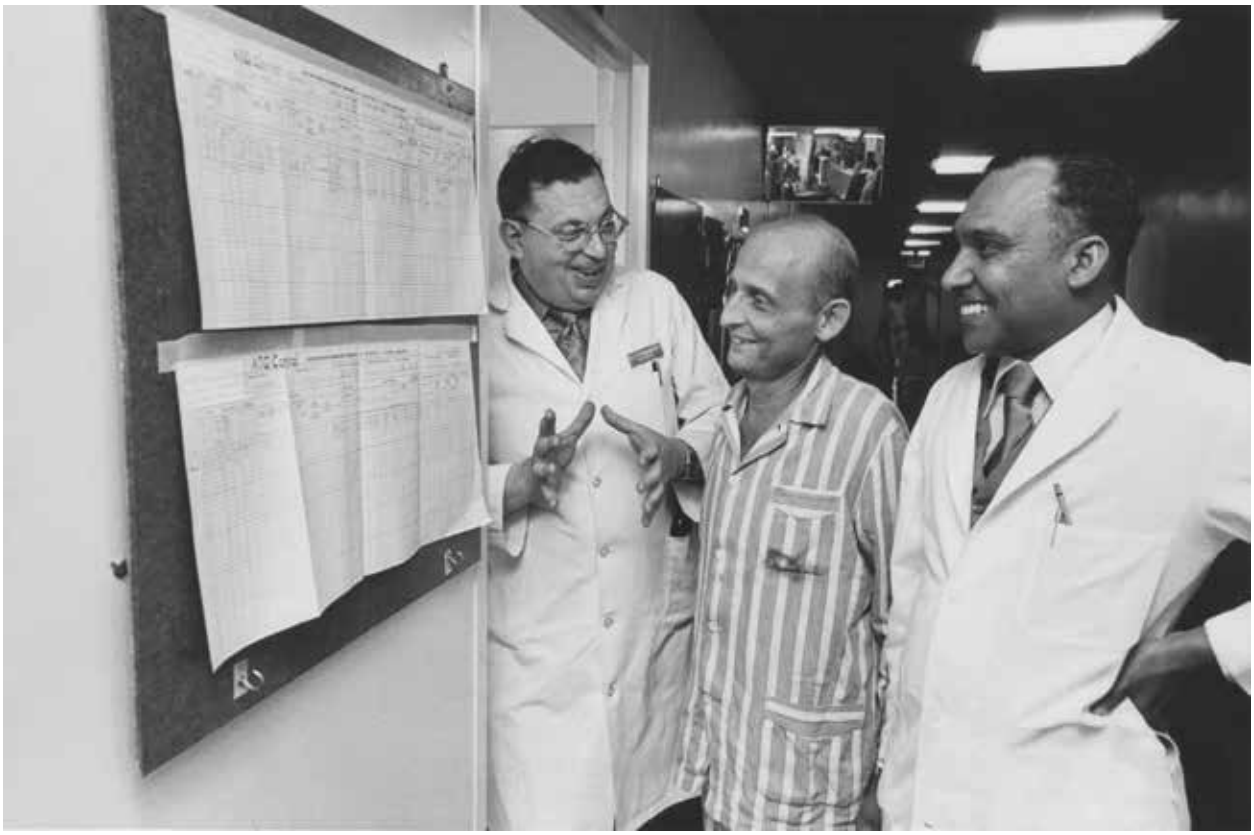

Figure 1

Leader in Surgery and Transplantation

Kountz earned an international reputation in academic surgery and transplantation. He published 154 peer-reviewed articles, with key research in nearly every area important to clinical renal transplantation: donor tissue typing,[4] use of methylprednisolone to prevent acute renal allograft rejection,[5] measurement of GFR and creatinine in monitoring for allograft rejection,[6] and preservation of deceased donor kidneys.[7]

He was named president of the Society of University Surgeons and received honorary doctorates from the University of Arkansas and UCSF. In 1972, he was named chair of surgery at Downstate Medical Center in Brooklyn. He transformed an inner-city facility into a leading transplant center.[3] With Kountz as its chief of surgery, the hospital performed more than 500 transplantations, making Downstate one of the busiest transplant centers in the nation.[8]

In an era where the high cost of transplantation made it unavailable to the urban poor, especially the Black community, Kountz used his fame to support federal funding for the treatment of end-stage renal disease, including kidney transplantation.[9] As part of his campaign to increase awareness of the need for living donors in renal transplantation, Kountz performed a living donor renal transplant on NBC's *Today* television show in 1976. After its airing, nearly 20,000 people offered to serve as living donors nationwide.[3]

A Lasting Legacy

Kountz died in 1981 after a debilitating illness contracted during a visiting professorship in South Africa in 1977.[8] Remembered by colleagues long after his death, his legacy continues in schools, scholarships, and awards named in his honor. The NAACP presents an annual Afro-Academic, Technological, and Scientific Olympic program award in his memory.[3]

Acknowledgments

The authors thank Drs. David Kountz, Oscar Salvatierra, and Eli Friedman for their personal remembrances.

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Figure 2

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Legends

1. Samuel Kountz (right) with colleagues making rounds. Courtesy Archives and Special Collections of the Medical Research Library at SUNY Downstate Health Sciences University.

2. Kountz at surgery. Courtesy Archives and Special Collections of the Medical Research Library at SUNY Downstate Health Sciences University.

Patricia Bath, MD: "Eyesight Is a Human Right"

Don K. Nakayama, MD, MBA, FACS

Patricia Bath (1942–2019, Figure 1), a pioneer in the use laser phacoemulsification in cataract surgery (Laserphaco Probe, 1988),[1] was a leading activist for the treatment of blindness among Black people in the U.S. She was only 35 and just starting her career in ophthalmology in 1977 when she published her landmark paper on the disparity of prevalence of blindness among Blacks (more than twice that of whites), especially the major preventable causes of blindness such as glaucoma (eight times higher) and cataracts (more than twice) in the *Journal of the National Medical Association*.

Figure 1

Bath created the discipline of community ophthalmology, an interdisciplinary approach to ophthalmologic disease using trained volunteers to conduct vision screening in a public health campaign to address blindness in underserved communities.[2] In this chapter, an oral history conducted by Larry Crowe of the Black oral history archive, *The HistoryMakers*, is the source of all quotations and remembrances of Bath's childhood and early education except where otherwise referenced.[3]

Childhood and Early Education

Bath's mother grew up in North Carolina where her family claimed both African and Cherokee heritage. As a teenager, she escaped the South to live with relatives in Harlem, NY. She never finished high school and spent her life as a domestic worker. "She was very proud to scrub floors so that my brother and I could get a good education," Bath said.

Bath's father, Rupert Bath, descended from Jonas Mohammed Bath, a Mandingo sultan who was able to buy his freedom and emigrate to Trinidad. Rupert was schooled in social activism, a pupil of Eric Williams, the leader of the Trinidad independence movement and first prime minister of Trinidad and Tobago. Rupert immigrated to Harlem, where he took the entrance exam to be a

motorman with the Interborough Rapid Transit Company (IRT) and got a perfect score. Denied the position because of his race, he became the first Black motorman on the IRT subway system after 15 years of litigation on his behalf by the NAACP Legal Defense Fund. He later was active in the unionization of New York's subway workers.

Rupert eventually became a merchant seaman. Between the parents' jobs, the Bath family had enough money to live comfortably in a roomy apartment in Harlem near other relatives who had settled there. Bath's father kept an antique mahogany bookcase that included works of Shakespeare and a 78-rpm phonograph with an eclectic collection of classical music and calypso. Her neighbors were similarly varied, and included the families of physicians, merchants, steelworkers, and taxi drivers living in proximity, in part because of the *de facto* segregation of Blacks in inner-city New York.

"Education was a priority in my family," Bath said. "One had to strive to do one's very best. Although we were a poor family, both of my parents worked and they both felt that education would be the ticket to success."[4] At P.S. 68 she got a role in the Gilbert and Sullivan operetta *H.M.S. Pinafore* because she was a good reader and could memorize her lines. In middle school, she remembered a teacher, Mildred Miller, who had a formative effect on her education. "She helped me understand disciplined thinking and orderly and logical thought," Bath said. "I said, 'Wow, this is important.'"

There were no public high schools in Harlem, so she attended the Charles Evans Hughes High School on 18th Street in Chelsea. She was assigned a curriculum that nurtured her aptitude in science and mathematics. She won first place at a science fair for her derivation of a mathematical equation that predicted cancer growth. The prize, a National Science Foundation research fellowship, placed her in a laboratory at Yeshiva University, where she helped devise a bacteriological assay for *Pseudomonas aeruginosa*.

College and Medical School

Her grades guaranteed her a place at Hunter College, a women's college under the City University of New York system. She was offered a scholarship, but her father decided she didn't need it—the family had already paid for the books, the tuition was free, and she lived at home.

She had aspired to become a physician since grade school, so she took pre-med courses and graduated with a major in chemistry (1964). She joined the Alpha Kappa Alpha sorority, a Black Greek-letter service organization. Elected an officer of its national organization and the sole undergraduate on its board of directors, she got to introduce Dr. Martin Luther King, Jr., as speaker at one of the annual meetings of the sorority. "It was a brief interaction—minutes—but he was the type of charismatic person that could change your whole perspective," Bath said. "It had a great effect on me."

She applied to the New York medical schools and the Howard University School of Medicine. Bath was rejected by all of the New York schools. "I remember getting a letter from Downstate [SUNY Downstate College of Medicine, Brooklyn] saying I had great grades," she said. "The interviewer said, 'She has a twinkle in her eye.' But they didn't want to give me the spot because I was a woman."

She was accepted, however, to Howard. Her class was their first where a substantial portion was made up of women. "I was happy to be in that group," she said. "It was the first time I had professors that looked like me." At Howard, Bath, like so many other students, was inspired by LaSalle Leffall, Jr. "He was certainly a role model and mentor and instrumental in me choosing a surgical specialty as a career," she said.

What attracted Bath to the eye was its delicate internal anatomy, the precision of ophthalmologic operations, and the dramatic effect curing blindness had on patients. She met Lois Young, acting chief of ophthalmology at Howard, who inspired her and several classmates to enter the specialty. "She had the same levels of brilliance and skill as a

surgeon as Dr. Leffall," Bath said. "She was gifted, compassionate, and a wonderful human being. We admired her as a woman, too. She had style and beauty, and we admired her both as a woman and as an ophthalmologist."

Figure 2

Disparities in Blindness and Eye Care

During medical school, she and her classmates founded the Howard chapter of the Student National Medical Association. Bath served as one of the group's first presidents. In 1968, she organized students to help provide health services during the Poor People's Campaign in Resurrection City, an encampment near the Lincoln Memorial that was organized by King before his death to dramatize poverty among American Blacks.[4]

After taking her degree in medicine in 1968, she did an internship at Harlem Hospital, which was affiliated with the Columbia University College of Physicians and Surgeons in New York. It was one of her goals as a doctor. "I always had planned to go back to the community I was raised in and give back," she said.

Her training and early career in ophthalmology was summarized in her profile on the National Library of Medicine website celebrating prominent American women in the history of medicine.[5] After her internship, she took a year in ophthalmology at Columbia where she covered two clinics, one at the Presbyterian Hospital campus in Washington Heights and the other at Harlem Hospital. At Harlem half of her patients were either blind or visually impaired, while very few of the patients in Washington Heights had lost their sight. Many of her Black patients in Harlem suffered from glaucoma and cataracts, conditions that were preventable and treatable had they received proper care.

Bath persuaded her professors at Columbia to perform eye operations on Harlem Hospital patients on site, offering to assist on the procedures. They agreed, and the first major eye operation was performed at Harlem Hospital in 1970.

The differences in the prevalence of blindness at her clinics and the obvious lack of care at Harlem Hospital led her to look into the problem in depth. Blindness registries kept track of those eligible to receive tax deductions. Without access to computers, she painstakingly recorded the data by hand.[4] She confirmed what she had encountered during her training: the prevalence of blindness among Blacks was twice that compared with whites (252.7 per 100,000 in 1970, compared with 127.1, respectively), with preventable and treatable causes of blindness showing the same racial disparity (glaucoma, 6.5 per 100,000 for Blacks, 0.8 for whites; cataracts, 4.1 and 1.8, respectively).[2]

To Bath it was a public health issue, so she presented her findings at the annual meeting of the American Public Health Association in 1976. The attendees were surprised to find an ophthalmology trainee at a meeting of public health specialists. But her data were solid, and the validity of her conclusions was recognized.[4]

She initiated an outreach program to underserved largely minority communities to provide basic eye care, which she called community ophthalmology. Volunteers trained in screening ophthalmologic

examinations visited senior centers and adult daycare programs. They screened for cataracts and glaucoma and referred those who needed treatment. The community ophthalmology model has been repeated throughout the U.S. and around the world, treating ophthalmological conditions and providing corrective glasses to thousands of adults and schoolchildren.

In 1976, she and her colleagues organized the American Institute for the Prevention of Blindness, an organization to provide primary eye care to all people regardless of their race or economic status, under the guiding principle that "eyesight is a human right."[5]

Laser Cataract Surgery

She completed her training in ophthalmology at the New York Hospital from 1970 to 1973 as the program's first Black female resident. In 1974, she was appointed assistant professor of ophthalmology at the University of California, Los Angeles (UCLA), and the Charles R. Drew Postgraduate Medical School in Los Angeles. The following year, she was appointed the first woman faculty member in the department of ophthalmology at the Jules Stein Eye Institute at UCLA. First offered an office in the basement next to the lab animal facility, she refused the arrangement and got a standard office. In 1983, she was named program director of the residency in ophthalmology at the program at Drew-UCLA, the first Black woman to head a training program in the specialty (Figure 2).

In 1986, she took a sabbatical and studied with Danièle Aron-Rosa of the Rothschild Eye Institute in Paris, a pioneer in the use of lasers in ophthalmologic surgery (Figure 3). There, Bath began her work on laser cataract surgery, which she continued in Berlin at the Laser Medical Center. She and her colleagues devised a probe that used a laser to emulsify the cataract and an adjoining irrigation-aspiration system to remove the fragments.[1,6] Her device, for which she has five U.S. and three foreign patents (Canada, Europe, and Japan), was never commercially marketed. But the method of using laser phacoemulsification through a small incision was adapted widely and became one of the most innovative advances in cataract surgery.[7]

Figure 3

Legacy

Bath retired from clinical practice in 1993 and continued to lecture worldwide. In testimony before a Senate judiciary subcommittee on female inventors and American innovation she spoke on the barriers she faced in her career. "Sometimes I want to say to people, just look at my work. … I've had technological obstacles, scientific obstacles, and obstacles being a woman. Yes, I'm interested in equal opportunities, but my battles are in science."[8]

As significant as her far-reaching achievements in laser phacoemulsification, she had an equivalent and enduring impact in community ophthalmology. Her sense of social justice was nurtured in a working-class family in a segregated Harlem neighborhood, the New York City public school system, and medical school at Howard. With the same creativity she applied in laser technology on the eye she came up with an innovative approach to blindness among underserved communities that she first encountered as a young intern just starting her training.

