

“Towards a History of Medical Higher Education in the American South: Southern Nationalism, Racial Ethos, and the Flexner Report of 1910”

Tiffany Greer

University of Southern Mississippi

R. Eric Platt

University of Memphis

Shamekia Woods

University of Southern Mississippi

Abstract

Despite some literature on medical higher education in the American South, there remains no overarching subject-specific text. As such, this article provides a narrative guided by literary premises, which, in addition to future archival research, has the potential to become an expansive regional history. Through an examination of relevant publications (dedicated to southern medical higher education or briefly acknowledging it), three themes emerged: southern nationalism, racial ethos, and the impact of the 1910 Flexner Report.

Introduction

Medical higher education in the United States has experienced dynamic changes over the last two-hundred years as scientific knowledge and illness diagnoses have expanded and improved. After the establishment of the College of Philadelphia Department of Medicine in 1765, the practice of training physicians slowly spread throughout the country. Due to the lack of academic regulation and the allure of lucrative medical training, however, various questionable medical colleges were founded in both the North and South. (Duffy 1984; Halperin, Perman & Wilson 2010; Ludmerer 2010). Following the American Civil War and the horrors of battlefield medical tents, academic leaders at institutions such as Harvard University, Yale University, and Johns

Curriculum History 2018: 70-85.

Hopkins University championed rigorous medical training coupled with quality clinical experiences and thorough student examinations. While other northern institutions took note and adapted, southern medical colleges lagged (Ebert 1977; Slawson 2012).

Due to the rich history of progressive medical education in the northern states, copious research and publications have been dedicated to institutions in Illinois, Michigan, Maryland, New York, Pennsylvania, etc. These texts do much to illustrate predominantly northern curricular trends while southern medical higher education is only briefly addressed (Rothstein 1987; Ludmerer 1999; Solberg 2009; Grauer 2012; Aptowics 2015; Gotto & Moon 2016; Boster & Howell 2017). Though some research has been published regarding southern physician training, the extant literature is either concerned with solitary institutions or only briefly addresses singular issues within the larger region. To date there has been no expansive, overarching text published concerning regional trends like medical college founding, curricular development, and/or physician training in the southern states.

As such, the purpose of this article is to provide an exploration of literary themes drawn from twentieth- and twenty-first-century publications. These themes, in turn, can provide a useful framework for future archival enquiries regarding southern medical higher education. Resulting from a careful analysis of existing literature, three themes were apparent as concerns the development of medical departments/colleges

in the American South: southern nationalism, racial ethos, and the influence of the 1910 Flexner Report. All of which directly impacted how physicians were trained in a region typified by slavery, sectionalism, and curricular intransigence.

Despite the dearth of overarching southern-specific literature, some regional institutions such as the Medical College of Louisiana, the Medical College of Georgia, and Morehouse School of Medicine have been examined in book-length detail, but with little consideration given as to how they correlate with peer colleges located in surrounding states (Duffy 1984; Spalding 2011; Gasman, Bush, & Sullivan 2012). In addition, there are a handful of journal articles that examine issue-specific subjects associated with individual southern medical colleges. Topics range from the investigation of period-specific medical journals, such as the Medical College of Georgia's *Southern Medical & Surgical Journal*, to the use of enslaved persons as the subject of antebellum anatomical experiments (Savitt 1982; Worthington 1991; Stewart 2015). As well, some articles explore the influence of southern nationalism, racism, and sectionalist ideology on medical instruction and college development (Duffy 1957, 1968).

In addition to racial ethos and southern nationalism, there are a handful of texts that chronicle the rise and fall of short-lived southern medical colleges that failed to adapt to radically changing instructional, clinical, and facility (laboratories, associated hospitals, etc.) expectations posed in Abraham Flexner's 1910 assessment, *Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching* (Mitchell 1944; Harley 2006; Rhodes 2007). Even so, in-depth historical analysis of *defunct* southern medical colleges is sparse as related primary documentation has been destroyed, misplaced, or scattered amongst other archival repositories.

Regardless of this brief literature review, the South has yet to be examined as thoroughly as other areas of the country. As such, this article, "Towards a History of Medical Higher Education in the American South", provides a genesis narrative that explores southern medical higher education development. In the sections that follow a synopsis of regional medical higher education is provided to contextualize the aforementioned literary themes. Next, each theme is explored as regards their geographic and temporal setting. Finally, considering both historic context and publication analysis, the authors assert the need for extensive southern medical higher education research guided by the realities of nineteenth-century nationalism, racism, and academic legitimization.

Overview

Medical higher education in the United States was still in its early stages of development in the nineteenth century. Prior to 1800, there were only four medical colleges in the country, and physicians-to-be learned primarily through apprenticeships with practicing clinicians (Miller & Weiss 2008). As John Duffy (1984) notes, given the need for formal training opportunities, institutions with affiliated medical programs began to open, one of which was Maryland Medical College, founded in 1807. In the South, one of the earliest medical academies was the Medical College of Virginia, which was established in 1838 (Bowman 2011). These emerging institutions, though varying in admission standards and courses of study, were popular in both the North and South for providing opportunities for middle-class males to acquire lucrative careers post-graduation.

