INSIDE THIS ISSUE

1 Interview With First Lady Hildreth
3 Learning About Radiology
5 Medicine Is Messier Than You Realize
7 Design Thinking and Revolutioning Medical Education
10 A Letter From the Editor
Last semester, The PULSE, formally introduced the college’s 12th president, Dr. James E.K Hildreth in our fall edition. Dr. Hildreth was named president in July 2015 and since then has been working tirelessly to make his presence known and goals realized.

However, as the old adage states, behind every great man is a great woman and Mrs. Phyllis Hildreth is no exception. The PULSE was able to have a few moments with the new first lady of the institution and learn more about her past, present and future.

Mrs. Hildreth was born in Berkley, California to an Oklahoma father and Missouri mother. During the interview, she frequently spoke of her love of history and how she felt everything happened for a reason and during a certain time. “I believe that our individual stories and community stories are so heavily marked by larger national and historical stories that seem not to be related, but when we pull back and pay attention we see why something happened,” she recollected.

During the Civil Rights movement, her father graduated from Lincoln University, an HBCU in Jefferson City, Missouri. Concurrently, the Korean War was taking place and opportunities for blacks were very limited. Therefore, young black scientists and doctors ended up on the West Coast where they could thrive.

“I was trained in California schools during a time when Sputnik happened and the Russians got to space first, so everyone felt the need to train more scientists,” she said. She also stated that she was brought up during a time where there were linear roles and individuals had to identify as one particular job. “There wasn’t any deciding my career path, it was fairly organic, the question wasn’t ‘Are you going to be a scientist, but more so what kind,’” she continued.

After graduation, working as a laboratory technician for five years did not stop Mrs. Hildreth from her true passion. She instinctively felt the need to help the family and believed that healthy families were the core of healthy communities. “I loved the centrality of maternal child health,” she said. “Maternal and child health systems are the heart of my universe.”

She recalls her last job being at Johns Hopkins University in the pharmacology department. She remembers one of her husband’s mentors pulling her to the side and asking what it was she truly wanted to do because she could not continue to hide in the lab.

“He did me a great service. I would have signed up for a career that did not have much black life or culture,” she said.

With the hopes of pursuing a degree at the School of Hygiene and Public Health at Johns Hopkins and the ultimate goal of studying maternal and child health, Mrs. Hildreth applied to the University of Maryland’s law school. In 1984, she became part of the first law class at the university to matriculate a large number of African-American students. Incorporating her love of history she said, “With Brown vs. Board of Education they continued to segregate high school and higher education, so this class was a part of completing the desegregation process.”

In the course of her first year of law school, Mrs. Hildreth discovered that she actually liked it. Upon searching for a job during school she was forced to carry around her one-page resume stating that she had majored in biology, worked in a lab for five years and now wanted to be a lawyer. “The only person who said ‘yes’ was the public defender of Baltimore city,” she said. “They put me over the CINA (Child In Need of Assistance) division and I clerked there for the remainder of law school.”

Mrs. Hildreth went on to graduate in 1988—and because of her great work ethic and willingness to work in a narrow, but nevertheless, important area of law, she was offered a position at the public defender’s office. Immediately after swearing in, she had piles of cases waiting for her. “We must focus on that which we have passion and do it with exhausting excellence,” she advised when reminiscing.

Our first lady is currently a professor at Lipscomb University teaching conflict management where she was previously a student in the same program. When asked how she felt about having to move back to Nashville after her husband accepted the president’s position, she said that she had never left after he departed Meharry for California. “We were forced to have a long distance marriage for four years,” she stated. “But during that time I was able to empathize with mothers in a way that I had not previously. I was able to see what it was like for other families to have to do this and make it work,” she continued.

When asked how she deals with the pressure of being a professor, first lady and public figure, she said that she may work long and non-traditional hours, but the minute she gets home she has released every-thing and work is not the focus. Her hobby, knitting, is also a stress reliever that helps to ease the day’s worries.

In addition to assisting in fulfilling her husband’s goals for Meharry, she also hopes that, by her presence and practice, women of her generation begin to institutionalize a way to be easily accessible. “I want to figure out a way to have couch hours and it will be known that at a certain time on a certain day I will be findable,” she said.