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Legends

1. Patricia Bath. University of California, Los Angeles.

2. Bath, about 1980. Courtesy Eraka Bath, MD.

3. Bath (left) and her mentor in laser surgery, Danièle Aron-Rosa. Courtesy Eraka Bath, MD.

Andrea Hayes, MD, FACS, the World-Class Surgeon Who Couldn't Get a Fellowship Position

Don K. Nakayama, MD, MBA, FACS

Andrea Hayes, MD, FACS (Figure 1), today is at the top of her field of pediatric surgery, the world authority on pediatric surgical oncology, and advisor to the President on childhood cancer. Barely two decades ago, however, she failed three times trying to get a training position in her specialty. "You never want to blame it on your race," Hayes says, "but when you can't find another explanation, that's what you're left with."[1]

Figure 1

Hayes was born in Los Angeles, CA, in 1965. Her mother was a high school principal, and her father, a high school guidance counselor. "My mother tells me that from when I started talking I said I wanted to be a baby doctor," she said.[1] She went to Dartmouth for both her baccalaureate and medical degrees (Figure 2). She was inspired to go into surgery by Thomas Colacchio, MD, FACS, then a surgeon at Dartmouth-Hitchcock Medical Center and later president of the Dartmouth health system. When she was a fourth-year medical student she did a rotation in pediatric surgery at the Stanford University Medical Center under Stephen Shochat, MD, FACS, whose example inspired her to pursue the specialty.

In 1991, she returned to California to train in surgery at the East Bay surgical residency program in Oakland, CA, then affiliated with the University of California, Davis, under its legendary chair and program director, Claude Organ, Jr., MD, FACS, (the East Bay program is today affiliated with the University of California, San Francisco). The program had just consolidated three smaller programs (Alameda County Medical Center, Naval Hospital Oakland, and the Kaiser Permanente Medical Center) in 1990 and had no track record in placing residents into highly competitive specialty fellowships like pediatric surgery.

Organ knew that competition for a fellowship position in pediatric surgery would been keen, but he didn't flinch. He arranged for Hayes to work in a molecular biology research lab at the University of

California, San Francisco, during her residency to bolster her candidacy. However, she was rejected by all of the pediatric surgical fellowships she applied to despite her extra work.

Figure 2

Hayes was shocked. "When I didn't get in the first year, I went back to Dr. Organ," she said. "One of his colleagues told him, 'Well, you know the reason you're having trouble. There are none.' I said, 'What do you mean there are none?' And he said, 'There are no Black female pediatric surgeons, so it's going to be hard for you to get in.'"[2]

She couldn't believe what she had heard. "It's the 90s," she said to Organ. "It's not the 60s, it's not the 40s."[2]

Resolute in her plans to be a pediatric surgeon, she went through the annual application process twice more without success. She completed her residency (1998) and acquired additional training in pediatric surgical oncology at the St. Jude Children's Research Hospital (1998–2000) and in melanoma and sarcoma at the University of Texas MD Anderson Cancer Center (1999).

Her repeated failure to win a training position baffled her, as now she had publications and additional training in basic science and surgical oncology, an important subspecialty in the field. Her qualifications were by then equal to those who had won training positions with similar resumés.

Organ was also frustrated. Highly placed in American academic surgery, he had been chair of the department of surgery at Creighton University, the first Black person to head a major department in a predominately white medical school, and would be elected President of the American College of Surgeons in 2003 as the organization's second Black president. He called several pediatric surgical program directors directly. One was astonishingly candid. "Well, it's not her," he said. "It's just that I can't take a chance at training a Black woman."[2]

Hayes remembered her reaction. "It was the reality that it really was the color of my skin and not my abilities as a surgeon," she said.[2]

Whatever was done, in 2000 she secured a training position at the Hospital for Sick Children in Toronto, completing her training in 2002. "It confirmed that I was doing the work God had put me here to do," Hayes said.[2]

She started her career in pediatric surgery at George Washington University (2000–2004), then moved to the University of Texas Medical School (2004–2018) and the MD Anderson Cancer Center (2005–2018), where she began in earnest her work in pediatric surgical oncology.

In 2006, she started to implement hyperthermic intraperitoneal chemotherapy (HIPEC) for the first time in a pediatric patient, a treatment developed for adult cancers. Hayes was inspired in part by a patient she cared for when she was at St Jude's as she waited for an opportunity to train in pediatric surgery.

The patient was a 12-year-old boy who had desmoplastic small round cell tumor (DSRCT), a rare cancer that presents as a large mass often arising from the pelvis with hundreds of peritoneal and omental metastases spreading throughout

the abdomen. At that time, there was no surgical option; specifically, the sheer number of tiny metastases defied resection. The only option was systemic chemotherapy and whole abdomen radiation therapy, a solely palliative therapy with a dismal 2-year survival of only 5 percent. If that.

Hayes, still a trainee, was sent to inform the boy's mother of the bad news, that surgical resection was not an option. "Talking to his mother was the worst feeling in the world," she said.[3]

She had gone into surgery to save lives. She happened to attend a conference where HIPEC for adult peritoneal carcinomatosis was discussed. Immediately, she recognized it as a possible option for children with DSRCT. She approached her colleagues in pediatric surgery and at MD Anderson, who tried to dissuade her. No one, anywhere, was doing pediatric HIPEC. There weren't enough patients to justify learning how to do it, and there wouldn't be enough patients to figure out complicated protocols to avoid the significant morbidities associated with the procedure. One of the dictums of pediatric surgery, "a child is not a small adult," applied on a number of levels. The cancers were different, no one knew whether they would respond to chemotherapeutic agents and what toxicities would be encountered.

Hayes decided to forge ahead, strengthened by her Christian faith (her degree at Dartmouth is in religious studies). "I really believe God put me here to do this," she said.[4] She learned the procedure from her colleagues in Houston. She went through the rigorous approval process for applying unproven technology and treatment regimens at MD Anderson.

When it came time for surgery, she had to learn that the tumors of DSRCT were flat, miliary lesions, and not the round nodules of most kinds of peritoneal metastases in adults. Worse, the lesions had microscopic extensions beyond what could be seen at operation and resections of the peritoneum had to be correspondingly more extensive.

Every detail of the administration of chemotherapy had to be figured out as well, and how to limit toxicity. The patients were sensitive to renal failure, a complication that caused her trial to be halted for several months until it could be worked out. She had to train her colleagues in pediatric critical care to care for her patients, who had just had surgery that routinely lasted more than 12 hours and sometimes took 36, over two sessions. All of the children needed advanced life support and careful monitoring for toxic effects of chemotherapy.

Modern cancer therapy involves trials that compare how hundreds of patients respond to stepwise improvements in care. There aren't enough patients with DSRCT to develop treatment regimens that way. Hayes had to build her experience patient by patient, one at a time, encountering each new complication as it occurred and making an improvement by modifying the care of the next case when it came around. In the process, she became the leading—and sole—expert in pediatric HIPEC and the world authority on DSRCT.[5] By 2018, she reported a phase 2 clinical trial with a 79 percent 3-year survival rate.[6] By the end of 2020, she performed nearly 200 pediatric HIPEC operations, orders of magnitude more than any surgeon in the world. She teaches the procedure in major pediatric surgical centers in the U.S. and foreign countries.

She also gained expertise in all areas of surgical oncology, becoming one of the international experts in childhood cancer. In 2018 she moved to Chapel Hill at the University of North Carolina School of Medicine, where she was the Byah Thompson-Doxey Distinguished Professor in the department of surgery and surgeon-in-chief to the North Carolina Children's Hospital (Figure 3), she has national advisory positions on the National Cancer Advisory Board (appointed by President Donald Trump) and the Childhood Cancer Advisory Committee of the National Academies of Sciences, Engineering, and Medicine. While at MD Anderson she was recognized with the president's award for faculty excellence.

She has leadership positions with her specialty associations, including membership on the Board of Governors of the American College of Surgeons

and the American Pediatric Surgical Association. She is section editor for pediatric surgical oncology for the *Annals of Surgical Oncology.* In 2020, she was elected president of the Society of Black Academic Surgeons.

Figure 3

She maintains a basic research laboratory investigating tumor progression and metastasis in murine models of sarcoma and DSRCT. She leads international studies on rhabdomyosarcoma and soft tissue sarcomas.

L.D. Britt, MD, MPH, DSc(Hon), FACS, FCCM, FRCSEng(Hon), FRCSEd(Hon), FWACS(Hon), FRCSI(Hon), FCS(SA)(Hon), FRCS(Glasg)(Hon), MAMSE, Past-President of the American College of Surgeons and chair of surgery at the Eastern Virginia Medical School in Norfolk, describes Dr. Hayes quite simply: "Innovative," he says. "She is the consummate role model. Her star will continue to rise."[1]

In 2021 she was named chair of the department of surgery at Howard University.

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Legends

1. Andrea Hayes at MD Anderson Cancer Center. UNC Department of Surgery.
2. Hayes at graduation from Dartmouth Medical School. Photo courtesy of Dr. Hayes.
3. Andrea Hayes with her mother, Delia Anita Hayes (age 81), and grandmother, Etta Gwen Williams (age 102), on the occasion of her installation as Byah Thompson-Doxey Distinguished Professor in the Department of Surgery at the University of North Carolina at Chapel Hill. UNC Department of Surgery. Photo by Paul Braly.

Surgical Allies

Louis T. Wright, MD, FACS, and Henry W. Cave, MD, FACS: How They Paved the Way for Fellowships for Black Surgeons

John S. O'Shea, MD, FACS

This is an edited version of an article that appeared in the *Bulletin of the American College of Surgeons* (2005;90[10]:22–29).

The 1912 Clinical Congress in Philadelphia was attended by Dr. A. Wilberforce Williams, a Black surgeon from Chicago, IL, who expressed regret that "more of his race had not taken advantage of the opportunity to keep in touch with the latest discoveries in the surgical world."[1] His attendance at the meeting marked the beginning of a relationship between the American College of Surgeons (ACS) and Black surgeons.[1] In many ways, the history of this relationship parallels the story of many U.S. institutions of national scope and is not unlike the story of U.S. democracy.

A basic motivation for the founding of the ACS was to bring equality to surgical education, making scientific and clinical advances available not only to academic elites but also to all those involved in the practice of surgery in all regions of the country. The early efforts to achieve this goal, however, confronted social, cultural, and economic realities and compromises that threatened to make surgical education for all an incompletely fulfilled promise.

Sixty years ago, through leadership and cooperation—most notably through the efforts of Louis T. Wright, MD, FACS, and Henry W. Cave, MD, FACS, the College took a major step toward satisfying that promise, a decision that has been equally beneficial to the College and to all surgeons and their patients.

Daniel Hale Williams, the First Black Fellow of the ACS

Daniel Hale Williams, MD, FACS, of Chicago, IL, was the first Black surgeon to be admitted to Fellowship in the College (see Chapter 10 for a profile of Williams and his accomplishments). Born in Pennsylvania in 1858, he received his medical degree from Chicago Medical School (now Northwestern University) in 1883. Dr. Williams gained notoriety in 1897 as only the second surgeon in the U.S. to report the successful repair of a stab wound to the pericardium. In 1902, he reported one of the earliest successful attempts at splenorrhaphy. He also left his mark on hospital administration when he founded Provident Hospital and its affiliated training school in 1891,[2] responding to a need in Chicago for an interracial institution to provide care for Black patients, opportunities for hospital staff appointments for Black physicians, and educational possibilities for Black nursing students.

Among the surgeons listed as references on Dr. Williams's application to the ACS were founding members of the College: Drs. J. B. Murphy, Albert

Ochsner, and Franklin Martin (all MD, FACS). Dr. Murphy wrote that Dr. Williams "has had great experience and a studious career, surgical standing far above the average. Moral standing exceptional. Ethical standing perfectly good."

When the list of initiates for the first Convocation was presented by Dr. Martin, Dr. Williams's application generated considerable discussion among the Regents. The discussion was partly, though not entirely, divided along North-South sectional lines. At least one Southern surgeon expressed a strong opinion that recognizing Dr. Williams as a Fellow and the notoriety that would follow would be a source of considerable social problems. Most of the Regents, however, fully supported the application, and one—Alton Ochsner, MD, FACS—threatened to resign from the College if Dr. Williams was not accepted.[3] Dr. Williams's application was accepted in 1913.

These discussions addressed fundamental questions regarding the future direction of the ACS. If the College was to become a scientifically based organization committed to the advancement of the profession of surgery, racial and cultural issues should not be problematic. The number of Black surgeons who applied to the College in the first several decades of its existence is difficult to know for certain, as the official policy was to not record the race of applicants or Fellows.

However, records show that at least 35 applications from Blacks surgeons were received from 1913 through 1944, of whom only one, in 1934, was accepted for Fellowship on initial application. Five of these applications were noted as "not submitted to local credentials committee," possibly because of insufficient credentials, and two of the applicants were clearly rejected on the basis of not being primarily engaged in the practice of surgery.

Of the remaining applicants, however, most possessed excellent or, in many cases, outstanding credentials, and six were board-certified in a surgical specialty. Furthermore, among the applicants in the early 1940s, many were officers who had served during World War II, including a graduate of the distinguished Tuskegee Army Flying School.[4]

The only Black surgeon to be accepted for Fellowship during these years was Louis T. Wright, MD, FACS, a man who not only was an outstanding surgeon but also contributed enormously to the struggle for racial equality, leaving a legacy that advanced the goal of fair and full access of opportunity to Black patients, medical students, physicians, and nurses to all aspects of the U.S. health care system.

Louis T. Wright, the Second Black Fellow of the ACS

Louis Tompkins Wright (Figure 1) was born in 1891 in La Grange, GA, and in his early years was exposed to what must have seemed contradictory influences (see Chapter 18 for a complete summary of Wright and his accomplishments). He witnessed not only the worst of racial bigotry and hatred but also the achievements that could be realized, regardless of color, through talent and industry. Although two of his grandfathers were prominent white men, Dr. Wright's father, Ceah Ketcham Wright, was born into slavery. Possessed of extraordinary abilities and aptitude, Ceah Wright managed to obtain a medical education, graduating as valedictorian from Meharry Medical School in 1883. By the time he married Louis's mother, Lula Tompkins, Ceah had given up the practice of medicine to become a full-time minister in the Methodist Episcopal Church. He died at age 41, when Louis was four years of age.