To garner additional monies, these early institutions, largely controlled by their faculty, sold public lecture tickets (Ebert 1977; Geiger 2000; Slawson 2012). Examples of public lectures

include those of Dr. W. Byrd Powell and Dr. Edward H. Barton, both of the Medical College of Louisiana. In the late 1830s, Powell gave lectures on physiology and pathology both on campus and at his private offices. Likewise, Barton gave lectures on the influence of Louisiana's quasi-tropical climate on general health and endemic diseases at the medical college and in off-campus rented rooms (Fossier 1998). In addition to public faculty lectures, instructors at the Medical College of Louisiana developed the *New Orleans Medical and Surgical Journal*, which, for most of the nineteenth century, focused on illnesses that plagued south Louisiana (Duffy 1957). Similarly, the medical department at the Kentucky-based Transylvania University founded both the *Transylvania Journal of Medicine and Associated Sciences* in 1828, and, later in 1849, the *Transylvania Medical Journal* to disseminate region-specific healthcare information (Savitt 1982).

By 1850, fifty medical colleges had been established nationwide (Miller & Weiss 2008; Stowe 2004) but only five of said institutions were in the South (Mitchell 1944). These included the Transylvania Medical College in Lexington, Kentucky, Charleston's Medical College of the State of South Carolina, the Medical College of Georgia in Augusta, the Medical College of Louisiana in New Orleans, and the Louisville Medical Institute in Louisville, Kentucky (Stowe 2004). By the onset of the Civil War, there were 63 US medical colleges, 16 of which were located in states that eventually seceded from the Union (Slawson 2011). Examples of these southern institutions include the Memphis Medical College, the Botanico-Medical College of Memphis, and the Alabama Medical College (Delaney 1981; Kirkland 2011). This rather quick establishment of southern physician training academies is largely

Table 1: Medical Colleges in the American South Prior to the Civil War

<i>Founded</i>	<i>Institution</i>	<i>Location</i>
1824	Medical College of South Carolina	Charleston, SC
1825	University of Virginia	Charlottesville, SC
1826	Winchester Medical College	Winchester, VA
1831	Medical College of Georgia	Augusta, GA
1835	Medical College of Louisiana	New Orleans, LA
1846	Memphis Medical College	Memphis, TN
1846	Botanico-Medical College of Memphis	Memphis, TN
1850	University of Nashville	Nashville, TN
1852	Savannah Medical College	Savannah, GA
1854	Medical College of Virginia	Richmond, VA
1854	Reformed Medical College of Georgia	Macon, GA
1855	Atlanta Medical College	Atlanta, GA
1856	New Orleans School of Medicine	New Orleans, LA
1856	Oglethorpe Medical College	Savannah, GA
1858	Shelby Medical College	Nashville, TN
1860	Medical College of Alabama	Mobile, AL

attributed to a rise in sectionalism and southern nationalism (Duffy 1957). However, with the coming of southern secession and war, the majority of southern colleges closed due to both students and faculty enlisting in Confederate armies (Cohen 2012). By 1861, only one of the 16 Confederate state medical colleges, the Medical College of Virginia in Richmond, remained open (Slawson 2011).

In addition to these war-caused closures, battles associated with the sectionalist cause brought with them the horrifying reality that medical training, particularly in the American South, was far from adequate. Although the engineering science of warfare had advanced to include explosive mortar shells and flesh-tearing minie musket balls, medical science still consisted of only a limited array of curative strategies. Penicillin and effective anesthetics had yet to be discovered and amputation was an all too common occurrence that cast a dark shadow over army doctors' tents. Infection was rampant sans antibiotics, and wounds excreting puss were inaccurately diagnosed as a positive sign of healing. Consequently, "the common soldier," as Simon Winchester puts it, was "monstrously treated by all the new weaponry, and yet only moderately treated with all the old medicine" (2005, 52). Likewise, wartime disease was widespread. Soldiers regularly died of typhoid and pneumonia, which were "treated with the ignorance of the day, with little more than . . . opium or calomel, painkiller and purgative" (Winchester 2005, 66). If anything, the bodily damages of the Civil War taught medical practitioners and educators alike that medical science and instruction needed to advance.

As Reconstruction medical science progressed with new surgical instruments and more advanced pharmaceutical applications, the

number of medical colleges increased. In the century following the Civil War, 457 medical colleges opened in the United States and Canada, the majority being proprietary (Ebert 1977). By 1900, enrollment in US medical higher education reached approximately 49,000 students (Burke 1982). Even so, as historian Roger Gieger (2000) reports, of those attending medical colleges, only 7.9% graduated and received a medical degree in 1880, 9% in 1890, and 10.2% in 1900. Equally disappointing, a significant portion of these institutions, such as the Medical College of Alabama, closed prior to the mid-twentieth century (Brown 2018).

In addition to poor graduation rates and short-lived institutions, clinical study in nineteenth-century proprietary medical programs was rare as very few were even affiliated with a university, let alone a hospital that could readily supply experiential student opportunities. Understanding the need to provide practical learning experiences, early medical colleges went to great lengths to deliver clinical opportunities. To offset this curricular deficit, medical doctors with preexisting hospital affiliations were often hired as instructors in lieu of those physicians who had no infirmary or sanitarium connections (Ebert 1977). While some institutions hired faculty affiliated with local hospitals, other colleges founded their own clinics or hospitals to provide needed practitioner encounters (Slawson 2012).

Institutions that had clinical opportunities advertised their hospital connections to recruit new students. An example of this important affiliation can be seen in the case of Tulane University Medical Center, which was created in 1847, when the Medical College of Louisiana merged with then University of Louisiana (present-day Tulane University of Louisiana) (Mohr 2011). In his 1984 history of Tulane University Medical Center, Duffy points out that the New Orleans-based

institution had a long-standing clinical, student-training relationship with Charity Hospital—a colonial infirmary opened in 1736 that remained in existence until the devastation of Hurricane Katrina in 2005 (Duffy 1984; Salvaggio 1992). In fact, this all-important affiliation influenced Abraham Flexner, who would soon go on to cause enormous changes in the field of medical education. After visiting the New Orleans institution in January of 1909, Flexner declared Tulane University Medical Center as being “one of a very few existing southern schools that deserve development” (1910, 233).