Lastly, Mrs. Hildreth wants all Meharry students, whom she affectionately calls her babies, to know and understand that we are not just training to become doctors, dentists and researchers. We must realize that our purpose is bigger than ourselves, she said, and in some cases the things we want to do may not have been invented yet.

“If your goal is a value, then you have great freedom and flexibility to adapt to the different ways in which that value is manifested and addressed,” she continued. “However, if your goal is to a particular process, when that process is no longer needed, neither are you.”
LEARNING ABOUT RADIOLOGY

(A Discussion with Future Generations)

Luther B. Adair, II, M.D.

There they were, my dad and my new cocker spaniel, Jocko (seemed like a great name at the time). It was no different a night than several other nights in 1982 when my father came home and trained Jocko in the concrete floored basement of our split-level, ranch-style suburban home. At the time, the stairs that led to the basement were open to the view of the basement from an unenclosed stair rail. As a 5-year-old, however, this was not a stair rail at all; it was a gymnastics paradise to display my ninjutsu expertise—plus a bonus view of my personal dog trainer and my new puppy. It does not get much better for a 5-year-old except for the frequent chastisement that parents would never need such a resource, but also explains its necessity in certain situations.

There has been extensive controversy regarding the overuse of CT scans ordered by the emergency departments over the last six years—just “google” CT scan, pediatrics and CNN. Some argue that the legal system is causing doctors to practice defensive medicine. Others argue that the training of emergency personnel promotes a flippant approach to the use of diagnostic imaging.

Recently, my 8-year-old nephew suffered a head injury while playing and I realized after talking with his parents that the responsibility should also lie with the parents to understand their available options in similar circumstances. Hence the reason my company, Viewbox Holdings, LLC, and I decided to create our second (and most unlikely) product, a children’s book.

The book, Learning about X-rays with Lula and Ethan, is loosely based on my nephew’s experience and attempts to educate the pediatric population about possible concerns around radiation exposure, but also explains its necessity in certain situations. Most importantly, and aligning with the ACR’s Heart of Radiology campaign to educate the public about our role as radiologists, this book introduces readers, both parents and children, to one of their key health care providers—the radiologist. This book was written for ages 7+ and features two children eating lunch and discussing one child’s experience of getting an X-ray. Obviously, it is our desire that parents would never need such a resource, but given the trend of increased diagnostic imaging in the emergency setting, as well as the large numbers of allied providers joining the health care force over the next few years, we believe this resource will help families and providers.

It is our hope that any provider that treats the pediatric population has access to this resource for their patients (even radiologists in the outpatient or emergency waiting rooms). You can purchase either the paperback version for $9.59 or the e-book for $4.99 directly from the publisher by following this link http://www.blurb.com/b/6950764-learning-about-x-rays-with-lula-and-ethan. The book will also be available through Amazon, Barnes and Noble, and in the Apple iTunes Store where you can also find our iPad application for radiology trainees, Viewbox. Because the information and message in Learning about X-rays with Lula and Ethan also aligns with the Image Gently Campaign, this non-profit organization has also agreed to endorse the book by placing it on their website: www.imagently.org. During the editing process, we received guidance and amazing support from the chair of the Image Gently Campaign, Dr. Donald Frush, as well as my sister, Dr. Candace Adair, who is a child and adolescent board-certified psychiatrist. If you have any questions or comments please feel free to email me directly at luther.adair@viewbox.net.
Medicine is Messier Than You Realize

A review of Atul Gawande’s Complications: A Surgeon’s Notes on an Imperfect Science

Peter Oluwaseyitan Bamikole, MSI

“Read Gawande.” That was the brief answer a doctor gave me when I asked him what medicine is like. So I started with this book, and thoroughly enjoyed it. To better commend it to you, I will briefly review it here. Dr. Atul Gawande, an American surgeon, opens Complications with two central assertions: “[Medicine is not] an orderly field of knowledge and procedure,” but instead “it is an imperfect science, an enterprise of constantly changing knowledge…” (Kindle p. 7). To support these claims, he compiles 14 essays loosely federated under three headings: Fallibility, Mystery and Uncertainty.

