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**Editorial**

**AΩA and professionalism in medicine**

Richard L. Byyny, MD

Medicine is based on a covenant of trust, a contract we in medicine have with patients and society. Medical professionalism stands on this foundation of trust to create an interlocking structure among physicians, patients, and society that determines medicine’s values and responsibilities in the care of the patient.

AΩA was founded in 1902 by a small group of medical students galled by the absence of professional values and the immaturity and poor conduct of their fellow medical students and faculty. They wrote: “The mission of AΩA is to encourage high ideals of thought and action in schools of medicine and to promote that which is the highest in professional practice.” They established the AΩA motto as “Be Worthy to Serve the Suffering.” They defined the duties of AΩA members: “to foster the scientific and philosophical features of the medical profession; to look beyond self to the welfare of the profession and of the public; to cultivate social mindedness, as well as an individualistic attitude toward responsibilities; to show respect for colleagues, especially for elders and teachers; and to foster research and in all ways to ennable the profession of medicine and advance it in public opinion. It is equally a duty to avoid that which is unworthy, including the commercial spirit and all practices injurious to the welfare of patients, the public or the profession.” AΩA’s founding principles in fact described professionalism, though that term came later. Scholarly achievement and leadership capabilities, ethical standards, fairness in dealing with colleagues, demonstrated professionalism, potential for achievement in medicine, and a record of service to the school and community remain the criteria for membership in AΩA and represent what AΩA stands for.

Both Hippocrates and Maimonides developed oaths codifying the practice of medicine as a sacred trust for the physician to protect and care for the patient and a set of values for physicians appropriate for their times. Both emphasized teaching and learning, and the primacy of benefiting the sick according to one’s ability and judgment while adhering to high principles and ideals. These oaths were also a form of social contract that partially codified what patients and society should expect from the physician.

Apparently, Scribonius, a physician, coined the word “profession” in 47 AD. He referred to the profession as a commitment to compassion, benevolence, and clemency in the relief of suffering, and emphasized humanitarian values. While patients and societies and the concept of medical professionalism have changed over time, many of the professional values in medicine are timeless. To paraphrase Sir William Osler: “The practice of medicine is an art; a calling, not a business; a calling in which your heart will be exercised equally with your head; a calling which extracts from you at every turn self-sacrifice, devotion, love and tenderness to your fellow man.” He also wrote, “no doubt medicine is a science, but it is a science of uncertainty and an art of probability.”

The science of medicine has progressed dramatically in the last hundred years. Up until the mid-1900s, doctors could diagnose some illnesses, but they had few diagnostic tests or effective therapies. Thus one of the special roles...
of doctors—the art of medicine—was to relieve patients’ suffering. Scientific and technical advances brought more effective treatments, which paradoxically led many doctors to become less capable of compassionately caring for the suffering patient. Within the last fifty years, social changes have altered the relationship of the doctor and patient. In what is sometimes referred to as the corporate transformation of health care, many components of medicine actually became businesses that do not put the patient first and dismiss the special relationship between patients and their doctors. At the same time, the profession of medicine has not responded as effectively as it should have to protect the primacy of the care of the patient.

A few decades ago, medical professionalism became an important issue. Many researchers concluded that an integrated patient-centered approach was needed, one that included both the science and the art of medicine. While a disease framework is needed to reach a diagnosis and select appropriate therapy, the illness framework in which the patient’s unique and personal experience with suffering, including individual worries, concerns, feelings, and beliefs, is equally important. Some recognized that what Francis W. Peabody wrote earlier was simple and profoundly important: “One of the essential qualities of the clinician is interest in humanity, for the secret of the care of the patient is in caring for the patient.”

In dissecting medical professionalism to better understand the concept and determine how to address issues of concern both to the profession and society, most researchers have concluded that the profound and rapid advances in medical knowledge, technology, specialized skills, and expertise have inadvertently resulted in a loss of our professional core values.

Many writers and our professional organizations have proposed a renewed commitment to restore professionalism to the core of what doctors do. It seems self-evident that we should practice medicine based on core professional beliefs and values. This represents medical professionalism. In my opinion, this relates first and foremost to the doctor-patient relationship. It starts with physicians understanding their obligations and commitments to serve and care for people, especially the suffering. Physicians must put patients first and subordinate their own interests to those of others. They should also adhere to high ethical and moral standards and a set of medical professional values. These values start with the precept of “do no harm.” They include a simple code of conduct that explicitly states: no lying, no stealing, no cheating, nor tolerance for those who do. I also believe that the Golden Rule or ethic of reciprocity, common to many cultures throughout the world—“one should treat others as one would like others to treat oneself”—should be the ethical code or moral basis for how we treat each other.

Professional organizations and leaders in medicine have recently defined the fundamental principles of medical professionalism. CanMed2000 stated it well: “Physicians should deliver the highest quality of care with integrity, honesty, and compassion and should be committed to the health and well being of individuals and society through ethical practice, professionally led regulation, and high personal standards of behavior.” The American College of Physicians and the American Board of Internal Medicine have developed a physician charter with the following fundamental principles: the principle of primacy of patient welfare or dedication to serving the interest of the patient and the importance of altruism and trust; the principle of patient autonomy including honesty and respect for the patients to make decisions about their care; the principle of social justice and to eliminate discrimination in health care for any reason.

These professional organizations have also developed a set of professional responsibilities. I also believe explicit rules and values are important in medicine and I have taken the liberty to rephrase some and add others in the table on page 3.

Learning requires a clear, straightforward set of expectations combined with learning opportunities, reflection, evaluation, and feedback, and these principles may provide an important basis for physician learning. While I hope that most physicians understand, practice, and teach with professionalism and its core values, the literature indicates that unprofessional behaviors are common. This raises the question: Can you teach professional behaviors to students and physicians? Although medical schools would like to select students who already have professional values and ethics, they lack reliable tools to find those candidates and so primarily rely on academic performance for admission.

Medical schools transmit knowledge, teach skills, and try to embed the values of the medical profession. During this curriculum and learning process do students learn to put the needs of patients first? Most of the data indicate that students begin with a sense of altruism, values, and open-mindedness, but they learn to focus on what is tested to pass examinations. They observe self-interest, a focus on income, and nonprofessional behaviors by their seniors in our profession.
and unfortunately grow progressively more cynical and less professional, especially once they get to clinical experiences. This is worsened by the lack of moral and professional values in the business and political components of medicine that often disregard the patient and the patient’s needs and interests. Although most schools have curricula related to professional values, what students learn and retain is from what is called the “hidden curriculum”—the day-to-day experiences of students working in the clinical environment while watching, listening, and emulating resident and physician behaviors. It is not a good story. Fortunately, some schools and teaching hospitals have implemented effective interventions to improve medical professionalism and some have attempted to develop methods of evaluating aspects of professionalism. A few courses do not seem to make the difference in learning professionalism and professional behaviors. The most effective programs, so far, lead by changing the entire culture and environment to respect and reward professional behavior and to diminish the negative impact of the “hidden curriculum.” Many of these interventions are top-down and bottom-up institutional changes that focus on faculty, house staff, students, and staff members, and have shown promising reports of changes in professionalism. Little has been done about practicing physicians.

After reading the literature and this editorial, you could become pessimistic, but we call it “the practice of medicine” because we are always practicing our profession to learn and improve. Our work in medical professionalism is a work in progress. Our goal is not perfection, but continuous learning, improvement, and focusing on what is best for the patient. We recognize medical professionalism as an important issue for doctors and society that must be taught and then practiced in the interests of both patients and our profession.

We have begun to make progress, but the challenges are huge. AΩA developed the Edward D. Harris Professionalism Award a few years ago as our society’s contribution to promote professionalism in medicine. We have made some interesting awards, but haven’t had a clear focus about AΩA’s leadership role and how AΩA’s programs and projects can make a difference. Is it curriculum reform, remediation, or some other important step toward the future? To enable us to focus our efforts and define our role in the development of professionalism in medicine, AΩA will host a “think tank” meeting in late July to discuss these issues and others with experts in the field. I hope to learn how to make it possible for AΩA to provide leadership in medical professionalism. Because many AΩA members are leaders in medicine, we need to recognize that leadership in medicine must always be grounded in professional values. The combination of leadership and professionalism can have a synergistic and positive impact on our members and profession.