By the time Louis was eight, Lula had remarried, again to a physician—Dr. William Fletcher Penn, Yale University's first African American medical graduate, who would tremendously influence Louis' formative years. Being the grandson of prominent white men and the son and stepson of Black men of extraordinary achievement did not insulate Wright from the worst of racism in the South in the early 20th century. In addition to observing lynching and chain gangs as a small boy, at the age of 15 he witnessed the 1907 Atlanta riot from his front door, where his stepfather had stationed him, Winchester rifle in hand, with instructions to

shoot anyone who attempted to enter. The family was rescued by a white neighbor, who hid them to escape the threat of being shot or lynched.[5]

Figure 1

Having graduated as class valedictorian from Clark University in Atlanta in 1911, confident in his abilities and encouraged by his stepfather, Wright applied to Harvard Medical School. When he presented himself at Harvard, the dean of the medical school, Dr. Channing Frothingham, realized that Wright had graduated from the Clark University in Atlanta, a school that offered elementary, high school, and university instruction to Blacks—not the Clark University in Worcester, MA—and was rather amazed that a student from "one of those funny little schools" would consider applying to Harvard.[5]

Convincing Dr. Frothingham to at least test his abilities, Wright was referred to Dr. Otto Folin, professor of biochemistry, who, after a reportedly heated oral examination, told his secretary to let the admissions committee know that "Mr. Wright has had adequate chemistry for admission to this school."[5]

During his student years at Harvard, Wright displayed the courage of conviction and an activism against racial inequality that he would develop throughout his life. In April of his final year of schooling, he missed three weeks in order to demonstrate against the Boston showing of *The Birth of a Nation*, the D. W. Griffith film that glorified the role of the Ku Klux Klan in the U.S. Wright was supported in these efforts by his teacher, the prominent surgeon Richard Cabot, MD.

In June of that year, Louis received his medical degree, graduating *cum laude* and ranking fourth in his class. He was also given the Hayden award for scholarship during his four years.[6] After his applications for internship at Massachusetts General Hospital, Boston City Hospital, and Peter Bent Brigham Hospital were rejected, Dr. Wright accepted a post at the Freedmen's Hospital in Washington, DC, a federally subsidized institution established under the accepted federal policy of "separate but equal."

Following a one-year rotating internship, Dr. Wright returned to Atlanta and joined his stepfather, quickly building a large clinical practice. Back home, he continued to face the expected discrimination from whites. But as a member of the Black medical community, he was now ostracized by a group of Black physicians, mainly from Meharry, who resented Black graduates from Northern medical schools.

In 1917, Dr. Wright was commissioned as first lieutenant in the U.S. Army Medical Corps, 367th Infantry Regiment, 92nd Division, stationed in France. He was placed in charge of the surgical wards at Field Hospital 366 and was discharged as a captain, receiving the Purple Heart following a German assault with phosgene gas. Upon discharge he settled in New York City and opened an office for the general practice of surgery on Seventh Avenue in Harlem.

Henry W. Cave—An Unlikely Ally

At a casual glance, Henry Wisdom Cave, MD, FACS, (Figure 2) may not have seemed an obvious candidate to champion the cause of Black surgeons. By all accounts, he was a true "white Southern gentleman." Dr. Cave was born in Paducah, KY, in 1887, the son of Edward Cave, a Presbyterian minister from Virginia, and Nell Wisdom, a native of Tennessee. He graduated from Central University of Kentucky in 1909 and received his medical degree from Johns Hopkins University in 1913, where, as a student and during his internship, he came under the tutelage of Dr. William Stewart Halsted.

Figure 2

After a short period of study abroad, Cave joined the staff of Roosevelt Hospital in New York City in 1915, where he would remain for the rest of his career. Like Dr. Wright, Dr. Cave served with distinction in World War I as a captain with Base Hospital No. 15 (Roosevelt-Mackay Unit), stationed in Chaumont, France.

Though transplanted to the North, there was much of Dr. Cave's life that remained classically Southern. He married Mary Thompson of Texas, the daughter of a distinguished professor of surgery. The couple built a country home in Wilton, CT, high on a hill, from which, on special occasions, a huge silk Confederate flag was prominently displayed.[8]

"Fellowship in the College is not being conferred on members of the Negro race at the present time."

The admission of Dr. Wright to ACS Fellowship in 1934 generated a considerable firestorm of debate, much like what had followed the admission of Dr. Williams in 1913. Faced with possible disapproval by a substantial number of Fellows, the College initially tried to avoid a head-on confrontation. As in any federated organization, including the U.S. government, central policies can be subject to considerable variation on the state and local level. This was the case in both the American Medical Association (AMA) and the ACS, where more subjective judgments such as the "moral and ethical standards" of the applicant were left largely to state and local credentials committees.

By the late 1930s, however, many national medical organizations had to deal with the issue of the exclusion of Black doctors from their memberships. In 1939, the Medical Society of the State of New York urged that membership in the AMA not be denied solely on the basis of race, color, or creed in a resolution published in the *Journal of the American Medical Association*. The AMA thus was publicly challenged to reexamine its policies with regard to admission of minority applicants.

In the face of the increasing awareness of racial and religious (but, as yet, not gender) discrimination, the ACS also felt the need to make a formal statement regarding eligibility for admission to Fellowship. In 1939, the Board of Regents unanimously adopted the following resolution: "Be it resolved that no applicant shall be granted fellowship in the American College of Surgeons whose admission would be injurious to the good order, peace, or interest of the College, or derogatory to its dignity, or inconsistent with its

purposes."[7] In other words, the College refused to directly address the eligibility of Black surgeons as Fellows of the College and allowed themselves latitude to refuse membership should the furor of opposition be too strong.

Black surgeons continued to apply to the College in the early 1940s, and the ambiguity of the formal statement from the Board of Regents did little to defuse a growing controversy. Among those who were denied Fellowship during this period were Charles R. Drew, MD, chair of the department of surgery at Howard University and chief surgeon at Freedmen's Hospital in Washington, DC; Peter Marshall Murray, MD, a well-known surgeon in New York City; and Lt. Col. Roscoe C. Giles, MD, chief surgeon at the military hospital at Ft. Huachuca, AZ, the historic base of the famed 10th Calvary Regiment—the all-Black Buffalo Soldiers of the American Frontier Wars in the American Southwest and Great Plains during the late 19th century.

Drs. Cave and Wright supported fellowship applications of several Black surgeons who were seeking staff privileges at New York City's Sydenham Hospital in 1941. Their candidacy for membership in the College was put off with an official response that the issue could not be addressed at the present time. (In 1943, Sydenham Hospital became the first fully integrated voluntary hospital in the country.) The inability of prominent Black surgeons to gain Fellowship resulted in an increasing amount of negative publicity for the College.

Responding to the difficulties faced by Drs. Drew, Murray, Giles, and others, Dr. Wright wrote a guest editorial that appeared in the Pittsburgh *Courier* on March 25, 1944, entitled "Your New York and Mine." Dr. Wright wrote that racism in American medicine societies was "harmful to the health of the American people, and the morale of millions of our soldiers." He suggested that the immediate correction of this attitude would "go a long way toward causing the colored doctor to think that the majority of his white professional brothers believes in democracy, and that racial distinctions cannot be justified in the art and science of surgery."

In May 1944, Drs. Cave, Ochsner, and Frederick Coller (all MD, FACS) were appointed to act as a "Committee on the Relation of the Colored Surgeon to the American College of Surgeons." Dr. Wright arranged for a meeting between Dr. Cave and a group of Black surgeons from New York City in order to get some idea of their professional qualifications, ethical standing, and "to attempt to ascertain why they seemed so anxious to become Fellows of the College."[9] Following the meeting, Dr. Wright prepared a list of 11 Black surgeons on the staff of Harlem Hospital, not including those working in surgical specialties, whom he believed met the requirements for Fellowship.

The College was now seriously addressing the issue, but Dr. Cave asked that Black surgeons be patient. He planned to attend the next meeting of the Southern Surgical Association in order to begin a process of "education and understanding" in the hopes of resolving the matter in an "evolutionary rather than a revolutionary manner."[10]

Before the problem could be adequately addressed, however, the issue was forced into stark relief in 1945. Rejection letters typically contained nonspecific language such as, "A decision has been reached not to confer this Fellowship at the present time," or, "Under the present ruling, you are not eligible for fellowship at the present time." In November 1944, Charles Bate of Tulsa, OK, received the following response to his request for an application to the Junior Candidate Group: "By action of the Board of Regents, colored surgeons are not being admitted to the College at the present time. However, the subject is now under consideration by a committee appointed by the Board." In addition, in April 1945, at least two applicants for Fellowship—J. Arthur Hibbler, MD, of Kansas City, MO, and George D. Thorne, MD, of New York, NY—received letters stating the following: "Pursuant to a resolution of the Board of Regents, Fellowship in the College is not being conferred on members of the Negro race at the present time. However, the Board has a committee now charged with the task of making a complete study of the situation for future consideration by the Board."[11]

The source of the specific language that gave the impression that a resolution barring Black surgeons from Fellowship had been adopted by the ACS is unclear. The College never had an official policy regarding admission of Black surgeons, and the most likely explanation is that an articulation of how to handle the situation on a temporary basis was incorporated into the letters.[12]

The College Integrates

If the intention was to obtain more time to resolve the matter in a gradual manner, the effect of the letters, especially the one sent to Drs. Hibbler and Thorne, was much the opposite, raising the volume and intensity of the negative publicity and making resolution of the matter more urgent. In February 1945, Malcolm T. MacEachern, MD, FACS, Associate Director of the ACS, responding to an inquiry from Mr. David Dorin, executive director of Sydenham Hospital, stated that the College had no policy barring Blacks from Fellowship. Following Dr. Thorne's rejection letter, Mr. Dorin again wrote to Dr. MacEachern, asking for clarification of these contradictory responses and a clear statement of the College's position.[13]

A number of newspapers throughout the country carried stories about the rejection of Dr. Thorne. Officials of the College found themselves responding to interview requests from national news organizations, including *Time* and the Associated Press. In June 1945, in order to get some idea of the opinions of the membership of the College regarding this issue, Dr. Cave sent a letter to a number of Fellows, which read, in part:

> *Unofficially, I am anxious to obtain opinions of various members of the College throughout the country about their feeling of having more colored surgeons as members. …It seems to me that the College is such an important national organization that the question of race, creed, or color should not enter into the matter if a candidate meets its qualifications. May I have your views in regard to this?*[14]

Of the 227 Fellows who responded, 201 were in favor of admitting qualified Black surgeons and 26 were opposed. Of more interest than the final count were the individual responses to Dr. Cave's letter, which can be roughly grouped into three categories. A small number were clearly racist in tone and content, citing a belief in either racial inequality or "the immutability of Southern mores."[15] A second group favored accepting Black surgeons on the basis of their scientific and clinical qualifications but believed that the social repercussions represented a potential problem, with a few suggesting remedies such as separate meetings or even a separate College. By far the largest group of respondents was clearly and strongly in favor of the free admission of qualified Black surgeons. Many of these letters admonished the College that not to do so would be undemocratic, un-American, and "publicly and scientifically indefensible."[16]

Dr. Cave presented the findings of his committee to the Board of Regents in June 1945, moving that the Regents act to admit to Fellowship, as a matter of policy, Black surgeons who met the qualifications. After his motion was seconded, the charged discussion that followed included an "emotional outburst" against the motion by James Mason, MD, FACS, of Birmingham, AL.[17] The Board then passed Dr. Cave's motion.

From then on, all applications to the College were carefully reviewed by the Central Credentials Committee to ensure that each was given fair consideration. At the 1945 Convocation of the ACS, four Black surgeons were initiated, in absentia, as Fellows: Drs. Peter Marshall Murray (New York City), Ulysses G. Dailey (Chicago), Roscoe C. Giles (Chicago), and Carl Glennis Roberts (Chicago).[18]

The first Black surgeon accepted for Fellowship from the Deep South was approved by the Alabama State Credentials Committee, chaired by Dr. Mason. (The meeting was also attended by a delegate from the Board of Regents.) In 1946, 10 Black surgeons were admitted to Fellowship, and the total admitted from the end of World War II through 1950 was at least 38.

The Legacies of Drs. Cave and Wright

Dr. Wright was personally aware of the harmful effects of a "separate but equal" approach to medical education on the health status of Blacks and worked tirelessly throughout his career for equal access to all aspects of the health care system. In 1931, he was the principal author of a widely read open letter opposing efforts by the Julius Rosenwald Fund to build an all-Black hospital in New York City. The letter was entitled "Equal Opportunity—No More—No Less."[19] That same year, he joined the board of directors of the National Association for the Advancement of Colored People (NAACP) and was named its chair in 1934.

In 1944, he formed the NAACP National Medical Committee, a group charged with fighting segregationist policies in health care legislation. Among the issues taken on by the committee was the Hill-Burton Hospital Survey and Construction Act of 1946, where they urged that federal funds be apportioned for the building of hospitals be available to Black and white patients alike. Much of the national health care program developed by the National Medical Committee of the NAACP became core elements of President Truman's Civil Rights Commission report, *To Secure These Rights*.[20]

Dr. Wright had a prolific career as a clinical surgeon and researcher, making a number of valuable contributions to the surgical literature. In 1952, the Louis T. Wright Library was established at Harlem Hospital. A testimonial banquet to inaugurate the library and honor Dr. Wright, held in April, was attended by more than 1,000 people, including Eleanor Roosevelt, who praised him for his contributions to the people of the United States. Dr. Wright died of a heart attack at his home in October 1952.

During a long and distinguished career, Dr. Cave served both his profession and the ACS. He was chief of the First Surgical Division at Roosevelt Hospital in New York, NY (1933–1953) and professor of clinical surgery at the Columbia University College of Physicians and Surgeons (1945–1953). Initiated as a Fellow in 1922, Dr. Cave served five terms as a member of the Board of Governors (1937–1953), was elected vice president (1939–1940), served on the Board of Regents (1940–1952), and was the 30th president of the College (1950–1951).

In February 1951, the Harlem Surgical Society honored Dr. Cave with a testimonial dinner held in the President's Room at the New York Academy of Medicine. Dr. Wright was among the many speakers that evening, noting that as the leader in the movement to open the doors of the ACS to qualified Black surgeons, Dr. Cave "did so not because they were Negroes, but because they were qualified surgeons and not to admit them was a handicap for both the surgeons and their patients." He went on to say, "Dr. Cave represents America, American surgery, and democracy at its best. He is, in the words of King Lear: 'One of God's spies who has taken upon himself the burden and the mystery of things.'"[21] Dr. Cave died at his New York home in May 1964.