Prior to Flexner’s 1910 report, medical colleges, North and South, possessed curricular structures like those developed at early on at Harvard Medical School. Academic terms lasted approximately four or five months, depending on the institution. These lecture-based courses and associated anatomical laboratory experiences were then repeated for a second year. Medical students typically followed one of two curricular tracks. Students who desired employment as “surgeons” post-graduation were usually provided intensive clinical and/or laboratory experiences (human examination and, when possible, dissection) and apprenticeship/internship opportunities to perfect their skills at surgery, amputation, and bleedings (Wilder 2013).

Students who wished to become “physicians,” on the other hand, spent more time in the classroom studying internal medicine, chemistry, and pharmaceutical application. Having completed this relatively brief retinue of courses, and with the payment of graduation fees (in addition to tuition costs), students were awarded a doctorate of medicine degree (Wilder 2013). As most states had licensure laws that granted practicing rights upon graduation, the proliferation of low rigor proprietary medical academies swelled. The widespread existence of such low rigor

institutions, particularly in the South, led historian Colin B. Burke to note, “The body of formalized medical education [in the mid-nineteenth century] was inadequate, if not incorrect and dangerous . . .” (1982, 252).

However, as both Johns Hopkins Medical School in Baltimore, Maryland and the Harvard School of Medicine began to modernize their curricular structures, hire more astute professors, and employ harsher student examination procedures, other period medical colleges, like those associated with Yale University or the University of Michigan, followed suit (Cremin 1988; Geiger 2000). As Roger Geiger explains, “Not only had the requirements for a M.D. been greatly expanded, but the advantage to future practitioners shifted decisively away from cheap degrees in favor of rigorous preparation” (2000, 273). Between the late 1800s and early 1900s, American medical higher education underwent a transition from practices solely based on theory to training based on scientifically supported treatments and diagnostic evaluations. Before this transition, medical education and practice was dictated by various conflicting theories that aimed to explain health and disease (Cardinal & Kaell 2017).

Before these late-nineteenth-century curricular revisions, the admission standards for most US medical colleges were slack and unregulated (Ludmerer 1999). It was not until 1905 that a high school diploma became mandated nationwide as an admission standard for medical programs (Cardinal & Kaell 2017). Eventually, having a bachelor’s degree was required to enroll in medical study. The period between 1870 and 1910 saw sweeping change in medical higher education but only in a handful of leading institutions. Despite advances in some northern medical colleges, southern medical higher education failed to improve instruction and

scientific considerations. It was this uneven trajectory of reform that ultimately led to the development of a mass medical training inspection that culminated in the Flexner Report of 1910 (Cremin 1988), wherein southern institutions were harshly judged for delays in improvement. Even so, throughout the nineteenth century, southern medical higher education relied on a precedent of “exceptionalism” that painted regional medical needs as being unique to the quasi-tropical climate and racially bifurcated social strata once capitalized by radicalized slavery and later substantiated by sharecropping and Jim Crow law. Such, in the minds of southern intellectuals, set the South apart from the instructional and practitioner norms of the North.

Southern Nationalism

The idea of “southern medicine,” being inherently different from the medical practices of the North, exemplified the extent to which southern nationalism had permeated academia. There are numerous examples of authors establishing “southern medicine” as a unique phenomenon in the landscape of medical history (Mitchell 1944; Duffy 1957; O’Brien 2010), whether due to the climate and the resulting differences in prevalent diseases (Stewart 2015) or through the inherently racist views pertaining to physiological differences between white patients and the enslaved “negro” population (Duffy 1968; Kenny 2013 & 2016; Willoughby, C.D. 2017). This kind of sectionalism reinforced the ideological need to establish state medical colleges and attract those southern students who had, for the first half of the nineteenth century, attended northern physician training institutions.

Duffy (1968) illustrates how southern nationalism manifested itself in period medical practices via the reliance on eighteenth-century medical treatises that described a variety of

diseases that were linked to regional climate and topography. In the eighteenth and nineteenth centuries, burgeoning southern intellectuals reasoned that sicknesses present in the American South were inherently different from those in the North. Sectionalist medical professionals argued in editorials that students who received medical training in the North were unprepared to deal with illnesses brought on by the southern climate (Duffy 1957; 1968). In one such editorial, physician James C. Billingslea declared that anyone with aspirations to practice medicine in the South should receive a southern education because medical practice in the humid, muggy, tropical-fever-ridden region “is entirely different from that taught in northern institutions, and by northern writers” (1856, 215). As early as the 1830’s, before there were any established medical colleges in the South, there was a call by sectionalist medical professionals demanding that medical students study the peculiarities of southern diseases or obtain remediation after graduating from Northern medical colleges if they intended to practice in the South (Kilbride 1999; Stewart 2015).

As late 1850s sectionalism intensified and the threat of disunion and civil war grew, the demand for southern medical colleges increased (Duffy, 1984). Due to intense southern nationalism and enhanced numbers of southern medical colleges, students who heralded from such states as Arkansas, Mississippi, and Tennessee returned in ever-increasing numbers to enroll in newly minted medically academies firmly affixed in their home states (Mitchell, 1944). This exodus of southern students from northern medical colleges culminated in December of 1859, when approximately 200 students withdrew from colleges in Philadelphia and transferred to southern institutions. The majority of these students enrolled at the Medical College of Virginia. This educational egress was celebrated in

a variety of southern newspapers published in cities such as New Orleans and Richmond (Mitchell 1944; Duffy 1957).