Richard L. Byyny, MD, Editor
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My heart skips a beat
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Rises with him aboard.
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My heart swells
Now, ten years later,
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Collide with his opponent,
Fall, rise,
And jump for joy.

Joyce Hooley-Gingrich, MD, MPH, FAAP

Illustration by Jim M'Guinness
Wisdom in medicine

William T. Branch, Jr., MD, and Gary A. Mitchell, MD

Dr. Branch (AΩA, University of Alabama, 1966) is director of the Division of General Internal Medicine and the Carter Smith, Sr., Professor of Medicine at the Emory University School of Medicine. Dr. Mitchell is professor emeritus of Medicine at the Indiana University School of Medicine.

We attribute wisdom to our heroes in medicine: “Dr. John Hickam was a wise man.”* It is a quality attributed sparingly and thoughtfully. When asked, most doctors will think long and hard before naming a few wise teachers or mentors. Though obviously important in medicine, little has been written about the nature of medical wisdom, or about how it is acquired or transmitted from one generation of doctors to the next.

Psychologists have struggled to define wisdom. Ursula Staudinger and Paul Baltes provide the definition, “insight and knowledge about oneself and the world . . . and sound judgment in the case of difficult life problems.”¹ Baltes sees wisdom as integrative and holistic, an approach to life that includes factors such as social and emotional intelligence and practical knowledge.² Monika Ardelt believes that wisdom is less an expert knowledge system than a quality of a person.³ She says that no one is wise all the time, and some people are wiser in one aspect of life than another.³ Wisdom, like moral reasoning, develops throughout life, mediated by skills and personal characteristics including openness to experience, other-enhancing values, conflict resolution, and managing uncertainty.⁴⁻⁷ Reflection on personal experience may enhance wisdom.⁵

We sought to characterize medical wisdom from narratives written by doctors. The stories come from a workshop sponsored by the American Academy on Communication in Healthcare at the University of Wisconsin in 2003. The doctors were asked to write about meaningful professional experiences. We learned a surprising amount from just a few stories and recognized that they might provide a pathway to explore wisdom.

Ruth’s story

A practitioner told of caring for Ruth, an eighty-four-year-old former nursing dean who was hospitalized in the throes of terminal heart failure. He described her as a “kind, gracious, grande dame.”

One day I asked how she hoped I could help her. She replied, “Want you to talk with my family . . . help them to understand that I can’t do this anymore . . . I need for them to take over . . . I tried to tell them this before—I told my oldest daughter and she said, ‘Oh, mother, you’ll be fine.’”

Ruth, a widely admired matriarch and no doubt wise woman, turned to her doctor for advice on a difficult life problem. She realized that her physical and cognitive capacities were deteriorating. Too weak to deal with the situation herself, yet wise enough to know she needed assistance, she asked her doctor to “be her voice and help her to begin her passage out of this life to the next.”

Researchers say that wisdom increases in middle age and may remain stable or progress to around the age of seventy-five years. As in Ruth, the slow decline thereafter lags decline in cognitive function. We presume this doctor is in the stage of life when he is acquiring wisdom, as his patient judged when she asked him to help. He said, “I needed Ruth to remind me what I am here for.”

This doctor’s comment seems wise. He will need other aspects of wisdom to assist Ruth. These include wisdom to understand the viewpoints and emotions of the family members and the patient; wisdom to remain calm, compassionate, and flexible in an emotionally fraught situation; and wisdom to guide a patient and her family toward accepting life’s inevitabilities.

*Dr. John Hickam was Dr. Mitchell’s chairman when he served as a house officer at Indiana University.
These capacities of a wise person do not fit neatly into a single quality, but we probably sense that a wise person combines these many attributes.

A faculty member’s story

I gave a lecture to a group of internists practicing in the local community where I had attended medical school. I read several narratives describing residents’ experiences. Afterwards, in discussion, many, I found, were actually my teachers in med school—I am sixty, they must be seventy to seventy-five years old. They began describing their experiences in residency. One—my former mentor—mentioned the importance of his mentor and role model, Tinsley Harrison.

I asked him, ”Tell us a story to illustrate something about Dr. Harrison that had a profound influence on you.”

His story: “I asked Dr. Harrison, ‘How can you give advice to people on life and death matters? What enables you to assume such responsibility for people?’ Dr. H said, ‘I just imagine what I would say if they were members of my own family, and then I say it.’”

As I reflected on my former mentor’s story, I thought, what profound yet well-known advice, the Golden Rule. I’ve known it since kindergarten, but what an experience to have heard it from Dr. Harrison.

Here wisdom passes through three generations of medical educators. Dr. Harrison rephrased a well-known precept from what has been called the wisdom literature. Such wisdom often resides in religions, as does the Golden Rule, expressed here as doing for others what you would do for your closest loved ones. But as this story illustrates, wise sayings may gain life and layers of meaning when transmitted by influential mentors. So wisdom often comes from our common moral and religious heritages and takes shape in a person steeped in those heritages. Dr. Harrison continues to pass on wisdom long after his teaching career has ended.

A chief resident’s story

A former chief resident shared this story of Dr. John Hickam, his chairman of Medicine as an intern:

I had a patient who presented with mental status changes and many other symptoms. I loved the narrative history even then, and somehow decided strychnine poisoning was my first choice (zebras always fascinated me). My chair shook his head and informed me, gently, that this was impossible. Strychnine doesn’t cause mental status changes. “Okay,” I said. I didn’t have much time to read during the night. The next morning, the chair started morning report by saying, “I apologize for questioning your diagnosis yesterday. I read about strychnine and you were right—congratulations.” This was early in my internship and it set the tone for the rest of
Wisdom in medicine

my training. Four years later he asked me to be his chief resident, but unfortunately he died the April before. His funeral was attended by hundreds from all over. Turns out I wasn’t the only one who thought he was a wise man.

From Dr. Hickam’s example, a former chief resident who became a medical teacher learned the importance of being humble enough to give learners the benefit of the doubt—even when “sure” he was right and they were wrong. Dr. Hickam modeled humility, which is likely an essential quality of a wise person. Dr. Hickam’s wisdom served as a powerful motivator in this teacher’s later career and his wisdom was a source of reflection and continued learning that persisted for decades.

A primary care physician’s story

I often attribute the fact that I entered primary care and family medicine to my interactions on a Family Medicine experience during the “optional time” in the summer between first and second year. I had the experience of seeing a new intern—post call from her first night on call—preparing to enter her surgical rotation with a surgeon known to grill residents (especially women and even more especially minority women) to “facilitate” (read sarcastically) their learning.

I witnessed with growing disgust his childish piques of temper. I saw her run from the room in tears and felt hypocritical and powerless for not coming to her aid. I saw everyone in the operating room defer to this behavior and stored those observations fearfully and guiltily.

On that same day I was introduced to a family doctor, another minority woman, who was scattered but human (like me?), who openly resisted the time limitations placed on her, who patiently listened to an elderly diabetic woman while she gently cut the patient’s thickened toenails.

She did little that was earthshaking and yet there was no question that everyone around her felt the humanity of what she did do, down to the mundane tasks of ministering to an elderly woman’s gnarled feet.

I chose my path on that day and have not looked back. I met the doctor again, years later, and thanked her. She was surprised. She did not remember me (not surprising after hundreds of patients and many students over eleven years) and did not realize that the simple act of tending a person’s feet would have a profound meaning to a student. I strive to remember that in my smallest actions today.

Wisdom may come as an epiphany. Here it was an unexpected gift, perhaps a moment of grace, when the young student doctor saw a teacher, someone wiser that herself, living in accord with values that were not generally shared on the service. The story also reminds us that we, as medical teachers, may wield surprisingly powerful influences in our day-to-day encounters. We are always role models in the eyes of our learners, even when we think our actions are routine. Wisdom comes from this realization.

This story illustrates an act of compassion. Like humility, it seems that compassion is a quality of most wise persons.