A number of dynamics contributed to the opening of admissions to Fellowships for Black surgeons in the mid-1940s. One factor was recognition of the sacrifices and accomplishments made by African Americans in World War II, in combat as well as noncombat roles, including medicine. For example, Charles R. Drew, MD, FACS (his Fellowship was awarded posthumously—a rare honor), became a leading authority on the storage of large quantities of blood plasma in "blood banks" and organized the Blood Plasma for Great Britain Project in the early years of the war before entry of the U.S, into the conflict. (He resigned his official post to protest the insistence by government authorities on the separation of plasma pools according to race.)

Certainly, pressure from mounting negative publicity, especially following the rejection of Dr. Thorne, had a considerable effect. In addition, a growing number of people, including a majority of the College membership, simply concluded that discrimination had no place in an organization dedicated to education and clinical and scientific achievement.

The most important factor of all, however, was the leadership, cooperation, and courage of conviction shown by Drs. Wright and Cave. Although they had very disparate experiences of being born and raised in the South, their combined efforts for a common cause enabled the College to take a critical step toward becoming a truly American organization and making good on the promise of its founders to make surgical education equal. As the population of surgeons and their patients becomes ever more diverse, the legacy of Drs. Wright and Cave of equal opportunity can only increase in significance.

Author's Note: This article is dedicated to the memory of Claude H. Organ, Jr., MD, FACS, a former president of the College, who passed away June 18, 2005 (the year that this article was originally published). The author would like to acknowledge C. Rollins Hanlon, MD, FACS, for reviewing this article, and Susan Rishworth, ACS Archivist, for her assistance with research in the Archives.

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Legends

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Surgical Allies section photo: Hiraman/E+/Getty Images.

Ira Ferguson, Sr., MD, FACS, Asa Yancey, MD, FACS, and "the Other Tuskegee Experiment"

Charles M. Ferguson, MD, FACS, and Don K. Nakayama, MD, MBA, FACS

This is an edited excerpt from an article that originally appeared in the *Journal of the American College of Surgeons (J Am Coll Surg*. 2007;205[3]:501–509) by Dr Ferguson.

Ira Ferguson, Sr., MD, FACS, a white surgeon from the Deep South, and Asa Yancey, MD, FACS, a pioneer African American surgical educator, formed what outwardly might appear to be an unlikely partnership to develop surgical training programs aimed at Black surgical residents: first at the VA hospital in Tuskegee, AL, and later at the Hughes Spalding Pavilion of the Grady Hospital in Atlanta.[1]

After World War II, Ferguson, now a veteran of two overseas conflicts, returned home after three years' service in Italy as chief of surgery with Emory University's 43rd Base Hospital. At 49, rebuilding his practice was a challenge. To supplement his income, he took a position as a consultant to the VA. Among his duties was the inspection of VA facilities in the Southeast, including the segregated facility in Tuskegee for the care of Black veterans. The opening of the Tuskegee VA hospital in 1923 had sparked protests from the white community, including the burning of a 40-foot cross on its grounds.

Despite the four-hour drive from Atlanta, Ferguson formed a close association with the facility, regularly attending the annual meetings of the John A. Andrew Clinical Society held at Tuskegee, the major professional educational event for African American medical and surgical practitioners. He joined Charles Drew, MD, FACS, chair of surgery at Howard University and surgeon-in-chief at Freedmen's Hospital in Washington, DC, as one of the members of an advisory group to the dean of the VA facility. When it came time to appoint a new chief of surgery, Drew suggested one of his recent graduates, Asa Yancey.

Yancey was ready for the opportunity (see Chapter 24 for a more complete summary of Dr. Yancey's life). Upon his appointment as chief at Tuskegee, he wanted to emulate Drew and start a training program for African American surgeons. The lack of educational resources at the facility, however, threatened its approval as a training site by the American Board of Surgery.

Ferguson came up with a solution: a team from Emory to provide didactic education to Yancey's fledgling program and another program at Tuskegee in internal medicine. Once a week, a surgeon, an internist, and a basic scientist would take the long drive to Tuskegee from Atlanta and back for a session that lasted from 8:00 am to 4:00 pm. The training program was approved in 1948. According to Yancey, the educational sessions were a vital part of a program that trained more than 50 surgeons during his tenure.

Meanwhile, in Atlanta, a new facility for Grady Hospital was in its planning stages. Intended as a hospital to "nurse the poor and rich alike and… an asylum for African American and white," it was in fact a hospital for the poor, with segregated facilities and staffs. Yancey, asked for his views on the project, insisted that plans include the broader aims of education and training for Black students and resident physicians, as well as a practice facility for minority physicians and surgeons. Thus, the project was expanded to include the construction of a smaller hospital for the Black community as part of the project, "to care for Negro patients of means by Negro physicians." The facility, the Hughes Spalding Pavilion of Grady Memorial Hospital, opened in 1952 with Yancey as its director.

Once more he established a surgical training program, this time in Atlanta. Again, he got the assistance of Ferguson, who "knew where the keys were" to help Yancey's program gain access to Emory's medical library and surgical research laboratories at the site. His residents were accommodated in the "colored clinics" at Grady and given 12 beds at Spalding for their clinic patients. Seven residents completed their training before the program's accreditation was rejected by the American College of Surgeons and made obsolete by the integration of residency training programs after the Civil Rights Act of 1964.

In a turnabout that likely was delicious to Yancey, Emory residents had to rotate to Hughes Spalding for their gynecology experience until 1972. With integration, Yancey won appointment to the department of surgery at Emory as instructor in 1964, then advanced to full professorship in 1975. From 1972–1989 he was medical director of Grady and associate dean for the Emory University School of Medicine.

Ferguson remained on staff at Grady until his retirement in the late 1960s. He was popular among the Emory residents for his availability to help out when they needed his assistance, sometimes at the cost of his own practice. He also was promoted to full professor at Emory, despite having a bibliography of only six papers. It is easy to imagine that one paper gave him particular satisfaction—one of his coauthors was his son, Ira Ferguson, Jr., who was also a surgeon.

In a recent article Charles Ferguson, the grandson of the elder Ira Ferguson, mused why his grandfather, a man with deep roots in the Jim Crow South, would become an avid supporter of Yancey's educational programs devoted to the training of Black surgeons. "I believe it is because he had worked hard to overcome obstacles himself, and was compelled to make things easier for others," the youngest Ferguson wrote. The grandfather had a modest boyhood in Anniston, AL; served in WWI as a supply sergeant and medic with the ambulance corps on the front lines in France; worked his way through college and medical school doing janitorial work for the dean of the medical school; caught dogs ($1 per animal) and cats (25 cents each) for the physiology lab; and made ends meet during medical school by sharing a $6-a-week room in a boarding house and subsisting on meals of leftover soda crackers. One of his summer jobs was unloading bananas from ships in Mobile harbor on an otherwise all-Black work crew in the heat, humidity, and biting insects of the South. In work and at war, he saw the intrinsic humanity of all people of all races and creeds, and the experience without doubt guided the rest of his life.

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Martin L. Dalton, MD, FACS, and W. Lynn Weaver, MD, FACS

Don K. Nakayama, MD, MBA, FACS

Despite the differences in their skin color and cultural backgrounds, Martin L. Dalton, MD, FACS (Figure 1), and W. Lynn Weaver, MD, FACS, had a deep friendship that they sustained to their deaths (Dalton in 2018, Weaver just a year later). Both academic surgeons in the South, their friendship illustrates how goodwill can conquer racism.

Dalton held his slim frame tall and to his full height, his thinning crown of white hair accentuating his pale skin and light blue eyes. His high-pitched drawl revealed his upbringing in Columbus, GA, his baccalaureate at Auburn University (1953), a degree in medicine from the University of Alabama in Birmingham (1957), and training in surgery at the University of Mississippi. On the basis of his clinical reputation as a cardiothoracic surgeon and devotion to resident education, Dalton's election for membership in the elite surgical societies was a natural outcome in an era when the surgical establishment was overwhelmingly white and male.

His surgical upbringing was during the troubled decades of the civil rights movement, and in the states where it was the most contentious. As James Hardy's chief resident at Mississippi in 1963, he was responsible for the donor harvest in the attempt at the first human lung transplant. As he delivered the organ to his boss, he was called to the emergency department to attend to a Black man who had been shot in the chest. Dead on arrival, the victim was the civil rights martyr Medgar Evers (a story summarized in Chapter 17).

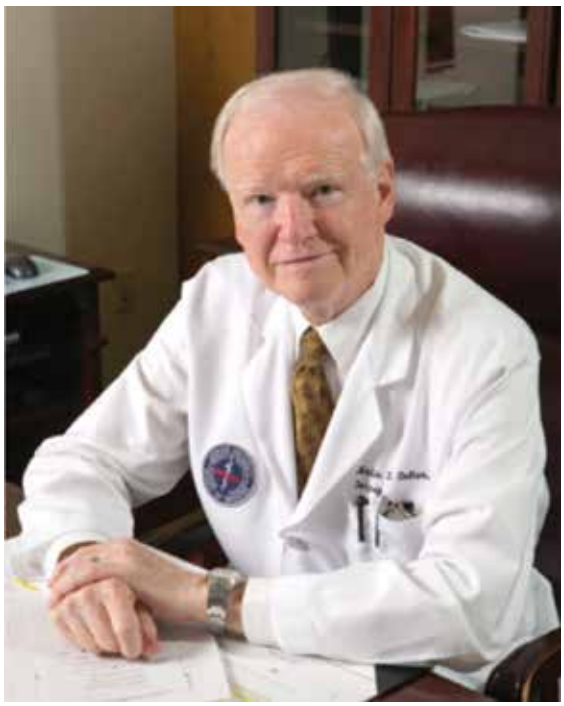

Figure 1

After service at Walter Reed and practice in Lubbock, TX, Dalton rejoined Hardy at Mississippi in 1983. In the two decades since he had last been in the state, the civil rights and the women's movements had changed society. There were more women and Blacks in the student body and residency program, changes that Hardy had already implemented. Without hesitation, Dalton embraced the new reality and would continue these policies at Mercer University in Macon, GA, where he went as chair of surgery and residency director in 1990, and later as dean of the medical school in 2006.

Dalton was a well-established figure in the Georgia surgical community when Weaver arrived in Atlanta in 1996 as the newly named chair of the department of surgery at the Morehouse University School of Medicine. (See Chapter 27 for a more complete profile of Dr. Weaver.) Weaver came from the opposite end of American society. Undersized for his dream of an NFL career, he might not have gone to college at all. One of his teachers—from his all-Black middle school, not the all-white high school that he and 14 other Black students had integrated in his hometown of Knoxville, TN—filled out the application and won Weaver a scholarship at Howard University. After graduating with an undergraduate degree in pharmacy in 1974, the military helped pay his way through Meharry Medical College (1978), then trained him in surgery at Denver and Tacoma. His early professional career was at military and VA hospitals as part of his service obligation.

Eddie Hoover, then chair of surgery at Meharry Medical College, recruited Weaver to join him. From there Weaver was recruited to Morehouse

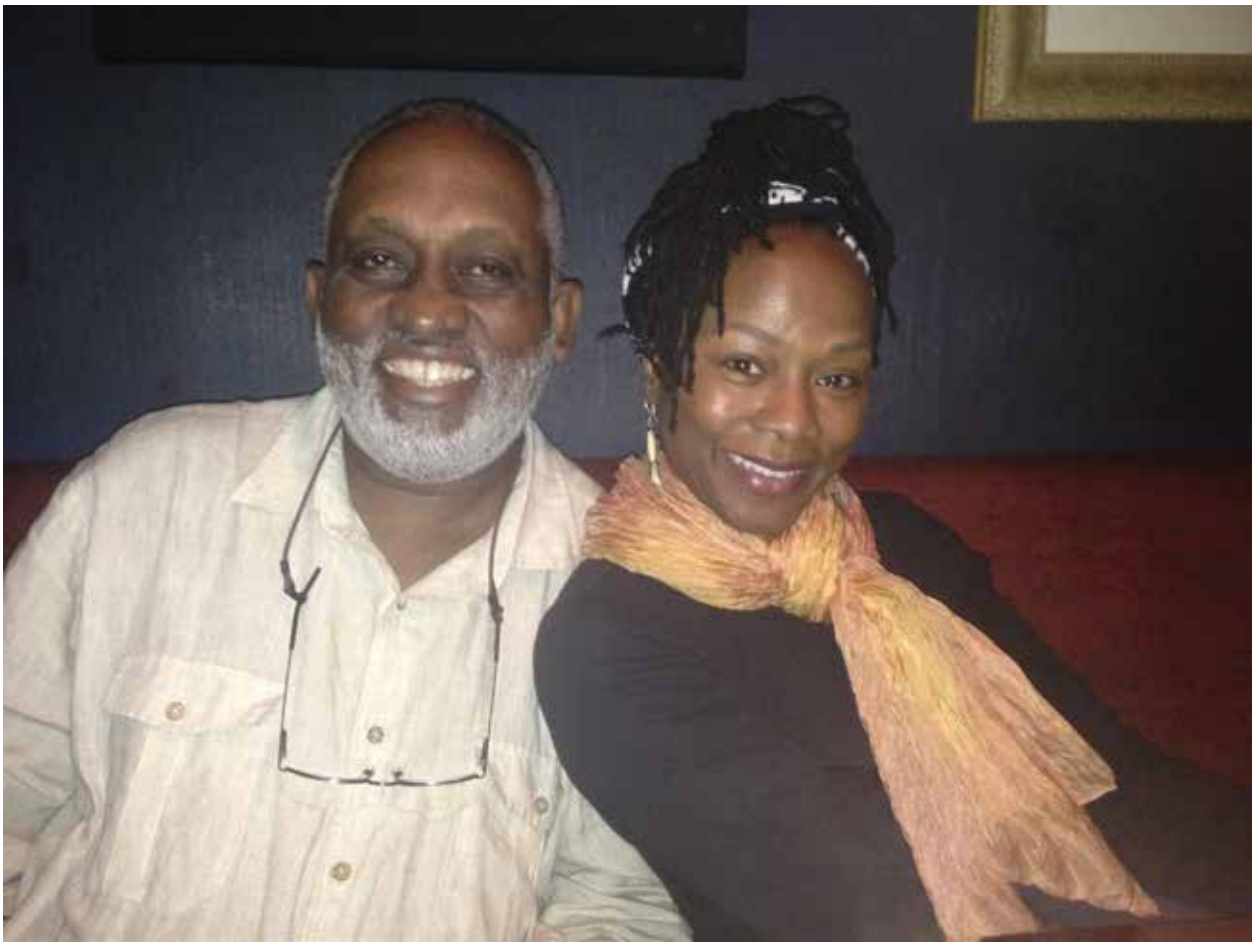

Figure 2

as chair and program director of its residency at Grady Memorial Hospital.