As the exodus of southern students from northern medical colleges progressed, many southern academies relied on southern nationalist propaganda to recruit. Medical colleges like Virginia's Hampden-Sydney College framed their clinical opportunities as uniquely southern in nature (Stewart 2015). Similar, the Medical College of Louisiana touted its expertise and proximity to yellow fever outbreaks and other tropical diseases to entice interested students (Duffy 1984). To a greater or lesser extent, all southern medical colleges, regardless of state association, relied on a careful mixture of regional pride and racist ideologies to lure southern students who were likewise supportive of segregation.

Racial Ethos

Southern nationalism went far to wed racism and slavery to regional medicine. As a result, physicians cataloged numerous physiological and mental conditions that applied to slaves (Wilder 2013). Southern doctors and medical educators, when espousing the exceptionality of their medical colleges, argued that the physiological differences between whites and the large enslaved population required scientific attention to address diseases that were relevant to each race. For example, it was commonly held that individuals of European descent were more susceptible to yellow fever than persons of African descent (Carrigan 2015; Willoughby C.D. 2017). It was also argued, largely due to the American eugenics movement and the marginalizing effects of pseudo-scientific phrenological claims, that there were significant intellectual disparities between individuals of European ancestry and those of African descent. Even more disturbing was the reliance on nineteenth-century medical practices (such as

forced gynecological examinations) to determine which enslaved females should procreate with healthy slave males in order to produce new generations of forced labor (Smith 1998; Goodson 2003; Winfield 2007; Tomlinson 2013; Kenny 2013 & 2016; Sublette & Sublette 2016; Forret 2016; Willoughby U.E. 2017).

Indeed, southerners from all professions attempted to rationalize the institution of slavery by arguing that the anatomical differences between blacks and whites were so great as to warrant separate medical practices. Samuel Cartwright, a native of Virginia who had practiced medicine in both Mississippi and Louisiana, published profusely about the social requirement of segregated medical facilities and diagnostic sciences. He even went so far as to “discover” uniquely “negro” disorders, such as drapetomania, a mental illness that Cartwright asserted caused slaves to run away from their plantation masters (Duffy 1968). While not all physicians of the era were as outspoken as Cartwright, most of his contemporaries subscribed to an ideology that insisted on wholly different medical treatments for each race (Mitchell 1944). In 2017, historian Christopher D. Willoughby highlighted this phenomenon of period specific, race-based medical theories and practices after examining over 4,000 nineteenth-century medical students' theses. In his research, Willoughby observed a distinct ideological shift toward racial medical differences in periods of increased sectionalism and southern nationalism (2017).

In addition to the physiological differences highlighted by nineteenth-century medical professionals, southern medical academies made regular use of slave labor to perform tasks including, but not limited to, resurrection—the illegal exhumation of human remains for autopsy (Schultz 1992). Prior to emancipation, some medical colleges, such as the Medical College of

Georgia, used enslaved persons to procure corpses for instructional dissection and student surgical practice. Grandison Harris, a slave purchased for \$700 by the faculty of the Georgia-based medical institution, not only dug up corpses and transported them to the college under cover of night, he was also forced to bury the dismembered remains in the college's basement to conceal the illicitly procured bodies (Cohen 2012; Wilder 2013).

As well as providing labor for unpleasant tasks such as the abovementioned, slaves were also exploited for clinical purposes and were easily-acquired specimens for antebellum colleges. As described by historian Todd L. Savitt: "southern white medical educators and researchers relied greatly on the availability of negro patients for various purposes. Black bodies often found their way to dissecting tables, operating amphitheaters, classroom or bedside demonstrations, and experimental facilities. . . . blacks were particularly easy targets, given their positions as voiceless slaves or 'free persons of color' in a society sensitive to and separated by race. . . . Blacks were considered more available and more accessible in this white-dominated society: they were rendered physically visible by their skin color but were legally invisible because of their slave status" (1982, 331-332).

A majority of southern medical education institutions engaged in slave examination and experimentation including, but not limited to, Transylvania University Medical Department in Kentucky, Louisville Medical Institute, Atlanta Medical College, and the Medical College of South Carolina. Faculty at the Medical College of South Carolina advertised in local newspapers requesting that plantation owners bring sick slaves to the institution for diagnosis, pharmaceutical treatment, or, in some cases, surgery (Savitt 1982). In short, slaves were exploited as medical specimens to both train students *and* attract

potential enrollees. Medical colleges that advertised training with live humans (in addition to the dissection of corpses) were more likely to attract larger enrollments than those who could not provide human subjects, living or deceased, black, white, or otherwise.

Knowledge of medical college slave abuse spread throughout the South and, as a result, enslaved persons were frightened by the notion that, after they or their loved ones passed away, their bodies would be used for medical student autopsies and discarded without proper burial. This fear spilled over into the Reconstruction era and spawned such nightmarish tales amongst black communities as "'night doctors' who stole, killed, and then dissected black people (Savitt 1982, 340). These fears would become all too real in 1930s Alabama when members of the US Public Health Service, in conjunction with officials at Tuskegee University, performed unethical syphilis studies on hundreds of unknowing African American males (Jones 1993).

These ties to the institution of slavery should come as no surprise given that, in the late eighteenth and early nineteenth centuries, founders of medical colleges in both the North and the South were entrenched in the tradition of purchasing and keeping human chattel. According to historian Craig Steven Wilder (2013), cofounders of the medical college in Philadelphia, John Morgan and William Shippen, Jr., both owned slaves and were wed to major slave holding families. Likewise, "New York surgeon John Bard, president of the local medical society, secured his family's economic position by investing in land and slaves" (Wilder 2013, 228).