Shirley’s story

The nurses and patient-care assistants said Shirley must be crazy. She had moldy chicken and rotten peaches on her bedside table. Her nurse had asked the assistant to get her ready for discharge to the rehab center. The patient was up getting her last dialysis treatment.

The assistant asked her nurse, “Should we pick up all her things?”

“Yes,” she said.

They did that, found the chicken and peaches on the bedside table, and threw them out. How could a patient keep food like that on her bedside table?

When Shirley returned from dialysis she found that they had thrown away the chicken and the peaches. She was so angry, she cried. The nurse called me for help. First I talked with the nurse and the assistant.

“She must be a little crazy,” the nurse
said and I thought that might indeed be the case. I prepared myself to speak with a crazy person and went into Shirley’s room.

She was a tiny African American woman. She was crying. “That was not their chicken. That was Shirley’s chicken. My sister made the chicken for me. Her own recipe. Wrapped it in tinfoil. Brought it in this morning. They said it was moldy. It was not moldy. The peaches were not rotten! They were a gift from my sister and they had no right to throw them out! No right!”

Shirley’s emotional soliloquy led the doctor to understand her point of view. Whatever else, the chicken and the peaches held special importance for Shirley, importance that would have been respected had someone listened to her before throwing them out. This story illustrates how preconceived notions about people often lead down the wrong pathway. A wise person will not dismiss someone because he or she is old, poor, or uneducated. What a great opportunity this event would have presented for a student or resident to learn the importance of listening to the patient. We see a doctor’s knowledge being tempered by an experience.

The nature of wisdom

Patients and families frequently seek advice from their doctors about life’s most intimate and important problems. These encounters provide medical practitioners with rich opportunities to gain wisdom. Cultivating these opportunities offers a remarkable pathway for growth. Following this pathway strengthens humility, compassion, and respect for others. Wisdom incorporates even more: a steady temperament, self-knowledge, humanity, foresight, and the pragmatic knowledge and depth of understanding and judgment needed to solve patients’ problems.

Philosophers through the ages have pondered the meaning of wisdom. Humility, practical knowledge, even leading the good life have been considered, but found neither necessary nor sufficient to define wisdom. We prefer the empirical approach taken by contemporary psychologists who find wisdom to be an amalgam of qualities of a person, no one of which is always present.2,3 Our medical perspective on wisdom was deepened by reading the doctors’ stories. The search for wisdom was a common theme. Some stories focused on humility, others on compassion. As wisdom may vary from person to person and according to the situation, discovering that the search favored different qualities came as no surprise. Rather, we conclude that individual physicians may follow rich and varied pathways to wisdom.

Previous investigators have focused on the role of wisdom in clinical judgment.6,9 Those authors’ examples of wise clinical judgment embraced life issues similar to those presented in our narratives. They concluded that wisdom enters most prominently into medical decision making when the answers are not precise and depend more on context. In such cases, the benevolence of the action, the good character of decision makers, and respecting the choices made by the patient become elements in decision making.8,9 We would add another aspect linked to medical wisdom: it is more about finding the wisdom to help others than about leading the good life oneself.

We wonder, however, if all the qualities listed above still fall short of capturing the nature of wisdom. Is there something about the nature of a truly wise person that is difficult to put into words? Is it possible to fully describe innate goodness, deeply felt compassion for others, true clarity of self-knowledge, or the courage to always do what is best? Is it possible to imagine the integration of all these qualities, so the good life becomes helping others? This may less define a concept than describe a person.

We think that seeking wisdom embarks one on a lifelong search. Our stories illustrate discrete episodes that marked that journey for a group of doctors. The moments selected seemed to be seminal events or epiphanies, important landmarks on the road to wisdom. Some describe interacting with wise mentors and teachers. Others describe dealing with situations requiring the narrators to act wisely. Did they become wise from their actions or by witnessing these events? The doctors make clear they were profoundly affected by the events described. But can
wisdom be transmitted from one generation of physicians to the next? If so, how? The stories illustrate another characteristic of those who wrote them, their capacity for self-reflection. We believe that capacity enabled them to learn from their experiences.

**Role modeling**

We observe in the stories of Dr. Harrison and Dr. Hickam, as well as the “scattered” family doctor, an important modeling of wisdom. As teachers, we struggle to understand how to create the learning climate that will allow and encourage modeling of wisdom through effective mentors, not confined to the Harrisons and the Hickams, but encompassing everyday teachers and practitioners.

In the three cases of role modeling cited above, the power that elevated modeling to exemplifying wisdom seemed related to profound personal attributes of the teacher. Their examples were not confined to exhibiting a skill or even an incisive display of knowledge. Dr. Hickam, the chairman, was in fact humble. Dr. Harrison lived by the golden rule. A faculty member was caring.

If qualities of these wise people were recognized and absorbed by the learners, the beautiful simplicity and goodness of the qualities and the influence of the role models counted. But another factor enhanced the impact of role models. These learners, it seemed, wanted to find faculty members who were caring, humble, and compassionate. We suspect many learners seek positive role models. We conclude that mentors and teachers should develop awareness of their learners’ hunger for wisdom. They should nourish this hunger. One lesson for teachers is to live every step by your values—because you are always observed by your learners. You never know when the seminal moment arrives for them.

**Experience**

Mentoring is not always available. Potentially profound experiences for residents and medical students may occur at times when no teacher is around. Practicing doctors almost by definition interact with patients and families in the absence of mentors. Several storytellers described meaningful experiences with patients that called for wisdom. The doctors recognized this. Furthermore, the stories made clear they saw the opportunities for growth; for example, by gaining a deeper understanding of a patient’s needs or perspectives, or by discovering (and thereby nourishing) within themselves the compassion needed to be of help. Being in the right place to encounter a meaningful opportunity was certainly necessary, but we think there is no shortage of opportunities. Doctors need to rise to the occasion to absorb the lesson. What helps a doctor be receptive to wisdom?

Some physicians will certainly have a greater capacity for wisdom than others. This may depend on character and temperament. It may depend on prior experiences and the circumstances of the present situation. We believe, however, that it is possible to foster the many humanistic qualities of trainees and medical students. These qualities may not fully define, but certainly contribute to wisdom. Four facilitative pathways that may awaken hunger for wisdom in trainees and young doctors are reflection, self-awareness, storytelling, and group support. Other approaches do not exist, but we believe these four are promising and teachable based on our experience.

- **Reflection.** To reflect is to look back and examine experience. Educators believe that reflective learning promotes professional and personal growth. One gains new perspectives and a deeper understanding of experience by connecting its meaning to moral and professional values, socially desirable ends, and wider knowledge. Each of our stories about wisdom represents a reflection—accomplishing one or more of these ends.

- **Self-awareness.** Mindfulness includes awareness of one’s feelings and reactions. It may include critical reflection on experiences. Even a seminal experience, something said by an important role model or a profound interaction with a patient, can be a jumble of memories. You sense that an elderly lady whose sister’s moldy chicken was discarded felt treated as less than a person. But connecting this with modulating one’s innate prejudices, with valuing respect for persons, with careful considerations of how to convey to others the need for listening to a problematic patient—these need to be critically examined. The propensity to pause and reflect, to be mindful, to have the aha! reaction should be nourished by the person who seeks wisdom.

- **Storytelling.** Storytelling is a means increasingly used by medical educators to foster reflection and self-awareness. Deep reflection often follows when human beings come together to tell stories. As in our stories, human values of empathy, compassion, and respect are likely to be themes of doctors’ stories. Of interest to those engaged in narrative ethics, oftentimes events that occurred years in the past remain vividly present in the minds of the writers, as if encountered today. We saw that when doctors read their stories. Time, it seems, is not linear in the development of the human spirit.

Especially the conditions will be ripe for wisdom if effective modeling by “wise” teachers is coupled with ongoing storytelling that allows for deep critical reflection. Reflective discussions are rare on teaching wards. Nevertheless, we saw the hunger for understanding their experiences in the stories written by the doctors above, and we think it is possible to develop the
humanistic skills of many faculty teachers.\textsuperscript{10–12}

- Group support. Doctors should discuss their stories with colleagues. One step is to have the experience. A next step is to tell the story. A third desirable step is reflecting on the meaning of the story with others in a group. Groups provide support and validation that you are not alone in facing life’s problems.\textsuperscript{10,11} Colleagues can be role models. And you can strengthen with colleagues your commitment to the values, beliefs, and behaviors that constitute the good and wise doctor.