Weaver's major task was to revitalize the training program and develop a full-time academic faculty. Key to the endeavor was the establishment of clinical services in trauma, surgical oncology, and breast surgery at Grady, to be staffed by his own largely Black faculty and residents from Morehouse.

Academic chauvinism and institutional inertia threatened to thwart his project. Weaver's squat body had softened from his football-playing days, but he was still the hard-nosed linebacker who had fought prejudice all his life. His sense of fairness demanded that Morehouse have equal standing in a public facility used by Atlanta's inner-city Black community and whose nonprofessional staff was nearly 100 percent Black.

He found support from what outwardly might seem an unlikely source: Martin Dalton, just down the interstate in Macon. The new chief of surgery at the historically Black medical school got a call of welcome from the white elder statesman of Georgia surgery. They became fast friends. When Weaver needed encouragement in building his department, Dalton was there with advice and support.

While Weaver was already part of the national leadership in Black academic surgery, Dalton knew that the newcomer's success in Atlanta would be facilitated by good relationships with the close-knit Georgia surgical community. The white patrician guided the hardscrabble football player's entry into the proudly independent Georgia Surgical Society. Weaver's acceptance was so complete that he served as its president in 2005.

Dalton shepherded Weaver's candidacy for membership to the Southern Surgical Association, where Alice Dalton made sure that Kay Weaver was welcomed to all its social events (Figure 2). When another newcomer came to Georgia to succeed Dalton as chair at Mercer (when the latter was named dean of the university's school of medicine), Weaver, in today's parlance, "paid it forward" and made sure Dalton's successor, another member of a racial minority, was welcomed into the state's surgical community.

Before he died, Weaver was asked to speak on race and gender equity at a plenary session of the 2019 meeting of the Eastern Association for the Surgery of Trauma. It was his last academic presentation. Instead of the compelling stories of his upbringing in the South during the civil rights era, he decided to commemorate his relationship with Dalton and shared their story of how friendship and mentorship transcended race and culture.

Legends

1. Martin Dalton. Mercer University School of Medicine.

2. Kay and Lynn Weaver. Image courtesy of Don K. Nakayama.

Current Challenges

Affirmative Action

Don K. Nakayama, MD, MBA, FACS

After Edith Irby entered the University of Arkansas College of Medicine in 1948, the integration of medical schools accelerated, as summarized by Steven Shea and Mindy Fullilove from Columbia University and the University of California, San Francisco, respectively.[1] By the time the *Brown v. Board of Education of Topeka* was decided in 1954, 11 of the 26 schools that had barred Black students in 1948 already had begun to admit them. By 1969, each of the remaining 15 had desegregated.

The total number of Black medical students, however, was still miniscule. In the 1964–1965 entering class of predominantly white U.S. medical schools (in other words, those aside from Meharry Medical College and Howard University School of Medicine) there were only 47 Black students—only 0.6 percent of the total number of medical students at those institutions. Far more Black students had to be admitted for the effort to be more than mere tokenism.

The efforts of medical schools to increase Black enrollment became known as "affirmative action." It continues to be the avenue by which racial and ethnic minorities enter the medical mainstream. At first, affirmative action was highly successful. After passage of the 1964 Civil Rights Act, the proportion of Blacks in predominantly white medical schools rapidly increased more than ten-fold to 911, or 6.3 percent, in the entering class of 1974–1975.[1]

The percentage, however encouraging it seemed at the time, had reached a ceiling that would go unchanged to the present day. In 2018–2019, Black students comprised 6.2 percent of all those entering U.S. medical schools, while Blacks comprised 13.4 percent of the U.S. population.[2]

The stubborn 6 percent ceiling reflects the inherent limitations that underlie affirmative action in medical schools and the widespread opposition that has risen against its implementation. As one of the central issues of race in medicine, it is appropriate to review the history of affirmative action and the events surrounding one of the judicial milestones in American civil rights: *Regents of the University of California v. Bakke* (1978).

The issue of racial equity in college and professional school admissions policies remains at the forefront of American politics, as it represents the gateway into the mainstream of American society. In 2021, the U.S. Supreme Court agreed to hear arguments in a suit challenging the admissions policies at Harvard University on the grounds that they discriminate against Asian Americans.

This chapter draws on three sources for most of its facts: Shea and Fullilove's article in the *New England Journal of Medicine*[1]; a book by Susan Welch and John Gruhl, professors of political science at Penn State and the University of Nebraska, respectively[3]; and the entry on affirmative action in the *Stanford Encyclopedia of Philosophy* by Robert Fullinwider of the University of Maryland.[4]

Affirmative Action in the University

"Affirmative action" was first used in its modern context by President Kennedy in an executive order that called for more equality of opportunity. "I took 'affirmative action' because it was alliterative," confessed one of the President's writers.[3] The term stuck, irrespective of the reasons behind its origin. While the term "affirmative action" did not appear in the 1964 Civil Rights Act and the subsequent presidential executive orders that were derived from it, the two words became the accepted shorthand for actions taken by businesses, schools, and associations to boost the participation of racial minorities and women in workforces, student enrollments, and memberships beyond simple nondiscrimination. In its first years, affirmative action programs attracted little public attention as long as they were confined to strong-arming unsympathetic entities such as construction firms (unused to governmental interference in their business practices), and labor unions (famously exclusionary and protective of their memberships).

In 1972, the Secretary of Labor's Revised Order No. 4 applied the same racial hiring standards to all U.S. institutions, public and private, that were supported by the government or received federal money. Once placed under this net, all medical schools and hospitals became subject to the "underutilization analyses," "goals," and "timetables" in hiring practices that heretofore had been restricted to construction sites.[4]

The murderous injustices highlighted by the civil rights movement in the 1950s and 1960s lent moral force to the implementation of affirmative action hiring practices in all sectors of the American economy, including the microcosm of medical school admission committees. The philosophical justifications for preferential hiring programs for Blacks were compelling. Affirmative action was a form of racial justice and redress for their past exclusion from white society. Racial preferences were counterweights that equalized advantages that accrued to whites in a society where they moved easily, without hinderance. In a system rife with injustice, preferential treatment of Blacks restored a situation that was more equal and thus more just.

A vigorous backlash arose against in nearly every sector to which affirmative action was applied. The concept of "reverse discrimination" against white men mirrored the argument for preferential hiring. The plain language of the 1964 Civil Rights Act prohibited discrimination on the basis of race and sex. If the goal of the Act was to eliminate racism, it was illogical to have preferential treatment on the basis of race as central to its implementation.

While the philosophical points above had their adherents, the executive branch had to apply the law. This meant using hard numbers and percentages of the racial makeups of workforces, union memberships, and school rosters to assess whether entities were in compliance with terms of the Civil Rights Act. To both observers and those subject to these reviews, the analyses suggested that racial quotas were being set. But the officials asserted they had gauzier aims, goals, and timelines to attain them, which they saw as distinct from quotas. The distinction remained obscure, however, leaving the warring concepts of equality of results and equality of opportunity, as well as the ambiguity between goals and quotas.[3]

The compelling philosophical arguments on both sides and the ambiguities of what was actually being sought resulted in a utilitarian definition for the affirmative action: activities that assured compliance with the nondiscrimination mandate of the 1964 Civil Rights Act.

Before *Bakke*

It was inevitable that the concepts of affirmative action would be challenged in court, cases that Welch and Gruhl reviewed in their book.[3] In

DeFunis v. Odegaard (1973), Marco DeFunis, a man of Spanish-Portuguese ancestry, was rejected by the University of Washington School of Law for two consecutive years. A swollen applicant pool from the Baby Boom generation made admission standards more difficult, with increasing thresholds for Law School Admission Test scores (LSAT) and grade point averages (GPAs) required for admission. To predict successful completion of the curriculum, the school had a measure that combined the two indices. DeFunis outscored 36 members of racial minorities who were admitted, but other whites with higher scores than his were also rejected. The school had no set quota of Blacks to admit but instead wanted a "reasonable" number of minorities (between 15 and 20 percent of the class), provided they met admission standards.

In 1970 DeFunis sued on the basis of reverse discrimination. A state trial court ordered his admission, and he entered law school as the university appealed the decision, first to the state supreme court and ultimately to the U.S. Supreme Court. When the time came to hear oral arguments, however, DeFunis was in his last year of school. The Supreme Court ruled the case moot, with three justices dissenting. One was William Douglas, reputed to be the most liberal of the justices. He wrote critically of the affirmative action at the school, a signal that he would vote against race-conscious remedies and a sign of the difficulties that affirmative action cases would face in the high court.[3]

In *Anderson v. San Francisco Unified School District* (1972), a federal district court ruled against a quota system used by the San Francisco school system in their hiring and promoting practices. The court ruled that white applicants had little opportunity for jobs and promotions. The school system had not had formal practices that discriminated on the basis of race before implementation of the quotas, so such a system was not necessary. Another program to provide financial aid to disadvantaged students at Georgetown University was struck down when the court found that 60 percent of the aid went to Black students and only 40 percent to whites.

Other courts, however, upheld minority programs in admissions. The Downstate Medical Center could give preference to minority applicants from Brooklyn ghettos (*Alevy v. Downstate Medical Center*, 1976). In North Carolina and Ohio, courts made important judgements that admissions decisions could be based on nonacademic factors, such as minority status and poverty.[3]

Legitimizing the nonacademic features of an applicant's résumé and deemphasizing academic performance had two important effects on the future of admission decisions at law and medical schools. First, they undermined claims of reverse discrimination that were based solely on comparing LSAT and Medical College Admission Test (MCAT) scores and GPAs. Second, the nonacademic features of an applicant's portfolio would take on increasing importance, with correspondingly less emphasis on academic achievement, an area in which racial and ethnic minorities historically had critical disadvantages compared with white and Asian applicants.

But in the 1970s, academic standing was still a prime factor in admissions decisions, and affirmative action in university admissions decisions was still in its infancy.

The *Bakke* Case

Allan Bakke, the respondent in *Regents of the University of California v. Bakke* (1978), was an engineer with the National Aeronautics and Space Administration. From his experience working with physicians studying the effects of radiation exposure on animals and people in outer space, he decided to go to medical school. He spent his off hours completing premed courses and volunteering in a local emergency room. When he applied to medical school at the University of California, Davis in 1973, Bakke was among 2,500 applicants vying for a spot in an entering class of 100.

As expected, he scored above the 90th percentile in the science, math, and verbal components of the MCAT, but he did not perform as well in general knowledge. His overall score was higher than the average of students accepted by Davis.

His main failings were his age (at 33, he was older than most first-time applicants to Davis) and his poor performance at interviews. He was rejected by Davis and the other ten schools to which he applied. He applied once more the next year, and again he was rejected.

The medical school at Davis had just opened in 1968. It had no Black students in its first year and just two in its second. Like all campuses in the university system, Davis had free rein to establish an affirmative action program. Its faculty decided to form a special admissions program for what it called "economically or educationally disadvantaged students," with 16 of the 100 places in its entering class reserved for them.[3] At the time, the state's minority population was 22 percent. Nearly all of the applicants to the special admissions program were Black and Hispanic; a few were Native Americans. Whites and Asians who applied to the special program were shunted to the regular admissions process.

Observers noted that Davis officials seemed disengaged in comparison to the ardor with which Bakke's lawyers were pursuing his case. The school appeared as though they wanted to be sued to get some guidance from the judiciary. They were disinclined to "find another cadaver for Mr. Bakke up there at Davis" and buy time to fine-tune their affirmative action policies before another disgruntled applicant sued them.[3] Few saw the case as the *cause célèbre* that it became. Even the NAACP declined to participate.

The first judge decided that the school could not use race as the basis of a decision for admission, but it also refused Bakke's demand for admission, saying that he did not prove that he would have been admitted if the special program had not been in effect. In 1976, both sides appealed to the California Supreme Court, which saw the university's assertion that it could take race into account in admissions as a violation of the equal protection clause, because whites and Asians were excluded from the special admissions program. The court ordered Bakke to be admitted.[3]

The university appealed to the U.S. Supreme Court, which took the case. One hundred seventeen organizations filed 51 *amicus curiae* briefs, a record at that time. One was the Carter administration, which claimed that while quotas were exclusionary and unconstitutional, "flexible affirmative action programs using goals" were acceptable.[3] It predicted the basic outline of the decision that would come from the high court two years later.

Justice Powell was the swing judge in the case. He joined a group of four justices, led by Justice Stephens, who held that the racially-defined two-track scheme at Davis was a violation of the plain language of Title VI of the 1964 Civil Rights Act, that "no person…shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program of activity receiving Federal financial assistance."[4] With Powell as the deciding vote, the Supreme Court ordered Bakke's admission to medical school at Davis.

The four other members of the Court, led by Justice Brennan, very much wanted to save the affirmative action program at Davis. The Brennan group used the Fourteenth Amendment ("no person shall be denied the equal protection of the laws") to justify the racial preferences that was had just been rejected by Powell and the Stephens group.

Powell also wanted to preserve affirmative action but disagreed with the justification put forth by Brennan and his allies. In Powell's view, wrote Fullinwider, the Court's role was to discern "principles sufficiently absolute" that were rooted and enduring in a community that outweigh political judgements that were only temporary.

> *When the decisions of state agents touch upon an individual's race or ethnic background, he is entitled to a judicial determination that the burden he is asked to bear on that basis is precisely tailored to serve a compelling governmental interest.*[4]

In other words, when a group (here, white men) is disadvantaged by a program (affirmative action)

implemented by a state agency (medical schools) based on race or ethnicity, it is the responsibility of the Court to define the "compelling interest" that is served by such a program. Powell then took each of Davis's justifications for its special program in turn.

1. *To reduce the historical deficit of traditionally disfavored minorities in medical schools and the medical profession*. Powell dismissed it, saying it was discriminatory for its own sake.

2. *To counter the effects of society discrimination*. While the state had an obligation to ameliorate the effects of past discrimination, Powell concluded that aiding individuals perceived as members of victimized groups should not come at the expense of other innocent individuals except in response to constitutional or statutory violations.

3. *To increase the number of physicians who will practice in communities currently underserved*. Powell found no evidence that such was the case, although surveys conducted after the Bakke decision found that Black physicians and those of other racial minorities were more likely to practice in their corresponding minority communities.

4. *To obtain the educational benefits that flow from an ethnically diverse student body*. It was here that Powell found his justification for affirmative action: to provide an educational atmosphere "conducive to speculation, experiment, and creation" that includes a "nearly endless range of experiences, talents, and attributes that students might bring to campus." He wrote, "The diversity that furthers a compelling state interest encompasses a far broader array of qualifications and characteristics of which racial or ethnic origin is but a single though important element."[4] In his view, the use of only race as the basis for admission actually decreased diversity.