FALLIBILITY

Acquiring a new skill demands a learning curve. “As patients, we want both expertise and progress. What no one wants to face is the contradiction” (p. 27). Novices improve best with experience, under expert supervision. But the skills practiced in medicine involve real-life human beings, and this makes all the difference. What ailing person wants to be practiced on? When Dr. Gawande had a sick child, he himself—at the time a resident—refused to let a resident treat his daughter. He demanded an attending. This understandable fear means that doctors must be distrustful about the training process, and trained physicians are necessary handmaidens to their trainees’ mistakes.

This bothers us so much because contemporary medicine prioritizes machine-like perfection in delivering care. Dr. Gawande visited Ontario to find his illustrative example. North York’s Shouldice Hospital is a ‘hernia factory’: they exclusively perform hernia repairs, cheaper and faster than anywhere else, yet with better outcomes. From the staff to the building’s very design, Shouldice “deliver[s] hernia repairs the way Intel makes chips” (p. 40). But could this “factory model” work on a grander scale? According to Gawande, the medical establishment is wary of this sort of automation especially as it pertains to the “art” of diagnosis.

Yet, regardless of their operative model, doctors must be healers. After all, “nothing splits a patient and doctor like a mistake” (p. 45). An instance of medical error is usually seen as a case of bad doctoring. It is often not so. Medical mistakes happen. He offers this advice to physicians: be diligent, expect perfection and own your errors.

Mystery

Our view of pain is historically Cartesian (“pain is like pulling on a rope to ring a bell in the brain”), but was replaced by Gate-Control theory (the spinal cord modulates pain percepts before they reach the brain, so the “bell itself modulates the rope”). Now we think pain is “all in the head.” Under this dispensation, pain and other sensations are “neuromodules” in the brain, like computer programs. But these neuromodules are entire networks (mood, emotion, memory, anticipation etc.) that together decide the threshold at which they play. Pain, therefore, “is a symphony” (p. 124). This means that a mere toe stub is more complex than we thought, and it also explains why limbless people feel limb pain. Despite its physical basis, in the brain all pain is the same. Gawande weaved the story of a patient through this essay to strengthen his conclusion: the social coordinates of chronic pain merit our attention. By paying attention to the non-physical factors that may cause pain, this new model has, surprisingly, made pain political. What unites the essays in this section is the observation that mystery comes with the territory of doctoring. So make your peace with it, early and often.

Uncertainty

In the opening essay, Gawande cites a 1971 paper about the nature of fallibility in science. Its authors argued that in applied sciences like medicine, perfect knowledge of a particular case is impossible. For example, who knows precisely where a hurricane makes landfall? They called this “necessary fallibility.” Yet some things (like ice cubes in a fire) are firmly predictable. Ignorance and inaptitude are surmountable sources of error, but necessary fallibility cannot be helped. So in medicine, “are people more like ice cubes or like hurricanes?” (p. 198).

Autopsies are on the decline, perhaps because of “medicine’s 21st century tall-in-the-saddle confidence” (p. 193). Folk wisdom states that autopsies rarely imply misdiagnoses in the cause of death. But the four studies Gawande provides suggest that 33 to 40 percent of autopsies revealed misdiagnoses that could have saved lives had they been caught. And these rates have improved since at least 1938. For his part, Gawande reckons that humans are equidistant between hurricanes and ice cubes. “permanently mysterious” in some sense, yet given enough systematic investigation—“entirely scru-
Design Thinking and Revolutionizing Medical Education

Bassam Zahid, MSII

It’s looking like another idyllic spring just north of Charlotte Avenue, as the season turns and the trees start to bloom and the birds begin to chirp. For all intents and purposes, Meharry Medical College has had a successful year and we still have a few months left. This year, our school opened up The Cal Turner Family Center for Student Education for full-time use. Meharry and 2100, the school’s health and technology interest group, also launched the school’s first mobile app, Meharry Mobile, which was born out of student-administration collaboration. And the School of Medicine Class of 2016 has found its match in competitive residencies and specialties. Justifiably, there is a feeling of accomplishment and success in the air.