Summary

The pathway to wisdom is a crooked one. Doctors have many opportunities to become wiser, and may do so in different ways and to different degrees. We suggest several means to facilitate their passage. There remains an additional key step. Seeking wisdom should become embedded in the culture of medicine. This may follow from the types of activities discussed above. We believe that wisdom is underrecognized as a life goal for medical practitioners and teachers. It is the pinnacle that every doctor should strive to achieve.

References


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Osler came to Boston

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Boston can lay claim to being the home of many notable figures in medicine but not that of William Osler (1849–1919). He was the preeminent English-speaking physician at the turn of the twentieth century but is not so widely recognized today among younger physicians in spite of the efforts of a small international society dedicated to his memory, the American Osler Society. Born in Canada, Osler taught successively at McGill University (1870–1884), the University of Pennsylvania (1884–1889), and the Johns Hopkins Medical School (1889–1905). He spent his final years as the Regius Professor of Medicine at Oxford (1905–1919) and was knighted in 1911. Thus he lived mainly in four cities: Montreal, Philadelphia, Baltimore, and Oxford. Osler did postgraduate research for a year or so in London, where he reported the role of platelets in blood clotting. He often came to New York City, mostly to board ships for passage to Europe. He frequented Boston professionally and during his middle years visited there the family of his wife, Grace Linzee Revere Gross ("the Widow Gross," as Osler sometimes called her), the great-granddaughter of Boston’s Paul Revere.

During the four decades between 1876 and 1913 Osler made at least nine trips to Boston to learn about advances in medical education, to share his clinical expertise, and to relate his humanistic views on medicine in talks before various groups.

1875: Boston medicine
In 1875 Osler was twenty-six years old and a young professor at the McGill Medical School. In August of that year he traveled down to Boston, as Harvey Cushing wrote, "to familiarize himself with its medical traditions" and to do some library research. He had a letter of introduction
Sir William Osler at the bedside at Johns Hopkins Hospital, circa 1903-1904.

Courtesy of the Osler Library of the History of Medicine, McGill University.
to the foremost physician in Boston, the venerated Henry Ingersoll Bowditch (1808–1892). Bowditch had studied under Pierre Louis in France and had translated Louis’ monograph on typhoid. Young Osler spent a memorable evening with the elderly physician and upon leaving was given a bundle of Dr. Bowditch’s reprints with this parting advice: to keep a reprint of everything he, Osler, should write.

1877: Harvard Medical School

Two years later, in April 1877, Osler stayed a week in Boston visiting Harvard Medical School, which was then located on North Grove Street near the Massachusetts General Hospital. The medical school had been undergoing major educational changes following the inauguration of Charles Eliot as president of Harvard in 1869. Eliot had been appalled at the poor quality of incoming Harvard medical students. Three-fourths of them had only a high school diploma. While the later clinical training was good in Boston’s several hospitals, the preclinical instruction lasted only two years and consisted of five months of lectures repeated in the second year. Exams were given orally and were very cursory. Professors were paid by student fees, which invited popular courses over rigorous ones. But these conditions characterized most other U.S. medical schools.

Eliot introduced the following changes:
1. The university collected student fees
2. Instructors were placed on a regular salary
3. Admission standards were raised
4. The basic science curriculum was reformed, with teachers trained in European research methods

5. A three-year-long sequence of courses running nine months each year and involving written examinations was instituted.

At the North Grove Street school, Osler was impressed with the physiology course taught by Henry Pickering Bowditch (1840–1911), whom he had previously met when visiting his uncle, the elderly Dr. Bowditch. The younger Bowditch had studied under Paul Broca and Jean Charcot and had spent time with Claude Bernard and the histologist Paul Ranvier. Osler admired the school’s three student physiology labs, all well equipped with microscopes, microtomes, and kymographs. He judged the instruction offered there in chemistry and pathology equally superior. But perhaps above all, Osler envied the autopsy suite at the Massachusetts General Hospital. In an article written later that year he urged all American medical schools to follow “the good example of Harvard.”

Osler’s interest in medical education dated from the two Boston visits.

1883: Harvard Medical School centennial

During the fall of 1883, while still at McGill, Osler made his third trip to Boston to attend the centennial celebration of Harvard Medical School at its new location on Boylston Street. Oliver Wendell Holmes, a former dean and the emeritus professor of Anatomy, gave a long address, reviewing the medical school’s history. The first classes in 1783 had been taught in the basement of Harvard Hall in Cambridge; in 1810 the medical school began its moves through a succession of locations in Boston. But for Osler, more important than the
school's history was its new dean, who was Henry Pickering Bowditch. He had expanded the new curriculum to include laboratory courses in histology, bacteriology, and embryology.

1894: Harvard Alumni Association

In June of 1894, Osler, then in Baltimore for five years, came up to Boston to speak before the Harvard Medical Alumni Association. A few weeks before, the initial class at the Hopkins Medical School had just completed its first year of basic sciences. At the alumni meeting, Osler described Hopkins' various preclinical courses. He added that Hopkins differed from most other American medical schools in the controversial issue of admitting women to all classes.

*Initially, Osler and William Henry Welch had not favored the intrusion of women students into their teaching programs, but both ultimately accepted them because of an endowment to the medical school of half a million dollars by a group of Baltimore ladies, who stipulated admission of women to all classes. The medical school was finally able to open in 1893 only because of their half-million-dollar bequest. Several years before, the Baltimore ladies had made overtures about coeducation to Harvard Medical School but had been rebuffed by the conservative medical faculty there.

Another professor at Hopkins, Dr. William T. Councilman, had been more inflexible than Osler and Welch because of a strongly held theological bias concerning women. How his objection was overcome is well told by both Cushing and Michael Bliss*pp199–201 but bears repeating briefly here. The problem of Councilman's intransigence at the Hopkins Medical School disappeared when he was recruited back to his alma mater Harvard as professor of pathological anatomy. There he became a successful department chair and later an important figure in local medical politics. As Osler related to his Harvard Medical Alumni audience, "We took the money, and you took the man. We have co-education without Councilman, and you have Councilman without co-education." 1p399

To the alumni audience Osler lamented that coeducation at Hopkins actually had been a failure because at the end of the first year one-third of the female students had dropped out for marriage. 1p399 The truth of the matter was that only three women had been admitted to the first class of eighteen students. 1p388 Later, another female student was lost because she became a Christian Scientist. 1p399 The next Hopkins medical class included eight women among the forty students admitted.

1901: Boston Medical Library

In 1901 Osler again took the train up from Baltimore—this time to speak at the dedication of a new building for the Boston Medical Library. 1p544 During his very first visit to Boston in 1875, he had spent time in the old library searching the medical literature on hemorrhagic smallpox and thus had great respect for the library's collection. 5p133 It was in this talk in 1901 that Osler declared, "To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all." 1p545

1904: The Ingersoll Lecture

In 1904 Osler was invited by President Eliot of Harvard to give the Sixth Ingersoll Lecture, an annual address on "The Immortality of Man." It was a formidable undertaking, since an earlier speaker had been William James, the famous pragmatic, agnostic philosopher. The lecture was delivered in Harvard's intimidating Memorial Hall. Osler's wife and her Boston family, the Reverses, attended.

Osler was reluctant to disclose publicly his innermost beliefs, particularly with his in-laws present. Years before, when asked about his own religion, he replied, "I'm of the religion..."
of all sensible people. And what is that? No sensible man discusses his religion.” Osler sought to keep the subject of his lecture impersonal by entitling his talk “Science and Immortality.” He ventured no new insights, because, as he added, “everything possible had been said before . . . by the master minds of the race.” To make his point, he quoted the Bible nine times and reviewed thirty-eight opinions from twenty-five authors. Conceding that medical science could contribute nothing to the subject, Osler, nevertheless, advised “the scientific student should be ready to acknowledge the value of a belief in a hereafter as an asset in human life. . . . [and to] gratefully accept the incalculable comfort of such a belief to those sorrowing for precious friends hid in death’s dateless night.” Osler donated his honorarium to the Boston Medical Library. Cushing reported that the talk was “not a particularly well-delivered address.” President Eliot found the lecture “a brilliant and charming essay” but disappointing. Nonetheless, the next month during the Harvard Commencement Ceremony Osler was awarded an honorary doctor of laws degree.