Powell thus was able to square the circle: reject the Davis program as a violation of Title VI of the Civil Rights Act while also justifying the concept of affirmative action programs as a means to create a diverse student body in its medical schools. The government was served by creating a diverse medical community, of which race was only one of a number of components.

After *Bakke*

After Powell validated affirmative action, universities saw a green light to push ahead.[4] The racial makeup of entering classes in predominantly white medical schools, however, were unchanged after the *Bakke* decision. The proportion of Black students had slowly declined to a low of 4.9 percent in 1978–1979, the year the Bakke decision was announced.[1] But even after Bakke, the proportion of Black students in predominantly white medical schools remained below 6 percent.[1]

Admissions committees were cautious because of the ambiguity of the *Bakke* decision. Some guidelines that Powell set were clear: Two-track systems defined by race and numerical outcomes—goals or quotas—failed constitutional muster. Hence, a succession of academic programs were voided at the University of Maryland (1994), at the University of Texas (1996), in selective high school assignments in Boston (1998), and at the University of Georgia and University of Michigan (both 2001).[4]

But more court decisions were necessary to clarify how race could be used in professional school admissions or whether it could be allowed at all. In *Hopwood v. University of Texas Law School* (1996), a court of appeals decided that the school could not use race as a factor in admissions. *Hopwood* later was abrogated by *Grutter v. Bollinger* (2003), which allowed race to have a limited role in admissions decisions at the University of Michigan. In *Fisher v. University of Texas* (2013), the plaintiff claimed that a University of Texas admissions policy exceeded the standard of a limited role in the use of race as expressed by *Grutter*. Advocates of affirmative action feared that, in taking the *Fisher* case, the Supreme Court was signaling an end to affirmative action, but in 2016 the high court upheld a decision by the appellate court in favor of the university.

The extent to which race contributed to a diverse educational environment appeared to many as a shallow claim designed to preserve affirmative action. Most, if not all, observers recognized that the term "diversity" was a proxy for "race." Justice Scalia called the law school's "holistic" admissions process "a sham."[4]

Beyond Affirmative Action

The University of Michigan arrived at a more defensible rationale for their affirmative action program. As the agency responsible for education in the state, it had an obligation to train its future leaders, who ought to roughly represent the state's population, both racially and ethnically. It therefore had to admit racially and ethnically representative classes. It was a rationale that was more realistic and defensible than the diversity argument.

> *In order to cultivate a set of leaders with legitimacy in the eyes of the citizenry," Justice O'Connor wrote, "it is necessary that the path to leadership be visibly open to talented and qualified individuals of every race and ethnicity. All members of our heterogenous society must have confidence in the openness and integrity of the educational institutions that provide this training.*[4]

As an instrument of diversity or integration, affirmative action policies continue to be inadequate to the task achieving racial equity, as shown by the unchanging 6 percent representation of Blacks in medical school classes over the past half-century. Medical schools are changing the parameters of their qualifications for admission and deemphasizing traditional measures of academic aptitude (MCAT and GPA) that have disparate impact against Blacks, Hispanics, and non-Asian minorities. MCAT and GPA are the only hard numbers on an applicant's resumé, making lay observers believe that they have a determinative effect on admissions decisions. To some the scores have burdened affirmative action for more than half a century. In response, schools are dropping test scores and instead base their admissions decisions on competency-based platforms that also consider parameters of diversity, equity, and inclusion.

In so doing medical school admissions committees are in the process of redefining the qualifications for entry into medical school and what is important in the practice of medicine. The deemphasis of MCAT and GPA, and for residency training, making steps 1 and 2 of the US Medical Licensing Examination of the National Board of Medical Examiners pass-fail tests, promise to achieve what affirmative action has failed to do: increase the proportion of Blacks entering into medicine and eventually becoming providers in the health care system. The result of such efforts will also redefine whether standardized tests are important in the selection, education, and training of surgeons and physicians.[5]

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Levi Watkins, Jr., MD, FACS: Champion for Diversity in Medicine

Don K. Nakayama, MD, MBA, FACS

Levi Watkins, Jr., MD, FACS (1944–2015, Figure 1), the first Black chief resident and then cardiac surgeon in the department of surgery at the Johns Hopkins Hospital, was poised to reach the top rungs of academic surgery when, still in his thirties, he performed the first implantable cardioverter-defibrillator (ICD) operation on a human patient in 1980. Rather than parlay the achievement into continued academic success, he devoted his career to affirmative action, then a new and highly controversial endeavor.

Figure 1

It was a decision that might have derailed his advancement not only in the white-dominated surgical professional societies but also in his own hospital, which had not yet fully committed itself to integration. Even before he was appointed to the full-time faculty, Watkins recruited Black students into the medical school at Hopkins, supported them, and nurtured their careers. That he accomplished this in one of medicine's most storied institutions assured that medical institutions across the country would follow his example and commit themselves to affirmative action, in both spirit and action.

Boyhood and Education

Dr. Watkins was the eldest son of six children born to school teachers in Parsons, KS, a small town in the southeastern corner of the state closest to the South. In 1948 the family moved to Montgomery, AL, and then followed the father, Levi, Sr., as he built his career as a successful president of Black colleges, first at Owen College (today LeMoyne-Owen College) in Memphis, then back to Montgomery at the Alabama State University. The elder Watkins led both institutions to full accreditation for their educational programs, the former as a two-year community college and the latter as a university granting four-year degrees in eight colleges.[1,2]

Levi, Jr., was only four when the family first moved to Montgomery, in 1948. He was 10 when they left in 1954, the same year Dr. Martin Luther King, Jr., arrived to take his first job as pastor of the Dexter Avenue Baptist Church, and the year before the famous bus boycott that galvanized the civil rights movement. His father brought the family back to Montgomery in 1962, when Levi was 18. Young Levi's brief stays in Montgomery only allowed a brush with King's activities, but each family knew the other, and Levi's siblings marched with the great man. As with all young Blacks growing up in the South during the hottest decades of the civil rights movement of the 1950s and 1960s, King had a profound impact on young Levi, who closely identified with his cause.

In 1962, he enrolled at Tennessee State University, a Black college in Nashville, where he earned the nickname "Mr. Brains" and graduated in biology with honors in 1966. He was active in campus life as president of the student council, member and national vice president of the Alpha Kappa Mu Honor Society, and member of the Alpha Phi Alpha fraternity.[3]

Figure 2

Watkins was admitted to the Vanderbilt University School of Medicine as its first Black student (Figure 2). He learned he had been admitted from a headline in a Nashville newspaper. He described his experience in medical school as "isolating and lonely."[4] John Tarpley, MD, FACS, one of his classmates at Vanderbilt, remembered Watkins as an excellent student.

> *His initial year was not so easy, in part, because of the taunts he on occasion received in the dorms. He dealt with any discrimination there and elsewhere; he earned the respect of all at the medical school including the faculty and residents.*[4]

When he graduated in 1970 as a member of the Alpha Omega Alpha Honor Medical Society, Watkins was still Vanderbilt's only Black student.[5]

Surgical Career

He entered the Hopkins training program in surgery as its first Black surgical resident. During training, he spent two years as a research fellow at Harvard.[6] On his return, he served as Hopkins's first Black chief resident in cardiac surgery. He was appointed to the faculty on completion of his residency in 1978.

He became the surgical member of the team at Sinai Hospital in Baltimore that developed a miniaturized automatic defibrillator suitable for implantation in humans. In February 1980 at Hopkins, Watkins and Vincent Gott placed the first ICD in a 57-year-old woman who had ventricular arrhythmias associated with ischemic heart disease and the second in a 16-year-old boy with idiopathic hypotensive ventricular tachycardia.[7] Watkins devised operations to place the calling-card-sized electrode on the surface of the heart, first through a left anterior thoracotomy and later with a much simpler subxiphoid approach. At the time of his presentation to the American Association for Thoracic Surgery in 1983, he had done 65 ICD implantations.[8]

William Baumgartner, MD, director of cardiac surgery at the Johns Hopkins Hospital, said of Watkins' work:

Levi was an innovator in many ways, particularly with the internal defibrillator. At that time there was a lot of skepticism that this defibrillator was the 'real thing.' And he persevered.…It was very successful, and that set the stage for millions of patients benefitting from that work.[9]

Watkins continued as cardiac surgeon at the Johns Hopkins Hospital for the rest of his career. He was promoted to full professor and vice dean for postdoctoral programs and faculty development in 1991. In the latter role he established the first postdoctoral association, an initiative to promote the interests of postdoctoral students that was emulated at universities throughout the nation.[10]

Admissions Committee

In 1975, while he was still a resident in cardiac surgery, Watkins was part of an initiative to attract talented Black students to Hopkins. A Hopkins obituary read:

Within a few years Johns Hopkins was attracting Black students from all over the nation who were convinced by Watkins that Johns Hopkins wanted them. The success of the Johns Hopkins minority recruitment campaign soon made it a model imitated by other medical schools.[10]

When he was appointed to the full-time faculty in 1980, Watkins was assigned a seat on the admissions committee, chosen in part because of his key role in the recruitment program when he was a resident. Admissions work is a time-consuming job seen by many as an onerous task that took time and energy away from the laboratory and research endeavors necessary for academic advancement. Watkins instead embraced the role, even though his advocacy of affirmative action was politically hazardous. Undergraduate and professional schools were actively increasing their admissions of Black students, but a backlash was building in all sectors of the country, especially in academic institutions.

The issue reached a climax in 1978 when the U.S. Supreme Court issued its decision on *Regents of the University of California v. Bakke*, the landmark decision on reverse discrimination, a topic that is discussed more completely in Chapter 37. Allan Bakke, an engineer with the National Aeronautics and Space Administration, sued the Regents of the University of California (UC) when he was rejected for admission to the UC Davis School of Medicine. The high court decided that the use of a special program that reserved 16 of Davis's 100 entering positions in their first-year class was unconstitutional, but it also found that having race be a factor in admissions decisions was permissible.[11] Justice Powell, the swing vote that decided both aspects of the case, listed race as one of several important elements to create a diverse educational environment that was in the state's interest to foster in its medical schools.[12]

It was thus left to the medical schools to determine the extent to which race entered into admissions decisions, seen by many as a zero-sum endeavor where the admission of a Black candidate denied the admission a white student. Schools continued their affirmative action policies, but their strategies remained cautious. The goals of affirmative action became utilitarian: make sure numbers of admitted students were high enough to satisfy federal regulators while also avoiding suits from disgruntled rejected applicants.

Watkins, however, felt no such inhibition. Instead he was a vigorous and highly visible advocate for the admission of Black students.

I had been exposed to Dr. King and the whole civil rights movement. I was looking at what was happening at Hopkins, which was not too different from Alabama, to be honest. And so, I was getting outspoken about what we should do about Black medical students, interns, residents, faculty, and so forth.

My brother-in-law, who had been with Dr. King, said, "Levi, this is the time. Don't make them too uncomfortable, but this is the time."[9]

Reminded of King's example, Watkins lost no time setting out his "action agenda" to shake the racial traditions of the country's most famous, yet in many ways hoariest, department of surgery.

Watkins made certain that Hopkins stayed committed to affirmative action. "Levi was the conscience of Hopkins," said Kenneth Grant, vice president of general services at the Johns Hopkins Hospital.[9]

"He was never afraid to speak out and say what needed to be said, but that no one else would dare say," said Lisa Cooper, MD, MPH, director, Johns Hopkins Center to Eliminate Health Disparities.[9]

"He was tenacious, yet considered; passionate, but purposeful; and a man combining the art of humility with the ferocity of a fire-breathing dragon about matters of equality and justice," said Kevin Johnson, professor at Vanderbilt University.[5]

"He made the effort to reach out and say, 'We are going to be diverse,' before diversity was popular," said Selwyn Vickers, who entered Johns Hopkins as a first-year medical student in 1982 and now serves as senior vice president for medicine and dean of the School of Medicine at the University of Alabama at Birmingham. "When Levi did this in 1982, he felt it was absolutely necessary to change the medical landscape at Johns Hopkins."[13] He made sure that one of the most prominent medical institutions in the country became the model for affirmative action for the field. During the first years of his involvement on the Hopkins admissions committee, the numbers of Black students admitted there increased 400 percent.

One of them was Vickers himself. "My interview for med school was a bit shaky," he said. "I thought the interview went okay. But Levi said it didn't go great. And he said, 'You know I had to make it very clear to them that you were going to be a good student if you got admitted.'"[13]

Legacy

Watkins died in 2015, just two years after his retirement in 2013 and just one week after the formal installation of his portrait in the division of cardiac surgery at Hopkins. Watkins founded the annual Martin Luther King, Jr., commemoration at Hopkins in 1982. The Hopkins class of 1983 led fundraising efforts to establish in 2010 an endowed scholarship in his name.[10] His medical alma mater, Vanderbilt University, has an annual lecture in his honor (established in 2002) and named him its outstanding medical alumnus in 1998 and its distinguished alumnus in 2008. Vanderbilt also has a portrait of Watkins in its school of medicine.[5] In 2018, Tennessee State, where he took his baccalaureate degree, established the Dr. Levi Watkins, Jr., Memorial Institute to provide scholarships to promising premed students, to conduct seminars, and to fund lectures.[3]

Vickers characterized Watkins' legacy. Levi understood sacrificial leadership," he said.

> *At some point he decided that there were things he was willing to stand and fight for that might prevent him from becoming the chair of a department of surgery or reaching some of the higher offices in national surgical leadership. The stances he took around civil rights and diversity were not popular. But he chose to take them because he felt they were important.*[14]

"He was almost larger than life," Cooper said. "To just everyone he encountered he had a way of making everyone feel special. He'll always be remembered as a mentor, a role model, and a real friend."[9]

In a commemorative film celebrating his life, Watkins said:

> *Hopkins, I hope when you see my life, you see tangible evidence of racial progress in America. We've come a long way, it did require struggle. It did require sacrifice.*
>
> *My heart goes out to my students. You know I've been at Hopkins for 43 years? I gave my best.*
>
> *And I say I know that Dr. King is happy. He's happy because I think he has looked down and seen what we have tried to do at Johns Hopkins, about Hopkins's diversity efforts. I think he's happy with the progress of his own dream.*[9]

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Legends

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The Continuing Challenge of Health Disparities

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Passage of the 1964 Civil Rights Act—equal access to hotels, all seats on public transportation, public schools, federal programs, and the ballot box—exposed the magnitude of centuries of unequal access to the benefits and prosperity of American society. But the landmark legislation, however far-reaching, had little immediate impact on the overall health of Blacks in America. As sweeping as the reform was in hospital care and medical education, it was dwarfed by the legacy of centuries of slavery and the 100-year tragedy of poverty and discrimination in health care, politics, employment, housing, and education that followed its abolition. The result was a difference in mortality of Blacks relative to whites that persists to the present day. Today's research on racial disparities in health care builds on a century of inquiry into why health outcomes in Blacks always trail those of whites, and how the medical profession and society can rectify the difference.