During the antebellum era, plantations owners provided rudimentary health care for slaves. After emancipation, however, freedmen were devoid of basic medical attention. Even though the Freedman's Bureau provided some

financial assistance for healthcare, most hospitals were predominantly white serving with little time or attention given to black patients. Prior to the Civil War, the need to provide physician training to African Americans was recognized by some northern medical colleges. As a result, some integrated. In 1848, Bowdoin Medical School in Maine conferred medical degrees to John V. De Grasse and Thomas J. White. Less than ten years later, Berkshire Medical School in Massachusetts graduated two African American in 1858. By 1860, nine northern medical colleges in total had admitted black students (“Black History Month: A Medical Perspective, Education” 2018).

On the contrary, in the South, per the steadfast precepts of late-nineteenth-century southern segregationists ideology, enhanced by the 1896 “separate but equal” ruling in *Plessy v. Ferguson* and *de jure* Jim Crow law, separate educational institutions to train black doctors were founded. As a result, fourteen African American medical colleges, such as Flint Medical College in New Orleans and the Raleigh, North Carolina-based Leonard Medical School, opened to provide training for black men who were expected to care for an expansive population bereft of medical

attention (Rhodes 2007; Harley 2006). However, half of these institutions closed before the twentieth century, leaving only seven to educate black medical professionals.

While Howard University College of Medicine and Meharry Medical College remain viable in the twenty-first century, the remaining five closed before the 1920s due to the crippling results of the 1910 Flexner Report, decreased student numbers, and loss of external funds. For example, Flint Medical College, (opened in 1889 as a physician-training department associated with New Orleans University) was originally supported by the Freedman’s Aid Society, the Methodist Episcopal Church, and private citizens (Rhodes 2007; Hart 2013). However, during the early twentieth century enrollment steadily decreased as funding from the aforementioned religious, organizational, and private citizen sources waned. When the Flexner Report was published, damaging claims about the college’s inability to provide adequate training further dampened enrollments and the institution’s board of trustees decided to close the college in 1911 (Rhodes 2007). Per Flexner, “Flint Medical College is a hopeless affair, on which money and energy alike are wasted” (1910, 233).

Table 2: Early-Twentieth-Century African American Medical Colleges

<i>Founded</i>	<i>Institution</i>	<i>Location</i>
1869	Howard University College of Medicine	Washington, DC
1873	Meharry Medical College	Nashville, TN
1882	Leonard Medical School	Raleigh, NC
1888	Louisville National Medical College	Louisville, KY
1889	Flint Medical College	New Orleans, LA
1900	Knoxville Medical College	Knoxville, TN
1900	University of West Tennessee Medical Department	Memphis, TN

Impact of the Flexner Report

As a step toward standardizing medical higher education, medical organizations such as the American Medical Association (founded in 1847) pressed for curricular revisions in nineteenth-century medical colleges. Admission requirements also became a focus of these standardization efforts, and some colleges began to tighten their requirements in the mid-1800s, with the trend becoming more widespread following the Civil War (Miller & Weiss 2008). These reform efforts were often met with objections from faculty due to the limitations they would impose on the number of eligible students (Slawson 2012). Medical colleges in the South, even those with excellent reputations, were often unable to meet the American Medical Association's standards, particularly with difficulties associated with reopening institutions temporarily closed by the Civil War (Duffy 1984).

As academic reform became commonplace in medical higher education, malpractice and low standards become evident at southern institutions. Though the requirement for potential students to possess bachelors' degrees had become an accepted norm, it was reported that Tulane University Medical Center, in the early twentieth century, was still accepting students with no undergraduate degree whatsoever. Despite being one of the South's "premier" medical colleges, the Louisiana institution had continued to rely on an age-old and outdated policy that applicants provide their high school diploma alone for program admittance (Platt 2014). It was amidst these early attempts at reform, and the resulting academic push back, that Abraham Flexner was commissioned by the Carnegie Foundation, with the approval of the American Medical Association, to determine deficiencies in US and Canadian medical instruction and make recommendations for the standardization of medical training

practices (Halperin, Perman, & Wilson 2010; Ludmerer 2010; Leslie 2011).

Flexner spent the better part of a year touring each of the then existent 155 US and Canadian medical colleges before publishing his recommendations. The report laid out deficiencies noted at each medical college and included harsh recommendations for improvement. Flexner went so far as to call for the closure of 117 US institutions (Flexner 1910; Ebert 1977). Resultantly, deficiencies described in the report such as inadequate laboratories, poor equipment funding, unacceptable admission standards, etc. ultimately led to the closure of most US proprietary medical colleges (Miller & Weiss 2008).

The report was especially harsh concerning medical colleges in the South. Flexner grouped the institutions he visited into three divisions. The first division which listed sixteen institutions—none from the South—was dedicated to medical academies deemed worthy of operation and recognized as providing quality educational services to their home states (1910). The second division, containing fifty colleges, listed institutions that should be kept open, so long as they were significantly improved. Only one southern medical college, Tulane University Medical Center, was included in the second division of the Flexner Report, but not without criticism. The Louisiana medical college needed to enhance admission standards and increase academic rigor if it was to continue operation (Duffy 1984).

Various northern institutions, as well as all other medical colleges in the American South, fell into Flexner's third division. These academies were condemned for a variety of reasons including, but not limited to, extremely lax entrance requirements. Flexner explained that the majority of students attending these colleges were allowed

to enroll with the “equivalent of a high school education” or with educational certificates “from non-existent schools as well as from non-existent places” (1910, 36). It was discovered that 80% of the students enrolled at the Mississippi Medical College in Meridian had been admitted with only minimal education requirements. The Meridian institution was deemed “totally without merit” (250). Flexner went on to admonish those colleges that “apologize[d] for their wretchedness by alleging the shortcomings of the student body” (41). This, per Flexner, was not an acceptable excuse.