1909–1913: Massachusetts General Hospital, Yale University, and the Peter Bent Brigham Hospital

Osler’s last three visits to Boston occurred while he was living in Oxford. During the summer of 1910 he made an impromptu appearance on a medical ward at the Massachusetts General Hospital, which was fondly recalled years later in articles by the two young attending physicians—Joseph H. Pratt and Reginald Fitz.

A year earlier, in May 1909, Osler had been in America seeing old friends. In Boston he had attended a dinner, sitting “between the out and the in” presidents of Harvard—the retiring Charles W. Eliot and the incoming A. Lawrence Lowell. The next day Osler and Lowell discussed concerns and fears voiced by clinicians at the Massachusetts General Hospital and the Boston City Hospital about “a new large general hospital” to be called the Peter Bent Brigham. What exactly the clinicians found controversial is now unclear. Osler declined an invitation to be a formal adviser for the new hospital.

In April of 1913 Osler again returned to the States for what proved to be his final visit. The First World War would soon intrude on his life. Yale University had invited him to give the Silliman Foundation Lectures, which he entitled The Beginnings of Modern Medicine—later published as The Evolution of Modern Medicine. He also delivered a short lay sermon to Yale undergraduates entitled, “A Way of Life.”

During this last visit to America, Boston was included for a hastily scheduled ceremony at the Peter Bent Brigham Hospital. Harvey Cushing, surgeon-in-chief, recalled the affair several years later as follows: “It happened that Sir William Osler was in this country on a visit and though we were in no condition to have a formal opening his presence forced the occasion, for we wished his baptism even though the hospital . . . was still in the stage of scaffolding and plaster.” Osler gave a short talk, noting the three functions of a hospital: 1) the care of patients, 2) the instruction of students, and 3) the extension of knowledge. He added a further thought about hospitals—that many inspire the “feeling
that you are a part of a great organization.”

1897–1906: Harvard Medical School

Independent of his visits, Osler also had an indirect effect on Harvard Medical School through his textbook of medicine. The first edition, published in 1892, was proclaimed “a literary as well as a scientific masterpiece.” In 1897, the Reverend Frederick T. Gates, the philanthropic adviser to John D. Rockefeller, was urged by a medical student acquaintance to read the Osler text. Gates did so during one summer with the aid of a medical dictionary. He came away impressed that “medicine had—with . . . few exceptions . . . —no cures.”

Being aware of the impact on public health of bacteriological studies done by Koch and Pasteur, Gates advised Rockefeller to fund medical research in this country. As a result, the Rockefeller fortune was used to establish the Rockefeller Institute in New York City, the Rockefeller Foundation for Medical Research, and the Johns Hopkins School of Hygiene & Public Health.

Perhaps less well known is that Rockefeller also contributed one million dollars of the five million dollars needed to construct the Longwood Avenue buildings of Harvard Medical School. Land for a new medical school complex had been purchased near the Fens of Boston’s Back Bay. The money donated by Rockefeller allowed construction to begin in 1903. These buildings were completed and dedicated in 1906, but Osler did not attend the ceremony, having just settled in at Oxford.

1891 and 1904: Harvard calling

Osler received two invitations to join the Harvard faculty. Henry Pickering Bowditch had become Osler’s close friend and had assumed that he could never be induced to leave his academic position, then in Philadelphia. Thus Bowditch was surprised to learn in 1889 of Osler moving to Baltimore. Bowditch wrote, “I don’t think this is quite fair of him for we wanted him in Boston.”

Two years later in May 1891, Bowditch was able to offer Osler the recently vacated Chair of Clinical Medicine at Harvard. But just then Osler had many things on his mind—organizing the medical service at the Hopkins Hospital, completing the manuscript of his textbook, and contemplating marriage to “the Widow Gross.” The last two were accomplished early the next year.

The second overture to Osler from Harvard came thirteen years later in 1904. President Eliot considered him an ideal candidate for an endowed professorship in hygiene.

The position was intended to benefit mainly undergraduates in Cambridge but would have allowed some hospital and consulting work. It was not an attractive offer for Osler, who was dedicated to educating medical students. Also in 1904 Osler got wind of a more distinguished academic chair in the offing and in June learned that he had been proposed to become the Regius Professor of Medicine at Oxford. Cushing later concluded, “What [Osler] subsequently made out of his position in Oxford was just what Mr. Eliot felt was needed at Harvard.”

In any case, it’s unlikely that Osler would ever have moved to Boston—and certainly not after his marriage. During a reception following Osler’s Ingersoll Lecture in 1904, President Eliot mentioned to the elderly Mrs. Susan Revere, Osler’s mother-in-law, that he seemed reluctant to live among his Boston relatives. Osler quickly interjected that it was Mrs. Osler (Grace) who objected.

Acknowledgment

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References


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Diagnosing the disorders of giants

Philip A. Mackowiak, MD, Paul G. Auwaerter, MD, and John Dove, MBBS, MSc

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The last embers of a dying volcano" went cold on December 17, 1830.1,2 The Simón Bolívar of America2 was dead at the age of forty-seven. For over a year, he had been ravaged by fever, cough productive of copious green sputum, progressive weight loss, dyspnea, and indigestion. When finally he slipped into a coma and died, his profoundly emaciated remains were autopsied by Dr. Alexandre Prospère Révérend, the French physician who attended him during his final fortnight. On opening Bolívar’s chest, Révérend discovered “hardening of the superior two thirds of” lungs that were “studded with tubercles of different sizes.”2 He concluded that his patient had died of “tuberculous consumption.”2 Although this diagnosis is the one accepted by most historians, the current president of the Bolivarian Republic of Venezuela, Hugo Chávez, recently challenged Révérend’s conclusion by announcing that the General was a victim of poisoning, not tuberculosis.3

The controversy over the cause of Simón Bolívar’s death, despite the ultimate diagnostic examination, typifies the difficulties encountered when attempting to diagnose the disorders of historical figures. Such diagnoses are necessarily tentative, because they are rarely supported by definitive test results, such as a critical blood value, key culture, or salient radiologic, histological, or autopsy finding. In Bolívar’s case, Révérend’s autopsy findings were striking and have long been viewed as conclusive. However, they suffer from the absence of the results of either histological examinations or microbial cultures. Consequently, they tell us more about the anatomy of the General’s fatal disorder than its cause.

Diagnosing the diseases of famous patients of bygone eras is hampered most by limitations of the historical records from which clinical summaries are derived. More often than not, such records are the work of nonphysicians, whose appreciation for and description of important clinical details were limited. In addition, because language evolves, the meanings of terms used to describe illnesses change over time such that their proper interpretation becomes problematic. In a letter written in 1829, for example, Bolívar reported that he had recently recovered from un fuerte ataque de bilis negra (“a severe attack of black bile”),2,8 whereas in 1828, he wrote of un fuerte ataque bilioso (“a severe attack of bile”).2,9 Was he referring to two attacks of the same illness? Was he jaundiced? Were the attacks of “black” bile indicative of hemorrhagic...
skin lesions or perhaps even the “black water” of falciparum malaria? Questions of this sort are encountered in the extreme when attempting to interpret Thucydides’ description of the rash exhibited by victims of the plague that devastated Athens in the fifth century BC. Perhaps more than any feature of that illness, the rash is the key to the syndrome’s diagnosis. Because of uncertainty as to the proper translation of phlyktainai, the term used by Thucydides to characterize the rash, his description of the disorder is ambiguous—so much so that clinicians have argued for more than two millennia over both the nature of the rash and the diagnosis it signifies.5