A Public Health Hazard

The Great Migration of millions of Blacks to the cities and industrial centers of the industrial Midwest and Northeast beginning in the early 1900s exacerbated crowding and contagious disease in urban slums. Infectious disease threatened all strata of society, white and Black, rich and poor, but Blacks were especially affected. David McBride, professor of African American Studies at Penn State University, studied epidemic disease among Black Americans.[1] At the end of World War I, death statistics showed mortality from tuberculosis among Blacks to be nearly triple that of whites (485 vs. 174 deaths per 100,000, respectively), with similar differences for pneumonia (356 vs. 185), diseases of the nervous system (308 vs. 214), typhoid (68 vs. 32), and malaria (63 vs. 7).

A widely held view was that Blacks were a health hazard to society, an opinion held by Robert Shufeldt, a major in the U.S. army medical corps and unabashed white supremacist. In *America's Greatest Problem: The Negro* (1915), Shufeldt wrote:

> *The gravest problem to be faced in dealing with the…negro is not his or her industrial future or right to social equality with the white man or woman. It is the danger to the public of his or her contagiousness and infections from the standpoint of physical and moral disease.*[2]

Black physicians and a small but growing group of progressive social scientists and welfare workers saw Blacks as victims of preventable disease.[1] In 1911, John A. Kenney, medical director of the Tuskegee Institute and editor of the *Journal of the National Medical Association*, prescribed a strategy of self-

help consistent with the ethic espoused by Booker T. Washington. Kenney wrote:

> *In many places, without quibbling over such academic questions as whether the Negro is dying as rapidly as some other people, or whether there is some racial inherency productive of its high mortality, or whether it is due to environment, the race is realizing that its death-rate is high; that certain diseases are taking more than their toll of human life from its ranks, and that many of these diseases are preventable. With this realization, many Negroes have set to work to improve their living conditions and reduce mortality.*[3]

Paul Cornely, chair of bacteriology, preventive disease, and public health at Howard University, was the first to study unequal health indices among Blacks from a public health perspective. In the early 1940s he published a series of articles that correlated the lack of health facilities and Black physicians and nurses to the increased rates of infectious disease among Blacks.[4–6] Alfred Yankauer, Jr., of the University of Rochester, in his studies of fetal and infant mortality in New York City neighborhoods in 1950, revealed that mortality increased in a linear relationship with the percentage of the Black population in a community. He quoted the dictum of Sir Arthur Newsholme, the leading public health expert in the Victorian era, that "infant mortality is the most sensitive index we possess of social welfare and sanitary administration."[7]

Discrimination After the 1964 Civil Rights Act

The 1964 Civil Rights Act thus was an opportunity to address the wrongs exposed by Cornely and Yankauer's research by imposing integration of all health facilities that accepted federal money through the Hill-Burton program and, after 1965, those that accepted Medicare and Medicaid. From the 1960s to the late 1970s, there were more than 75 separate pieces of federal legislation aimed at increasing access to health services for the economically disadvantaged, primarily poor Blacks.[8] The Department of Health, Education, and Welfare (DHEW) reported in 1979 that "in general, the health status of minorities has improved during recent years, and their use of health services has increased."[9] In 1978, Karen Davis and Cathy Shoen of the Brookings Institution wrote:

> *Poor people's access to medical care has increased remarkably (in the decade 1965–75)…steady progress has been made—particularly in those kinds of poor health that are the most prevalent among poor people and those that are most sensitive to improved medical care.*[9]

By the 1980s, Black life expectancy had improved by 5.4 years to 69.5 years in 1985 (up from 64.1 in 1970), an increase of 1.6 years greater than the 3.8-year increase of the population as a whole (from 70.9 to 74.7) over the same period.[8]

However, many facilities, in the South and North, remained stubbornly segregated, a phenomenon studied by Sara Rosenbaum of the George Washington University Medicine Center.[10] Physicians, not subject to the regulations of the 1964 legislation, continued to assign their patients to separate facilities by race. Some doctors simply refused to treat Black patients or those covered by Medicaid, the latter group being poor and largely Black.

Hospital staffs excluded Black physicians by requiring membership in the local medical society that routinely rejected Black applicants. Facilities required prepayment of fees or private insurance and refused Medicare and Medicaid, a prohibitive financial barrier for poor minority patients. Proponents of such exclusionary schemes rationalized that separate facilities actually honored Black patients' preferences by ensuring that they would be among other Black patients and cared for by minority physicians. The end result was that many facilities remained identifiably "white" and "Black," especially mental institutions and nursing homes that remained segregated for decades after the Civil Rights Act.[10]

In a 1970 test case, Black residents of New Orleans sued the Ochsner Foundation Hospitals on the basis that the organization was not providing

community and uncompensated services, in violation of their obligations as recipients of Hill-Burton funding. The case, *Cook v. Ochsner Foundation Hospital et al.*, was decided in favor of the plaintiffs in 1977 and forced the hospital to correct the discriminatory referring practices of its staff physicians.[11] In part because the case required almost a decade to decide, civil rights advocates were doubtful that federal courts would be a productive strategy.[12]

The failure of the 1964 Civil Rights Act to remove barriers to health care was dramatically illustrated in incidents recounted in a hearing before the Institute of Medicine (IOM), published in 1981:

> *In March 1979, a 29-year-old Mexican-American woman and her baby died of a ruptured uterus in a rural part of Texas. Two hospitals had turned away this acute ill eight-month pregnant woman for inability to pay.*
>
> *On August 1, 1976, Mrs. Carolyn Payne, a 21-year-old black resident of Holly Springs, Mississippi, delivered her own baby in the front seat of a truck after the emergency room of the Marshall County Hospital had refused admission. The Marshall County Hospital is a 60-bed county facility in Holly Springs, built with federal Hill-Burton funds, and supported by state and county health funds.*[9]

The IOM documented substantial differences in health indices among racial and ethnic groups. Overall mortality rate was highest among Blacks (10.4 deaths per year per 1,000 population; among American Indians and Alaska Natives: 8.2; whites: 6.8; Chinese Americans: 4.9; and Japanese Americans: 3.3). Black infant mortality was also the highest among the groups.

While Blacks and whites visited physicians at about the same rate (an average of 4.6 and 5.0 times per year, respectively), whites were more likely to visit an office-based practice, while Blacks were more likely to go to public clinics. Among children, the differences were clear. White children had an average of 4.3 visits a year; Black children had only 2.[9]. Immunization rates among white children exceeded those of Black children for rubella, measles, DPT, polio, and mumps. White women had twice as many prenatal visits as Black women.[9]

"The differences in gross measures of health status reflected many social, economic, and cultural factors at play," the IOM concluded. "The medical system cannot be held entirely responsible for the many differences in health status within a society."[9]

Their comprehensive analysis highlighted an overall lack of race-specific data on health care. Under an agreement with the federal Office of Civil Rights, in 1980 the Health Care Financing Administration began to track data on the racial and ethnic backgrounds of beneficiaries of Medicare and Medicaid, their utilization of health resources, and their health indices. The data collected by HCFA has been the source of the tremendous volume of research of health disparities to the present day.

A Different Approach and New Problems

The Department of Health and Human Services (HHS, the federal department for health care and successor of DHEW), under Secretary Margaret Heckler and President Ronald Reagan, outlined in 1985 a strategy to address racial health disparities. Instead of a strict disease-based approach, HHS employed a holistic strategy that acknowledged physiological, cultural, psychological, and societal factors that were "poorly understood for the general population and even less so for minorities."[13]

HHS proposed five categories of interventions (and examples of projects that supported each one): health information and education (early cancer screening with the involvement of community institutions); delivering and financing health services (programs for the medically indigent and prenatal care); cooperative efforts with the nonfederal sector (projects in disease prevention and health promotion in minority communities, education and training of minority physicians); data development (specific to minority health issues); and research (risk factor prevalence, health education interventions, preventive services, treatment services, and sociocultural factors and health outcomes). It was an aggressive, multifaceted

plan that laid the foundation of the federal agenda for the next decade.[13]

But the racial gap in longevity and other indices of health care remained. The disturbing reality was that Blacks were not receiving the intended benefits of HHS's ambitious program. In 1998, the mean Medicaid payment for each white recipient was $4,609; for each Black recipient, it was only $2,836. In other words, for each Medicaid dollar paid for services for a white patient, a Black patient got only 62 cents.[10] Whether Black patients were receiving less care, or less expensive care, is not clear. In terms of health resources, however, the racial disparities were inescapable.

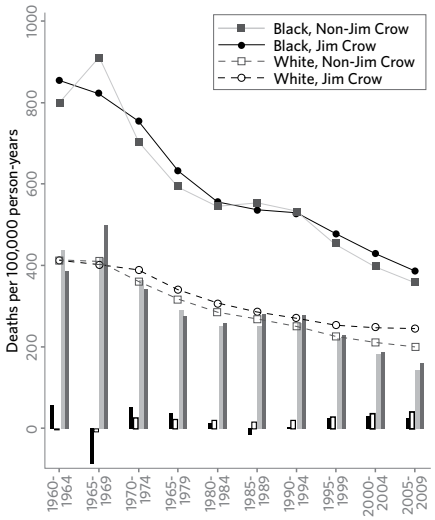
Other troubling details about advanced surgical care emerged, summarized in 1998 by health economist David Smith of Drexel University.[11] Whites were twice as likely as Blacks to receive such costly procedures as hip replacement, arthroscopy, and aortocoronary bypass, even with adjustments for age and income. Under a supposedly unbiased system for kidney allotment for transplantation, Blacks were still less likely to receive a transplant and had a higher mortality after renal transplant surgery.

Health care costs began to skyrocket in the 1970s and 1980s, exposing the economic dimension of racial discrimination. Insurance companies cobbled together various forms of managed care organizations, defined as insurance systems that either encourage or require their enrollees to obtain services through a network of participating providers. Their very structure was a setup for discrimination, with companies providing more generous schemes to attract well-heeled (and mostly white) customers while offering more limited options—or outright excluding—the poor (who were disproportionately Black).[14]

The National Medical Association proposed putting together health care networks that could compete with those being organized by big insurance companies and health maintenance organizations. The cornerstone of their proposal was health insurance on a national scale that ensured coverage and access for all Americans.[15]

New Millennium, New Perspectives

Racial disparities in health indices have persisted into the new millennium, reflected by the two-fold difference between the rates of premature death (before age 65) for Blacks and whites, a difference that was largely unaffected by the lifting of Jim Crow restrictions in 1964 (Figure 1).[16] Fresh approaches were necessary.



US age-standardized premature mortality rates (death before 65 years of age, standardized to the 2000 standard million), 1960–2009: black and white population by Jim Crow polity. Difference between Jim Crow and non-Jim Crow areas: for blacks, black bars; for whites, white bars. Difference between blacks and whites: for Jim Crow areas, light gray bars; for non-Jim Crow areas, medium gray bars.

Figure 1

Kenneth Keppel of the National Center for Health Statistics determined the 10 health indicators with the largest disparities for each of five U.S. racial and ethnic groups: Black non-Hispanic; white non-Hispanic; Hispanic or Latino; Asian only/ Asian or Pacific Islander (data labeling varied); and American Indian or Alaska Native. Disparities were measured as percentage differences between a given group and the group with the best rate for that health indicator (e.g., if the lowest group had a rate of 100 and the highest had a rate of 500, there is a 400 percent difference). The 10 most disparate indicators for each race comprised a total of 31 indicators. Infectious diseases accounted for 7 of the top 10 disparities among Black Americans: gonorrhea (1st and 2nd); syphilis (3rd and 8th);

AIDS (4th); HIV-related (5th); and tuberculosis (7th). Homicide was 9th, and drug-induced death was 10th, both causes where the largest difference was among Blacks. Differences were vast: Rates between Blacks and the racial or ethnic group with the lowest rate ranged from 525 to 2,757 percent; for these 10 indicators, the lowest rate was among either Asians or whites.[17]

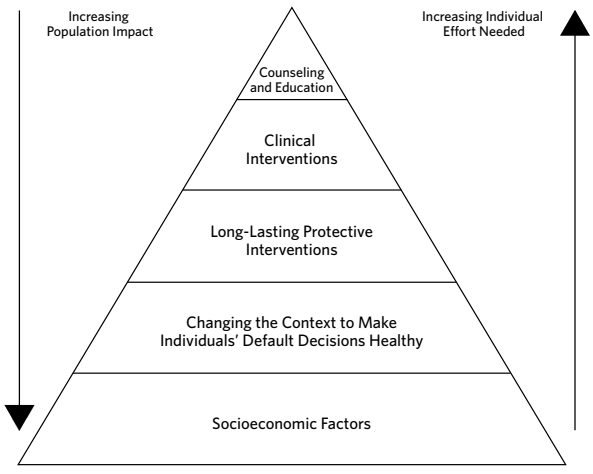
Most factors that might be considered related to surgery were far down the list, all highest among Blacks: nonfatal firearm injuries (highest among Blacks, by 869 percent); alcohol-related motor vehicle deaths (167 percent), physical assault among persons aged over 12 years (193 percent), and firearm-related deaths (519 percent). The only surgical diseases that made Keppel's list were melanoma (highest among whites, by 288 percent) and prostate cancer (highest among Blacks, by 516 percent). Keppel's conclusion was guarded: differences in health indicators play "an important part in deciding where and how to intervene to eliminate such disparities."[17]

According to Smith, the infectious diseases, homicides, and drug- and firearm-related deaths that topped the list of disparities for Black Americans were the result of poverty and social pathology:

> *Many indicators reflect outcomes beyond the direct control of health services providers. Many stark racial discrepancies in income, wealth, insurance, housing and environmental risk exposures play more of a role in affecting outcomes than the provision of health services.*[11]

David Williams, then at the University of Michigan and later at the Harvard School of Public Health, wrote that "racial residential segregation was a fundamental cause of racial disparities in health."[18] Black-majority urban neighborhoods were the legacies of implicit governmental support of discriminatory zoning and mortgage policies that concentrated Black residents, who tended to be poorer, in low-income neighborhoods that became associated with inferior schools, restricted employment opportunities, and generally lower household wealth. The impact on health were higher preterm birth rates, later-stage diagnosis of cancer, and concentrations of violent crime. Williams noted that the ratio of infant mortality in Black-majority urban neighborhoods to infant mortality among whites increased to 2.4 in 1998 from 1.6 in Yankauer's 1950 study,[18] recalling Sir Arthur's dictum that infant mortality was the most sensitive index of social welfare.