But as we pat ourselves on the back, we must also be aware that there is revolution happening at medical schools across the nation. Certain institutions are leading the conversation on what medical education will look like. They are not doing it based on their name or their rank or their level of experience in medical education. Instead, these schools are reinventing medical education simply by being the first to act. This past year, University of California, Irvine School of Medicine piloted a program where they distributed Google Glass to third- and fourth-year students in order to equip medical students with digital tools to visualize health problems in the human body, make connections with family and patient records, and collaborate with their peers. This spring, students from the internationally known design school, IDEO, to head up their Design Institute for Health. Their mission is to re-imagine medical education. So, as I sat in this conference room and listened to the researchers from the jCENTER, I had an epiphany. Why are we trying to catch up in a medical education system that will likely be obsolete in 10 years? Schools reinventing their curriculums to include design principles or introducing cutting edge technology to their students or participating in AMA’s Accelerating Change in Medical Education Consortium (which includes Vanderbilt by the way) will be rethinking how medical education is delivered. Let’s start videotaping lectures, which will not only allow students to revisit a lecture if they need to, but can also be a way to improve the delivery of content by the professors in the classroom. If professional athletes can break down their tendencies with game film why can’t educators? After all, isn’t teaching an art?

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These are just a few ideas I have, but what else can we imagine if we put together the experiences and brain power of hundreds of professional students, teachers and administrators? I am calling for a shift in our attitudes and our energy so that we work collaboratively instead of antagonistically. Meharry was the only school that gave many of us a chance to fulfill this once-in-a-lifetime dream. So when we advocate for change, we mean it from a good place. Let’s not forget that.

So as we put the cherry on top of yet another productive year, make sure to enjoy the spring galas and the inauguration festivities. Take the time to reflect on how amazing it is that Meharry is still standing and how we survived the Flexner Report. Give thanks to the giants that paved the way for us and raised the bar. Toast President Hildreth and the graduates of 2016 for leading the way. But remember, after the inauguration, after that collective sigh of relief, the honeymoon is over. Now the real work can commence. Let’s innovate medical education to revolutionize health care. In other words, let’s change the world.

My voice often feels muffled. People say I mumble. I come off as shy, hesitant and quiet. “Speak up.” “I can’t hear you.” That was a lot of my feedback growing up. And now I wish I could tell you that adding my opinion comes natural to me. As a training physician, I still think about the consequences of criticism, rejection and conflict in both my work and personal life. To be honest, as a black woman, my opinion has never been as rigorously sought as it has been now. But what muffles it? Is it the system, my superiors, my peers or is it me?

I remember when President Obama first won the election in 2008. I was anxiously sitting in the lounge of my undergraduate dormitory. At the University of Pennsylvania, my peers and I represented a minority and now we suddenly mattered – a black president. For the night, we had a voice. We forgot about the divisions between race and class. We forgot our opinions were not that of the majority.

Eight years later and two successful terms in office, we now have the opportunity to witness another historical stride. Secretary of State Hillary Clinton has been a forerunner in the Democratic Party and the first female candidate to gather this much support in presidential elections. In February 2016, she visited us here at our institution, Meharry Medical College.

I witnessed the diversity of supporters that flooded the ballroom of The Cal Turner Family Center for Student Education. While standing in the crowd with my classmates, I knew my voice mattered. I am a black female voter with the opportunity to witness leaders that generations before me would have never imagined. The American political system has seldom allowed individuals that look like myself to have roles of leadership. As a result, my voice has always felt muffled in such arenas.

Regardless of who wins the 2016 elections, seeing candidates that look like me brings my viewpoints to the forefront. So the next time, I doubt voicing my opinion as a doctor, because of fear of being critiqued by my superior and peers, I must remember that I, too, am a leader. Children that look like me see my role as a physician and picture themselves in my place. And it’s my understanding of those patients with similar experiences that gives me an advantage in the quality of care that I provide. Hence, not applying my diverse background to the health care arena will only exclude my voice and that of my patient from the conversation.

So how can I speak louder than the system, my superiors and my peers? As an American citizen, not voting for the candidate that represents my opinion allows the system to drown out my views. As a physician, not advocating for patients that I empathize with stifles the concerns of my patient. And not speaking up for myself muffles my voice amongst my superiors and peers. But I stop mumbling when I project my voice louder than my own hesitations and vote for a 2016 candidate that empathizes and advocates for me.

Estevana Isaac, MSIII
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