In Flexner’s opinion, such weak medical colleges did nothing to improve academic merit in their home states and should be closed instead of allowing them to remain open and besmirch the public with inadequate instruction. Flexner was disappointed to report that most southern institutions insisted on maintaining lax admittance to warrant continued operation. Such defenses were, to Flexner, wholly inexcusable, as medical physicians and surgeons ought to be of the highest academic caliber in order to effectively treat disease and execute safe medical procedures. Flexner not only recommended that institutions improve or close, but he also maintained that there were far too many medical students relative to the US population. As Flexner explained, it was better to have an adequate number of well-trained doctors than a surplus of unqualified physicians (1910).

African American-serving medical higher education was also addressed in the Flexner Report. Though Flexner indicated the importance of these institutions, he concluded that if African American medical academies, such as Knoxville Medical College and the Louisville National Medical College in Kentucky, were to persist, extreme measures had to be taken. Entire campuses needed refurbishment; new laboratories with up-to-date medical apparatuses were

required; well-organized residency programs were mandatory; and sufficient endowment funds were needed to support organizational longevity. Though Flexner gave a crippling assessment of African American medical education, he emphasized that only two such training programs were worthy of retention: Meharry Medical College in Nashville, Tennessee and the medical department of Howard University in Washington DC (1910).

Originally, Flexner championed the survival of the Nashville institution: “The urgent need in respect to the medical education of the negro is concentration of resources slender at best on a single southern institution. Much the most favorable situated for this purpose is Meharry Medical College at Nashville” (1910, 233). However, he eventually advised that Howard University’s medical division alone was to be nurtured through the creation of a \$500,000 endowment due to the institution’s association with the city’s Freedman’s Hospital. Even so, Meharry Medical College remained in existence. Per Flexner’s assessment, the other five African American medical colleges were ill equipped to provide adequate African American medical training and should be shuttered (Epps 1989; Thomas 2011; Miller & Weiss 2012).

Conclusion

The results of the Flexner Report were slow to take effect nationwide but, by 1928, only 76 US institutions were open. Seven years later, that number had dropped to 66 (Beck 2004; Ludmerer 2010). By the start of the 1930s, approximately 75% of southern medical colleges had closed. The rapid growth of medical higher education during the nineteenth century, the substantial scientific advancements made during the late nineteenth/early-twentieth century, and the South’s slow advancement of medical instruction

makes this region and era significant for historical research. Certainly, this period of southern medical higher education was heavily influenced by southern nationalism, slavery and racism, and the lasting impact of the Flexner Report. As a result, a more in-depth exploration of the region and its medical educational practices are warranted. To be sure, southern nationalism and increased sectionalism leading up to the Civil War led to a dramatic increase in the establishment of medical institutions in the South. This epoch of distinctly southern medical institutions was encouraged and touted by medical practitioners due to the promotion of “unique” regional diseases and racialized pseudoscientific medical claims (Duffy 1968).

During Reconstruction, efforts were being made nationwide to adopt more stringent standards for medical instruction. The lack of compliance with these reform efforts led directly to the creation of the Flexner Report of 1910, which exposed the deficiencies present in most US medical colleges—particularly those in the American South. Flexner, as explained above, was especially harsh in his assessment of southern medical higher education, to the degree that only three institutions were designated as worthy of continuance: Meharry Medical College, Howard University, and Tulane University Medical Center, two of which were black institutions (Flexner 1910). Despite this literature-fueled narrative, there is a need to further explore the history of southern medical higher education through intense archival source analysis. By instituting a conceptual framework centered on southern nationalism, racial ethos, and the impact of the Flexner Report, greater care can be taken to produce a text rooted in significant primary data that inclusive of all southern medical academies, defunct or otherwise. Such a text will go far to enhance an understanding of higher education,

medical training, and southern intellectualism in an era rife with sectionalism and segregation.

References

- Aptowics, Cristin O’Keefe. *Dr. Mutter’s Marvels: A True Tale of Intrigue and Innovation at the Dawn of Modern Medicine*. New York: Avery Publishing, 2015.
- Beck, Andrew H. “The Flexner Report and the Standardization of American Medical Education.” *The Journal of the American Medical Association* 291, no. 16 (May 2004): 2139-2140.
- Billingslea, James C. “An Appeal on Behalf of Southern Medical Colleges and Southern Medical Literature.” *The New Orleans Medical and Surgical Journal* 13 (1856): 214-217.
- “Black History Month: A Medical Perspective, Education.” *Duke University Medical Center Library & Archives*. <https://guides.mclibrary.duke.edu/blackhistorymonth>.
- Boster, Dea & Joel Howell. *Medicine at Michigan: A History of the University of Michigan Medical School at the Bicentennial*. Ann Arbor: University of Michigan Press, 2017.
- Bowman, Shearer Davis. “Hampton-Sydney College” in *The New Encyclopedia of Southern Culture, Volume 17: Education*, ed. Charles Reagan Wilson, 231-232. Chapel Hill: University of North Carolina Press, 2011.
- Brown, Ray. “Index of Colleges and Universities that Have Closed, Merged, or Changed Their Names.” *College History Garden*. <https://collegehistorygarden.blogspot.com/2014/11/index-of-colleges-and-universities-that.html>.
- Burke, Colin B. *American Collegiate Populations: A Test of the Traditional View*. New York: New York University Press, 1982.