Thomas Frieden of the Centers for Disease Control and Prevention argued in a 2010 article that the traditional four-fold approach to public health intervention—population health and primary, secondary, and tertiary care—overlooked the effect on health of the fundamental composition, organization, and operation of society.[19] He proposed an alternative model, which he diagrammed as a five-tier pyramid (Figure 2). At its base were socioeconomic determinants that have the greatest impact on the health of both the individual and society as a whole, with sometimes unpredictable results. The elimination of poverty through economic development may have both positive and negative results on society. While economic prosperity might bring clean water and reduce infectious disease, it could also increase pollution, stress, motor vehicle use, and overconsumption of food, alcohol, and tobacco.



The health impact pyramid.

Figure 2

The next tier represented regulatory changes that made healthy options the default choice. Examples included fluoridation of water, iodization of salt, elimination of saturated fat in cooking oil, reduction of sodium in restaurant food, and improvements in road and vehicle design. Not mentioned by Frieden was firearm possession, the elimination of which would in theory reduce violent crime and suicide.

The upper three layers were classic public health measures. On the third tier were long-lasting interventions that do not require ongoing clinical care, such as immunizations and smoking cessation. On the fourth tier were classic clinical interventions, such as inpatient care and surgery. At the top of the pyramid were patient education and counseling. Successively higher levels of the pyramid required more effort to be effective and would have less overall impact on individual and societal health than the lowest two layers.

To reduce health disparities, Rachel Thornton joined Williams, her colleague at Harvard, to propose interventions directed at socioeconomic determinants at the bottom level of Frieden's pyramid.[20] To make communities healthier and safer, they recommended urban planning projects that encourage walking, improve access to stores with healthy food options with fewer alcohol outlets. Scattering public housing in low-density, middle-income neighborhoods would provide a safer, low-crime environments for its residents.

Arguing that high-quality education improves health, Thornton and Williams proposed early childhood interventions and parental support programs. Maria Trent of Johns Hopkins, writing for the American Academy of Pediatrics, wrote that early childhood education and nurturing programs, fair housing, and child health insurance led to improvements in pediatric health indices as widely varied as lead poisoning, injuries, asthma, cancer, neurotoxicity, cardiovascular disease, and mental health problems.[21]

Employment and income gains improve longevity.[20] The Great Society programs, including the 1964 Civil Rights Act, improved household income, education, and employment with beneficial effects on overall health.

Zinzi Bailey of the New York Department of Health and Mental Hygiene wrote in the *Lancet* that racism itself was a key determinant of population health.[22] She noted that interventions to correct racism had largely focused on the unfair treatment of individuals, a scope that was too restrictive when considering how to intervene. She argued that a comprehensive view of society was necessary to understand the scope of racism and thus to address and prevent it. Structural racism began with the colonization of America by Europeans. The colonizers brought African slaves in their original settlements and conquered and nearly exterminated the indigenous people in North America. The colonizers' legal and societal systems incorporated racial oppression that was perpetuated as they established the predecessors of modern North American governmental and social institutions.

Bailey wrote that racism was an interconnected web that extended into all institutions, both public and private, to the present day. Structural racism in housing and labor markets leaves poor, largely Black urban neighborhoods with high unemployment and exclusionary hiring practices. In economics, it led to intergenerational poverty. In politics, it led to Jim Crow laws, unequal representation in legislative and judicial bodies, and inequities in application of criminal justice and incarceration rates. All had deleterious impact on public health.[22]

Bailey's recommended interventions focus on "where people live, work, play, and pray."[22] She gave the example of a private philanthropist who partnered in 1998 with the East Lake neighborhood of Atlanta, GA, to build a new, mixed-income development that included a cradle-to-grave educational curriculum and programs to promote healthy behaviors, generate jobs, and reduce crime. Property values increased along with new grocery stores, banks, and businesses.

Similar federal programs followed: the US Department of Education Promise Neighborhood (2010), the Department of Housing and Urban Development Choice Neighborhood (2010), Seattle's Race and Social Justice Initiative (2014), the Government Alliance for Race and Equity (2016), and Opportunity Zones (2017).

The problem of the disproportionate incarceration of Black men that followed the 1994 Violent Crime Control and Law Enforcement Act has begun to be addressed by initiatives to decriminalize drug possession felonies to misdemeanors. The First Step Act (2018) eliminated the "three strikes" life sentencing provision for some offences under the 1994 violent crime legislation and expanded judges' discretion in sentencing of nonviolent crimes. The Ready to Work initiative (2018) connected employers directly to former prisoners.

Discrimination in the Medical Profession

Since the mid-20th century, a pressing public health need was the education and training of Black physicians. Lack of same-race providers made trust, affinity, and expectations of care an issue, even when neither the provider nor patient were conscious of how race differences shaped the encounter.[11]

There has been a lack of Black providers throughout American history, a topic covered in a number of chapters in this book, especially Chapters 19 and 37. Even after the 1964 Civil Rights Act, the proportion of Black medical students remained between 6 and 6.5 percent, below the 13 percent representation in the general U.S. population. In 1950, only 133 Black students graduated from all U.S. medical schools, including Howard and Meharry—a mere 2.4 percent of the 5,553 U.S. medical school graduates that year. Affirmative action programs in the late 1960s led to a sharp increase in the number of Black students. The U.S. Supreme Court broadly upheld affirmative action programs in its 1978 landmark decision, *Regents of the University of California v. Bakke.*

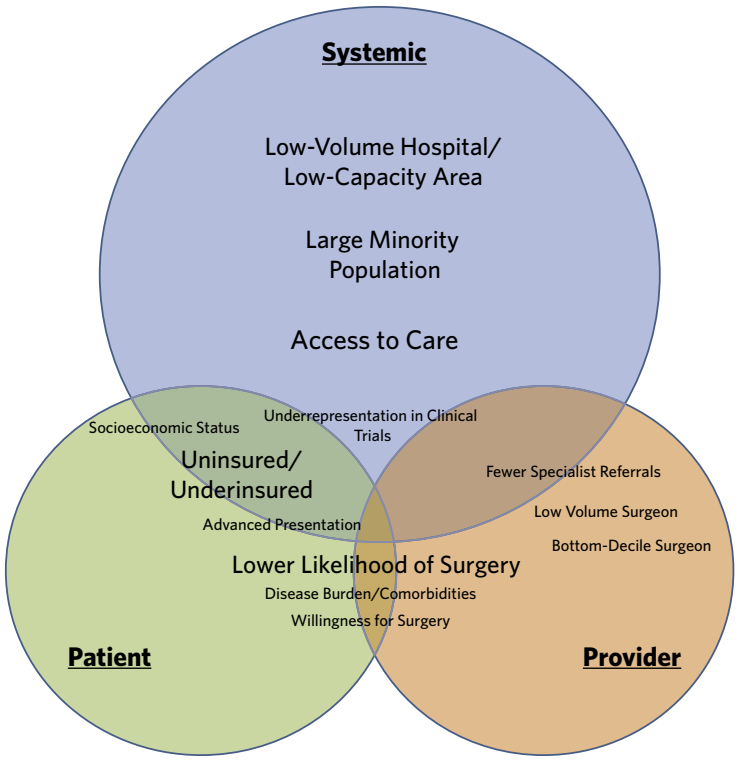
Californians responded by passing a ban on affirmative action admissions to public schools, including the state's medical schools, in 1996. Other states followed, including Texas (1996), Washington (1998), and Florida (1999). The number of Black acceptances decreased to 1,168 in 2000. In 2001, the *Journal of Blacks in Higher Education* estimated that as many as 10,000 of the 18,000 Black physicians who graduated from predominantly white U.S. medical schools in the last half of the 20th century would not have received training if were not for affirmative action.[23]

The decrease in the relative number of Black medical students has reversed over the last five years. In the 2019–2020 school year, the 6,781 Black medical students represented 7.3 percent of all medical students, still below the proportion of Blacks in the general population of 13.4 percent (2019 U.S. Census estimate).[24]

Only 39 percent of Black medical students in 2014 were men, a 35-year trend noticed by Cato Laurencin of the University of Connecticut, which he termed "an American crisis."[25] He attributed the decline to bias against Black men in education and employment and the effects of an unjust criminal justice system.

Laurencin suggested that the problem was more than just the lack of Black undergraduate students in STEM fields (science, technology, engineering, mathematics), the traditional premedical "pipeline" majors that lead to medical school. He suggested there were implicit biases that blocked minorities from entering medicine that might be avoided if admissions committees used, in his words, "true holistic approaches for admissions…that better define the notion of qualified and best qualified."[25]

A perceived overemphasis on STEM led to a deemphasis and elimination of the Medical College Admission Test (MCAT) as a criterion for admission. An increasing number of schools make the test optional or do not consider the score in their selection process, including the University of Rochester, the University of Pittsburgh, and



Race Disparities in Surgical Care

Factors contributing to health care disparities. Size of font reflects perceived relative importance of factor.

Figure 3

Tufts University.[26] Kristen Goodell, associate dean of admissions at Boston University, described a holistic review of an applicant's full range of attributes and experiences that emphasized factors that went beyond MCAT and grades earned on STEM courses.[27]

Attempts to decrease anti-Black bias among health providers and students involve a number of comprehensive training curriculums instituted by educators in medical schools and residency programs. Underrepresentation of Blacks and other ethnic minorities can be addressed by programs to recruit eligible students and support their academic performances through enhanced educational and social programs that supplement the standard curriculum. Blinded employment decisions and rigorous monitoring by committed management can mitigate racist admission decisions to medical schools, residencies, and hospital medical staffs.[28]

Discrimination in Surgery

Quality surgical care is critically important to society, despite its relatively minor position in Frieden's pyramid. Adele Levine of Harvard and L.D. Britt of the Eastern Virginia Medical School wrote that there is "no quality without access," arguing that "equitable access is essential to quality surgical care."[29]

Racial disparities in surgical care were reviewed in 2013 by Adil Haider, then at the Johns Hopkins University and today at the Aga Khan University School of Medicine.[30] He and his coworkers grouped racial factors contributing to surgical disparities into three overlapping regions: patient, provider, and systemic (Figure 3). Patient factors include some that were mentioned above, including insurance and socioeconomic status. Blacks and minorities are more likely to have comorbid conditions and diseases at advanced stages, which will affect survival and recovery after surgery. They also may

not consent to surgery at all and go untreated, which might reflect bias in expectations of patient and provider and issues in obtaining consent.

Hospital and provider factors include differences in advanced interventions that closely correlated with the patient demographics of a given hospital or health provider. An inner-city facility may not have trained personnel or resources to do certain procedures, so hospitals caring for largely minority patients are more likely to report higher mortality rates.

When barriers to access are eliminated, there is evidence that racial outcomes become equivalent. Haider cited a small study from one Veterans Administration hospital, where all races and ethnic groups—in theory—have equal access to surgery without discrimination. The researchers saw no significant differences in survival, stage of disease at presentation, or mean time from diagnosis to resection.

Levine and Britt recognized that a major problem with quantifying access to surgical care was the lack of validated surgical access indices of the sort available for neonatology (low-birthweight infant delivered at a facility appropriate to the level of care) and orthopedics (rates of hip fracture surgery within 48 hours of hospitalization). They emphasized that hospitals and health systems needed to have similar indices for surgical conditions so that equitable access to care can be assessed.[29]

In 2020, the American College of Surgeons restated its commitment to eliminate the inequities of the health care system in the U.S. and to provide the accessible, high-quality surgical care that all Americans deserve. J. Wayne Meredith, President of the ACS, organized a task force on anti-racism under his leadership to address the problem of racism in the College and in the profession of surgery.[31] The group identified five focus areas:

- Just and inclusive environment
- Cultural competency
- Diversity in the workforce
- Public health research
- Advocacy and legislative reform

Conclusion

As in nearly all cases in public health, a simple observation—that Black Americans have a higher mortality than whites—has a multifactorial etiology that defies easy explanations and solutions. Racial health disparities in American health care is a centuries-old legacy that dates to the settlement of the New World and the importation of slaves to the Jamestown settlement in 1619. Its history involves nearly every major political event and social movement in U.S. history. That it is with us today, well into the country's third century, reveals that the issue of Black health care lies at the core of American society. How each generation deals with this fundamental national problem reveals its dedication to the principles of equality and justice.

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Legends

1. Premature mortality rates (death before age 65) for states with Jim Crow laws (circles) and those without (squares) for Blacks (solid circles and squares) and whites (open circles and squares) from 1960 to 2009. For both races, the overall death rates decrease and begin to approach each other, but a persistent disparity in death rates remain. From ref. 16. *Epidemiology*.

2. Thomas Friedan's health impact pyramid. Socioeconomic determinants have the greatest impact on the population health and are at the foundation of the pyramid. With each ascending tier of the pyramid, more effort and expense is required to achieve an outcome, with those at the apex having the least impact and being the costliest. From ref. 19. *American Journal of Public Health*.

3. Factors that contribute to racial disparities in the delivery of surgical services, by Adil Haider. Patient, provider (surgeon and hospital), and systemic (social and economic) factors, some overlapping, all contribute to disparities in outcome. From ref. 30. *Journal of the American College of Surgeons*.

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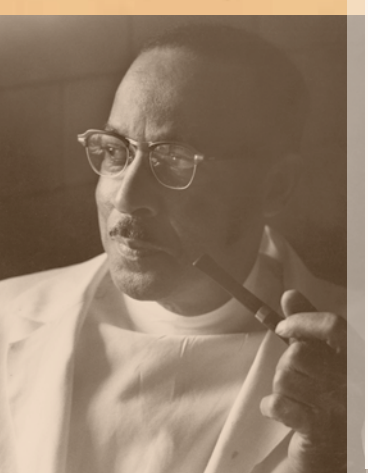
Page locators in *italics* indicate photographs and illustrations.







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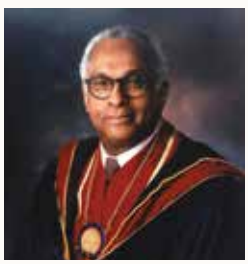
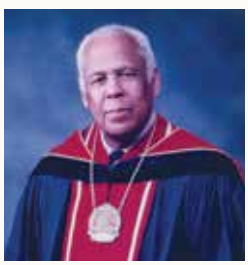


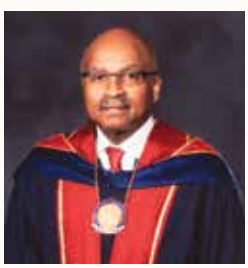
LaSalle D. Leffall, Jr.

1995



Claude H. Organ, Jr.

2003



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