In some cases, medical histories have been distorted for personal gain or in deference to political agendas. Révérend was not likely influenced by either motive, in that when in 1849, a French medical congress wished to recognize his service to the Liberator, he demurred, stating: “I want no other honor than that of having been the last doctor of Simón Bolívar, the genius of America.”2p18 Dr. J. J. Moran, who cared for Edgar Allan Poe during his fatal delirium, was another matter. In a patently embellished account of Poe’s final illness written many years after the fact, he promoted his own celebrity and denied posterity an accurate clinical description of the poet’s final illness.6 Josephus, from whom we learn of Herod’s terminal illness, was likely guilty of the latter indiscretion. At least some historians suspect that he was pressured by Titus’ mistress, Berenice (whose grandfather had been executed by Herod), to add infestation of the king’s “privy parts by worms” to his account, not in the interest of historical accuracy, but as postmortem punishment for crimes committed during a despotic reign.7

Many accounts suffer from having been written years, sometimes even centuries, after the fact, and fading memories and/or the limitations of available primary sources have taken a toll on their accuracy. Révérend’s notes were written contemporaneously, as was his autopsy report. However, he was witness to only a brief period of the General’s terminal illness. In the case of Alexander the Great, contemporary accounts of his fatal illness are long lost, and those secondary accounts (by Plutarch, Arian, and others), upon which current diagnoses are based, were written centuries after the king’s demise.8 Similarly, the only description we have of Mozart’s mysterious terminal illness is one written by his sister-in-law nearly three decades after the composer’s death.9

In exercises of this sort, there is also a nagging suspicion that clinical manifestations of diseases might change with the passage of time. Syphilis is one possible example of such, having a less acute and aggressive character than in 1493 when it first arrived in Europe aboard the Niña and the Pinta. It has been suggested that an even more radical transformation might have taken place in the clinical manifestations of the infection that helped bring an end to the Age of Pericles. In 2006, Greek investigators using “suicide” DNA amplification reportedly identified a genetic fingerprint of S. typhi in the dental pulp of three victims of the fifth-century BCE Hellenic holocaust (but no such evidence of M. tuberculosis, Y. pestis, R. prowazekii, B. anthracis, B. henselae, or cowpox virus), and believed they had at last solved the riddle of the etiology of Thucydides’ plague.10 If their findings are valid—and it should be noted that they have been challenged by experts at the University of Oxford’s Henry Wellcome Ancient Biomolecules Centre11—given the blistering eruption that characterized the Athenian disorder, typhoid fever would have had to undergo a stunning metamorphosis in the two and a half millennia since the Peloponnesian War if it was, in fact, the infection responsible for the epidemic.

Finally, there is the problem of a reluctance of those who look for answers in the medical records of history’s illuminati to accept ordinary diseases as causes of the deaths of extraordinary persons, as well as a penchant for diagnosing disorders that are the particular interests of those proffering diagnoses. What motivated Hugo Chávez to diagnose poisoning as the cause of his “spiritual father’s” death is known only to him. Possibly he considers tuberculosis too banal, too unbecoming a disorder to have extinguished the flame of such a remarkable predecessor, or maybe he hoped to enhance the theology of his country’s patriarch by having him martyred. For Bolivar
was truly one of the giants of his age—perhaps of all ages. Nevertheless, whereas he was a mighty general, he was also a man. It made no difference to the disease that took him that he had wrested from Spanish domination an empire five times vaster than all of Europe. Nor did his terminal illness pause to consider the twenty years of wars he fought to keep it free and united. In the end, he had to pay the debt to divine jealousy all must pay, regardless of worldly accomplishments, by succumbing to a disorder not of his choosing.

Whereas the challenge of diagnosing the disorders of historical figures is one of interpretation of the facts, like the diagnoses derived from them, the facts themselves are often in dispute. How well do the facts of Bolivar’s medical history support a diagnosis of fatal tuberculosis? On the positive side, there is a chronic illness with many of the cardinal features of consumption (fever, productive cough, and cachexia). Even more convincing are the autopsy findings of lungs riddled with tubercles and cavities. Nevertheless, if Bolivar did have far-advanced cavitary tuberculosis, possibly complicated by laryngeal involvement (as indicated by terminal hoarseness), he would have been extraordinarily contagious. If so, how did Révérend, who lived to the ripe old age of eighty-five, escape infection, or Manuela Sáenz, the General’s long-time mistress, who died not of tuberculosis but of diphtheria at age sixty, or his nephew, Fernando, who was his uncle’s private secretary and confidant throughout his terminal illness and lived to age eighty-eight? Why were episodes of hemoptysis not prominent? If Bolivar had been infected by his parents as a child, as many believe, how did his two sisters and brother escape a similar fate? Perhaps most importantly, the chronic cavitory form of pulmonary tuberculosis and the disseminated form rarely coexist. If this is true, as reflected in numerous case series of the latter, how does one explain the presence of pulmonary cavities and simultaneous invasion of the brain, liver, and mesenteric glands identified by Révérend at postmortem?

For all these reasons, closing the book on questions concerning the illnesses of historical figures is an arduous, if not impossible, task. Although examinations of the remains of such patients using modern molecular techniques can open the book to new pages, as in the recent efforts to identify the agent responsible for the plague of Athens, they are rarely diagnostic. Disputes invariably arise as to the meaning and the validity of their results. Consequently, those who would diagnose the disorders of giants of the past must rely primarily upon the limited clinical information provided by biographers more interested in their subjects’ worldly accomplishments than the diseases that liberated them from their earthly suffering.

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Diagnosing the disorders of giants


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The hospital chapel is nearly full today.
I wonder why; maybe the staff layoffs.
Prayer requests tell the stories.
Layoffs, test results, mother upstairs,
Daughter’s surgery in Detroit,
Grandson in Afghanistan,
Granddaughter on drugs.
Wednesday noon and fears will not
Wait another four days.
The chaplain raises her voice
In prayer; we respond in song.
At one pm she sends us out
To find our way.

Richard Frank Gillum, MD, MS

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Illustration by Jim McGuinness
The stillness in the room
Waiting for her to speak.
The palpable presence of death—
Hollow eyes,
Stockings pale, wrinkled—
The pressing silence.

It is enough.

The students—
so young—
Gather round the warm death bed,
Some with clouded eyes, some more steeled,
Seeking counsel.

Take thy rest.

Listen, she says,
Listen to the simple words of suffering,
Heart to very heart,
Within and without.
Hear the words like they are your own.

Thy work is ended.

When you have left the silent room,
When time and odd distraction
Dim its clear remembrance,
This will be your task:
Listen;
Listen to the simple words,
Trust their meaning and intent.
Listen to the silence of death.

It is enough.

R. Sparling Fraser, MD
In the Laboratory of Dr. X

They stared at me,
one eyed,
from behind barred doors,
row on row—
monocular monkeys!

Each, an eye enucleated,
its socket filled with putty—
a catheter protruding,
tapping the brain of its juices.
Monocular, row on row,
each grimaced,
jumped up and down,
rattled her cage as I passed;
and I thought it our nature
to do whatever
needed.

This was years ago,
yet they visit me still
when I see the name X
and read his work.

Richard Bronson, MD

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I feel your gentle presence here within;  
The hands that I will some day hold in mine.  
I know you not at all and yet so well,  
For you have been a part of me this long, long time.

How often have I dreamed of what you’re like—  
Your eyes, your smile, the sunlight on your cheeks;  
And I have come to love you, oh, so well,  
For this is wealth—the gold a mother seeks.

Some day when you are gone and I’m alone  
I’ll feel again the joy of this, our time.  
And know your heart has never left its home  
But will forever nestle next to mine.