- Cardinal, Lucien & Allen Kaell. "The Role of Medical Education in the Development of the Scientific Practice of Medicine." *Journal of Community Hospital Internal Medicine Perspectives* 7, no. 1 (January 2017): 58-60.
- Carrigan, Jo Ann. *The Saffron Scourge: A History of Yellow Fever in Louisiana, 1796-1905*. Lafayette: University of Louisiana at Lafayette Press, 2015.
- Cohen, David Michael. *Reconstructing the Campus: Higher Education and the American Civil War*. Charlottesville: University of Virginia Press, 2012.
- Cremin, Lawrence A. *American Education: The Metropolitan Experience, 1876-1980*. New York: Harper & Row Publishers, 1988.
- Delaney, Caldwell. *The Story of Mobile*. Mobile: The Haunted Bookshop, 1981.
- Duffy, John. "Sectional Conflict and Medical Education in Louisiana." *The Journal of Southern History* 23, no. 3 (August 1957): 289-306.
- Duffy, John. "A Note on Ante-bellum Southern Nationalism and Medical Practice." *The Journal of Southern History* 34, no. 2 (May 1968): 266-276.
- Duffy, John. *The Tulane University Medical Center: One Hundred and Fifty Years of Medical Education*. Baton Rouge: Louisiana State University Press, 1984.
- Ebert, Robert H. "Medical Education in the United States." *Daedalus* 106, no. 1 (Winter 1977): 171-184.
- Epps, Howard R. "The Howard University Medical Department in the Flexner Era, 1910-1929." *Journal of the National Medical Association* 81, no. 8 (1989): 885-911.
- Fleming, Kenneth A. "Flexner at 100: A Brief View from Oxford." *Perspectives in Biology and Medicine* 54, no. 1 (2011): 24-29.
- Flexner, Abraham. *Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching*. New York: The Carnegie Foundation for the Advancement of Teaching, 1910.
- Forret, Jeff. "'Deaf & Dumb, Blind, Insane, or Idiotic': The Census, Slaves, and Disability in the Late Antebellum South." *Journal of Southern History* 80, no. 3 (2016): 503-548.
- Fossier, Albert E. *New Orleans; The Glamour Period, 1800-1840*. Gretna: Pelican Publishing Company, 1998.
- Gasman, Marybeth, Barbara Bush, & Louis W. Sullivan. *The Morehouse Mystique: Becoming a Doctor at the Nation's Newest African American Medical School*. New York: Johns Hopkins University Press, 2012.
- Geiger, Roger L. "The Crisis of the old Order: The Colleges in the 1890s," in *The American College in the Nineteenth Century*, ed. Roger L. Geiger, 264-276. Nashville: Vanderbilt University Press, 2000.
- Goodson, Martia Graham. "Enslaved Africans and Doctors in South Carolina." *Journal of the National Medical Association* 95, no. 3 (2003): 225-233.
- Gotto, Antonio M. & Jennifer Moon. *Weill Cornell Medicine: A History of Cornell's Medical School*. New York: Cornell University Press, 2016.
- Grauer, Neil A. *Leading the Way: A History of Johns Hopkins Medicine*. Baltimore: Johns Hopkins University Press, 2012.
- Halperin, Edward C., Jay A. Perman, & Emery A. Wilson, E. A. "Abraham Flexner of Kentucky, His Report, *Medical Education in the United States and Canada*, and the Historical Questions Raised by the Report." *Academic Medicine* 85, no. 2 (2010): 203-210.

- Harley, Earl H. "The Forgotten History of Defunct Black Medical Schools in the Nineteenth and Twentieth Centuries and the Impact of the Flexner Report." *Journal of the National Medical Association* 98, no. 9 (August 2006): 1425-1429.
- Hart, Dana C. "Towards an Ideal of Moral and Democratic Education: Afro-Creoles and Straight University in Reconstruction New Orleans, 1862-1986." PhD diss., Louisiana State University, 2013.
- Hodges, Brian. "The Many and Conflicting Histories of Medical Education in Canada and the USA: An Introduction to the Paradigm Wars." *Medical Education* 39, no. 6 (June 2005): 613-621.
- Jones, David S., Jeremy A. Greene, Jacalyn Duffin, & John H. Warner. "Making the Case for History in Medical Education." *Journal of the History of Medicine and Allied Sciences* 70, no. 4 (January 2015): 623-652.
- Jones, James H. *Bad Blood: The Tuskegee Syphilis Experiment, New and Expanded Edition*. New York: The Free Press, 1993.
- Kenny, Stephen C. "The Development of Medical Museums in the American South: Slave Bodies in Networks of Anatomical Exchange." *Bulletin of the History of Medicine* 87, no. 1 (Spring 2013): 32-62.
- Kenny, Stephen C. "Medical Racism's Poison Pen: The Toxic World of Dr. Henry Ramsay (1821-1856)." *The Southern Quarterly* 53, no. 3/4 (Spring/Summer 2016): 70-96.
- Kilbride, Daniel. "Southern Medical Students in Philadelphia, 1800-1861: Science and Socialability in the 'Republic of Medicine.'" *The Journal of Southern History* 65, no. 4 (November 1999): 697-732.
- Kirkland, Scotty E. "South Alabama, University of" in *The New Encyclopedia of Southern Culture, Volume 17: Education*, ed. Charles Reagan Wilson, 294-297. Chapel Hill: University of North Carolina Press, 2011.
- Leslie, W. Bruce. "The Curious Tale of Liberal Education, Professional Training and the American College, 1880-1910." *History of Education* 40, no. 1 (July 2011): 83-95.
- Kenneth M. Ludmerer. *Time to Heal: American Medical Education from the Turn of the Twentieth Century to the Era of Managed Care*. New York: Oxford university Press, 1999.
- Ludmerer, Kenneth M. (2010). "Commentary: Understanding the Flexner Report." *Academic Medicine* 85, no. 2 (February 2010): 193-196.
- Miller, Lynn E. & Richard M. Weiss. "Medical Education Reform Efforts and Failures of US Medical Schools, 1870-1930." *Journal of the History of Medicine and Allied Sciences*, 63, no. 3 (July 2008): 348-387.
- Miller, Lynn E. & Richard M. Weiss. "Revisiting Black Medical School Extinctions in the Flexner Era." *Journal of the History of Medicine and Allied Sciences* 67, no. 2 (April 2012): 217-343.
- Mitchell, Martha Carolyn. "Health and the Medical Profession in the Lower South, 1845-1860." *The Journal of Southern History* 10, no. 4 (November 1944): 424-446.
- Mohr, Clarence L. "Tulane University" in *The New Encyclopedia of Southern Culture, Volume 17: Education*, ed. Charles Reagan Wilson, 321-323. Chapel Hill: University of North Carolina Press, 2011.
- Montgomery, James Riley, Stanley J. Folmsbee, & Lee Seifert Green. *To Foster Knowledge; A History of the University of Tennessee, 1794-1970*. Knoxville: University of Tennessee Press, 1984.
- O'Brien, Michael. *Intellectual Life and the American South, 1810-1860: An Abridged*

- Edition of Conjectures of Order*. Chapel Hill: University of North Carolina Press, 2010.
- Platt, R. Eric. *Sacrifice and Survival: Identity, Mission, and Jesuit Higher Education in the American South*. Tuscaloosa: University of Alabama Press, 2014.
- Rhodes, Desha P. *A History of Flint Medical College, 1889-1911*. New York: iUniverse, Inc. 2007.
- Rothstein, William G. *American Medical Schools and the Practice of Medicine: A History*. New York: Oxford University Press, 1987.
- Salvaggio, John. *New Orleans' Charity Hospital: A Story of Physicians, Politics, and Poverty*. Baton Rouge: Louisiana State University Press, 1992.
- Savitt, Todd L. "The Use of Blacks for Medical Experimentation and Demonstration in the Old South." *The Journal of Southern History* 48, no. 3 (August 1982): 331-348.
- Schrewe, Brett. "From History to Myth: Productive Engagement with Flexnerian Metanarrative in Medical Education." *Advances in Health Science Education* 18 (2011): 1121-1138.
- Schultz, Suzanne M. *Body Snatching: The Robbing of Graves for the Education of Physicians in Early Nineteenth Century America*. Jefferson: McFarland & Company, Inc., Publishers, 1992.
- Slawson, Robert G. "Medical Training in the United States Prior to the Civil War." *Journal of Evidence-Based Complementary & Alternative Medicine* 17, no. 1 (2012): 11-27.
- Smith, Calvin C. "Serving the Poorest of the Poor: Black Medical Practitioners in the Arkansas Delta, 1880-1960." *The Arkansas Historical Quarterly* 57, no. 3 (Autumn, 1988): 287-308.
- Solberg, Winton U. *Reforming Medical Education: The University of Illinois College of Medicine, 1880-1920*. Champaign: University of Illinois Press, 2009.
- Spalding, Phinzy. *The History of the Medical College of Georgia*. Athens: University of Georgia Press, 2011.
- Stewart, J. Brenton. "To Support the Southern Medical Public': The Medical College of Georgia as a Southern Information Agency, 1828-1861." *Information & Culture* 50, no. 4 (2015): 554-577.
- Stowe, Steven M. *Doctoring the South: Southern Physicians and Everyday Medicine in the Mid-Nineteenth Century*. Chapel Hill: University of North Carolina Press, 2004.
- Sublette, Ned & Constance Sublette. *The American Slave Coast: A History of the Slave-Breeding Industry*. Chicago: Lawrence Hill Books, 2016.
- Thomas, Karen Kruse. "Medical Education" in *The New Encyclopedia of Southern Culture, Volume 17: Education*, ed. Charles Reagan Wilson, 77-81. Chapel Hill: University of North Carolina Press, 2011.
- Tomlinson, Stephen. *Headmasters: Phrenology, Secular Education and Nineteenth-Century Social Thought*. Tuscaloosa: University of Alabama Press, 2013.
- Wilder, Craig Steven. *Ebony and Ivey: Race, Slavery and the Troubled History of America's Universities*. New York: Bloomsbury Press, 2013.
- Willoughby, Christopher D. "'His Native, Hot Country': Racial Science and Environment in Antebellum American Medical Thought." *Journal of the History of Medicine and Allied Sciences* 72, no. 3 (July 2017): 328-351.
- Willoughby, Urmi Engineer. *Yellow Fever, Race, and Ecology in Nineteenth Century New Orleans*. Baton Rouge: Louisiana State University Press, 2017.

Winchester, Simon. *The Professor and the Madman: A Tale of Murder, Insanity, and the Making of the Oxford English Dictionary*. New York: Harper Perennial, 2005.

Winfield, Anna Gibson. *Eugenics and Education in America: Institutionalized Racism and the Implications of History, Ideology, and Memory*. New York: Peter Lang Publishing, Inc., 2007.

Worthington, W. Curtis Jr. "A Study in Post-Flexner Survival: The Medical College of the State of South Carolina, 1913." *Journal of the American Medical Association* 266, no. 7 (1991): 981-984.