Alice R. Ring, MD, MPH

Dr. Ring (αΩα, University of Colorado, 1955) is a retired Preventive Medicine/Public Health physician, most recently serving with the United States Public Health Service at the Centers for Disease Control and Prevention. Her address is: P.O. Box 364, Gualala, California 95445. E-mail: ard@mcn.org. Illustration by Laura Aitken.
I slept badly the night before we left—horrible
wrenching dreams, screaming and crying—earlier
that day I had seen the article and it caught
in my chest like a fishhook, ticking
against my ribs, ominous and soft. We were stealing
across the golden leaf of Kansas, rising imperceptibly
to Colorado rock, when the tornado warning shot
through the radio and my husband
looked up sharply. I followed his eyes to the line
ahead—we have to go, he said simply—and
the Jeep swiftly circled towards the dark. The sky
began to curl around us, the trailing edge
of the clouds ruffling dirt against the fields, and as the
landscape browned out I wanted to know who had closed
their eyes first, who had vowed to stand guard as
their beloved moved away. They had joined hands, her
papery fingers somehow soft as a girl's in his still robust ones,
and lay down side by side, and they
died. We were flying now, eyeing the storm,
racing towards the front, like the groom bringing
his bride to the threshold, and the fishhook scraped
again and again like a sickle. He would not let her
go alone. I looked at my husband,
frowning grimly at the horizon, and as I reached
for him our wedding bands glowed with the same
steely green of the clouds. It happened so fast—they
were gone in ten minutes—and suddenly the sky
broke, and we opened the doors and felt the
silent rain pulsing down on us. Before us the last cuts
of scarlet sun welled up through the clouds, and as we glanced
behind us we saw the tornado grinding on,
anvil black and unafraid. I felt my husband quietly
draw up beside me. In the relief of twilight
we held watch as the roiling mass traveled across the ocean
of wheat to the south, seeking out that last safe place
to fall to its knees and die.

Ashley Mann, MD
2011 Helen H. Glaser Student Essay Awards

The twenty-ninth annual Alpha Omega Alpha Helen H. Glaser Student Essay awards were made in April. This year’s winners are:

First prize, $2000: Courtney Pendleton of the Class of 2012 at the Johns Hopkins University School of Medicine for her essay, “My life, my soul, my body I owe to you and God: Harvey Cushing and the Patient-Physician Relationship as Seen through Written Correspondence.”

Second prize, $750: Allison Hinko of the Class of 2011 at the University of Toledo College of Medicine for her essay, “The AMA and Health Care Reform.”

Third prize, $500: Adam Mikolajczk of the Class of 2011 at the University of Chicago Division of the Biological Sciences, The Pritzker School of Medicine for his essay, “You’re Sick, We’re Quick: Retail Clinics and Their Implications for the Future of the American Health Care System.”

Honorable mentions, $250 each: Jonathan Ryan Barry of the Class of 2013 at the University of Tennessee Health Science Center College of Medicine for his essay, “MD/MPH ‘Dualies’: The Case for Integrating Public Health and Medical Education and the Innovative Competition to Align Existing Schools to Meet this Objective”; Daniel Liebowitz of the Class of 2011 at the University of Vermont College of Medicine for his essay, “Carlos Finlay, Walter Reed, and the Politics of Imperialism in Early Tropical Medicine”; Heather Relyea Ashley of the Class of 2011 at the University of Texas Medical Branch School of Medicine for her essay, “Ulcers in Papua New Guinea: A Contemplation on Fairness”; Charles Rutter of the Class of 2011 at the University of Maryland School of Medicine for his essay, “Dollars and Cents of Electronic Medical Records: The Impact of EMR on Billing, Coding, and Physician Reimbursement.”

Winning essays will be published in future issues of The Pharos.

2011 Pharos Poetry Competition winners

The fifth annual Pharos Poetry Competition awards were made in April. This year’s winners are:

First prize, $500: Sarah Leeper of the Class of 2012 at the Warren Alpert Medical School of Brown University for her poem, “Breaking Bad News.”

Second prize, $250: Emily Silverman of the Class of 2014 at the Johns Hopkins University School of Medicine for her poem, “Anatomy.”

Third prize, $100: Angela Jiang of the Class of 2014 from Ohio State University College of Medicine for her poem, “A Reminder.”

Honorable mentions, $75 each: Sarah Rapp of the Class of 2012 at the University of Texas Medical School at Houston for her poem, “First Chair,” and Krishna Sury of the Class of 2013 at the State University of New York Downstate Medical Center College of Medicine for her poem, “Broken.”

Winning poems will be published in future issues of The Pharos.

Amotion

During that first interview,
the book on insects
lay open in front of us,
with a bird, head cocked, eyeing a stick bug
as a patched-on stem,
the same grey-brown colour as the plant.
The bird hopped,
shaking the little branch,
to no avail.

The new stem just waved with the rest of the plant.
All the time his mother talked,
he sat so quietly, looking at the book,
that for a moment,
when it was time to leave,
I could not recall his name.

Carl Rothschild, MD, FRCP(C)

Illustration by Jim M’Guinness
The physician at the movies
Peter E. Dans, MD

The King’s Speech
Starring Colin Firth, Geoffrey Rush, Helena Bonham Carter, Guy Pearce, and Derek Jacobi.
Directed by Tom Hooper. Rated R and PG. Running time 118 minutes.

A box-office favorite with an uplifting coherent story wins the Academy Award as Best Picture. Stop the presses! The film chronicles the transformation of the Duke of York (Colin Firth), who looks like “a deer in the headlights” as he stammers and stutters before a large crowd at Wembley Stadium at the closing of the Empire Exhibition in 1925, to his delivery of a speech that rallies a nation at war in 1939. The doctors who attend to what they call tongue-tiedness advocate cigarette smoking to help him relax his vocal cords and to give him confidence in anxious moments. He is also told to put pebbles in his mouth like Demosthenes was said to have done to speak over the waves. All that does is make him almost choke to death.

His concerned wife, Elizabeth (Helena Bonham Carter), poses as a Mrs. Johnson to enlist the aid of an unorthodox speech therapist, Lionel Logue, played with gusto by Geoffrey Rush. Firth deserved his Academy Award for his excellent job in reproducing the disability and capturing the Duke’s diffidence while maintaining his awareness of being a royal. Still, it is Rush who makes the movie come alive and has the best lines, some from Shakespeare—he apologizes to Mrs. J for the shabbiness of his studio with a line from Othello that being “poor and content is rich, and rich enough.” Refusing to disclose her husband’s identity, the Duchess tells Logue that...
his job requires public speaking. On being told that he can’t change jobs, Logue asks if he is an indentured servant and the Duchess responds, “Something like that.”

The relationship between the Duke and Logue starts awkwardly as Logue insists that the sessions be conducted in his “castle,” according to his rules. He insists that that they call one another Lionel and “Bertie,” the Duke’s familiar name, so that they can be “equal.” The Duke responds that if they were equal he wouldn’t be there. Later, his father King George V (Michael Gambon), after flawlessly giving a Christmas speech to the nation, tells his son that the advent of microphones and radios has ushered in an era in which “we have to become actors” and “invade” people’s homes.

Logue tries to get a personal history but the Duke resists. Told that infants don’t stammer, the Duke admits that the affliction began when he was four or five, which apparently is common. He doesn’t stammer when he talks to himself or sings, so Logue records him speaking Hamlet’s soliloquy “To be or not to be” and then singing it to Mozart. They try tongue twisters to relax his tongue, exercises to strengthen his abdominal muscles, gargling to limber up his throat, and jumping and other exercises to get him to relax and stop being so stiff. When Logue sees him smoking a cigarette, he tells him to stop. Told that his physicians advised it, Logue says, “They’re idiots.” George VI died at fifty-six, having suffered from coronary and peripheral artery disease and undergone a pneumonectomy for lung cancer.

When his father dies, Bertie is told that his last words were “Bertie has more guts than all his brothers.” He laments that his father couldn’t say this to his face and recounts that he was left-handed and how the King made him wear painful splints to force him to not use his left hand. He liked building model planes, but had to collect stamps as his father did. The Duke talks about his brother Johnny, “a sweet boy” who had epilepsy and was hidden from view, then died at thirteen. Bertie was reassured that he wasn’t “catching” and thus responsible for his ailment. Logue has a way of getting Bertie to unwind by using profanity; it was the profanity that gave the movie an R rating, but the producers then scrubbed it and rereleased the film with a PG rating to gain a wider audience. More about this later.

After a walk in the park with Logue during which the Duke agrees that he knows little of the common man and that the common man knows little of what he goes through, a period of alienation sets in between them. This allows the filmmaker to capsule political events vis-à-vis Germany with scattered snapshots, a technique that one critic called making a hash of history. The love affair of the Duke’s brother, King Edward VIII (Guy Pearce), with Wallis Simpson (Eve Best) of Baltimore is also introduced. The Archbishop of Canterbury (Derek Jacobi) says Edward can’t marry her, not because she is American, but because she was twice divorced with two living ex-husbands. Edward is portrayed as head over heels in love, very shallow, and sympathetic to the fascists. Simpson’s good favor is also being cultivated by the Nazi secretary of State Von Ribbentrop, who sends her carnations daily. Edward finally abdicates on December 30, 1936, to marry Simpson and discharges his last duty as king and emperor.

After becoming King George VI, his daughters Elizabeth and Margaret curtsy rather than run into the welcoming hug he offers. Protestors support Edward but George wins the public over. The King’s wife arranges a rapprochement at Logue’s apartment and they are reunited at Westminster Abbey to prepare for the coronation. The King tells the Archbishop of Canterbury to skedaddle while he practices with his speech therapist. Before doing so, he confronts Logue about being neither a certified psychologist nor a doctor, but a failed Australian actor. Logue makes a great plea for the pitfalls of credentialism (something our society suffers from) by saying he helped Australians who couldn’t speak after returning from World War I by giving them faith in their own voices. He had no credentials, only successful experience. The King’s fears are only partially assuaged, thinking that like his forebear King George III who suffered from porphyria and was called Mad George, he would be called Mad George The Stammerer. There follows a wonderful scene as Logue goads him into finding his voice, which he displays during his speech to the Empire on the occasion of England’s declaration of war with Germany. The closing credits reveal that Logue coached him during this and every speech during the war and they
remained friends for life. Logue was granted a Knighthood and the rank of Commander of the Royal Victorian order of chivalry, which rewards personal service to the monarch.

I especially liked the scenes of the Duke with his children and Logue with his as he tries unsuccessfully to stump them about their knowledge of Shakespeare. I also enjoyed seeing the famous Bovril sign that proclaimed that it “nourishes you to resist flu.” It appeared in many postwar British films when vehicles passed through Piccadilly Circus and also was a reminder of the flu epidemic that devastated the world from 1918 to the early 1920s. A beneficial effect of the film has been the large jump in the number of stutterers seeking therapy.

The scenes with profanity garnered the most publicity. James Lipton, who hosts Inside the Actor’s Studio with an off-putting pomposity and affectation, gushed over the scenes while interviewing Firth. Ann Hornaday, the Washington Post critic, called the rating board members “prigs” for assigning the rating and thus cautioning parents of teenagers against their seeing an otherwise “wholesome and edifying” film. By contrast, having grown up in the 1930s and 1940s, I couldn’t believe that Logue actually used these methods and wondered if it was just the invention of a post-1968 screenwriter inserting his own vulgar and potty-mouth vocabulary into the film to avoid the dreaded G rating and to appeal to hip cinephiles who prefer their films served up “edgy” and loaded with F-bombs. I was happy to learn that “Logue was reputed never to have sworn in front of the king, nor ever to have called him “Bertie.” As it turned out then, it was the Oscar award-winning screenwriter David Seidler who was responsible, not those so-called “prigs.” In short, my recommendation is to ignore the dubious history as well as the make-believe surrounding Logue’s methods and just enjoy the film as entertainment. You might watch for cameo appearances by other fine actors like Anthony Andrews, Claire Bloom, and Jennifer Ehle.

References

The Physician at the Movies

The Courageous Heart of Irena Sendler


This low-budget Hallmark made-for-television film does not have the cinematic production values of many Hollywood films, but as the title implies, it has “heart.” It tells the story of Irena Sendler (played by Academy Award winner Anna Paquin), whose physician father took care of patients other Polish doctors refused to care for, many of whom were Jewish. In doing so, he contracted typhus and died in 1917 when she was seven. In gratitude, Jewish community leaders paid for her education and she attended Warsaw University. There she was suspended for three years after opposing the segregation of Jews in what was called the “ghetto bench” system, which began in 1935 and was legalized in 1937, whereby Jewish students were required to sit on the left side of the lecture hall in a section specifically reserved for them.

As the old adage goes, the apple did not fall far from the tree. Irena begins helping Jewish children as director of the Social Welfare Department in Warsaw in 1939 and, once the ghetto is sealed off in 1940, she uses her position to gain admittance. The film opens in 1941 as she enters the ghetto under the cover of inspecting refugees for typhus. She smuggles in food for the children and arranges to transport them out.
to temporary quarters at her home, where her mother Janina Krzyanowska (Marcia Gay Harden) fears for her safety but does not forbid her to help. With the help of a doctor, a monsignor, and sympathetic Poles, Irena manages to place the children in homes, convents, and orphanages. As the noose around the ghetto tightens in the fall of 1942, the Council for the Aid of Jews (Zegota) is established and she becomes director of their department for the care of Jewish children. Unfortunately, by that time 280,000 of the 400,000 Jews in the ghetto had already been deported to Treblinka and other concentration camps.

Some of her staff decides to take on this increasingly dangerous work. The most poignant parts of the film involve Irena trying to overcome the resistance of parents to allow her to take the children and smuggle them to safety. To a heartbroken mother who fears that she’ll never see her child again, she promises that she will document where each child was sent and will contact the parents once the war is over. She must also overcome the parents’ concern that in releasing their children, they are likely to be brought up as Christians since they must be taught the Sign of the Cross, the Our Father, and other prayers to maintain their cover. In one dramatic scene, a rabbi is adamant that this fate for his grandchild would be worse than dying while retaining the Jewish faith. He optimistically counts on the fact that they have been left alone and that the Americans have entered the war.

The film shows the various ways Irena smuggled out the children in suitcases, hidden compartments in trucks, and leading them to secret hiding places and exits from the ghetto shown to her by her Jewish college classmate Stefan Zgrzembski (Goran Visnjic). She takes out one child, Hanna Rozenfeld, played with great conviction by Danuta Stenka, right under the noses of the Gestapo. Finally, in 1943, she is captured by the Gestapo and tortured but refuses to name her comrades, despite having her legs and arms broken. On the way with others to be executed, she is released by a German guard who was bribed by Zegota. Officially listed as dead, she is taken to a safe hiding place where she reunites with her Jewish friend, whom she later marries.

After the war, Irena dug up from its hiding place in her garden the jar containing the names and whereabouts of over 2,500 children whom she had shepherded to safety. Sadly,
many of their family members had died, but she remained close to the children who survived. She was persecuted by the Communists after the war because of her collaboration with the Polish nationals who were opposed to both the Nazis and the Communists. It wasn’t until 1965, when she was recognized by Yad Vashem as one of the Righteous among the Nations, that she was finally allowed to leave Poland to accept the award in Israel. In 2007 at the age of ninety-seven, she was honored by the new Polish government and nominated for the Nobel Peace Prize only to be beaten out by Al Gore and the Intergovernmental Panel on Climate Change. When told that she had not won the award, she said with characteristic humility and grace, “Every child saved with my help is the justification of my existence on this earth and not a title to glory.” Clearly, she had both guts and class, not unlike Audrey Hepburn, the namesake of the posthumous humanitarian award she received in 2009 from UNICEF given to those recognized for helping children throughout the world.

Reference

The Red Shoes (1948)
Starring Moira Shearer, Marius Goring, and Anton Walbrook. Written and directed by Emeric Pressburger and Michael Powell. Running time 133 minutes.

With all the hype about The Black Swan, I decided to revisit The Red Shoes, the all-time classic ballet film. It was one of a wave of British films that began to be shown in so-called “art-house theaters” after World War II. They were joined by other European films from Sweden, Italy, and France and, combined with American film noir, dominated the postwar movie era. The team of Pressburger and Powell were responsible for a number of films like Black Narcissus,1 which were especially noted for the excellent pictorial and surrealistic quality. The Red Shoes is a J. Arthur Rank production and at the first sight of the man striking the gong, I’m usually hooked, although Rank apparently wasn’t, in that he walked out of the film during its gala premiere.2 The Red Shoes won the Academy award for art direction, original screenplay, and a musical score that is as lush as the photography, especially as it is played by the Royal Philharmonic Orchestra under the direction of Sir Thomas Beecham.

The film opens with students rushing to get seats as the doors open for a ballet at Covent Garden. The story revolves around three ambitious principals, a budding composer, Julian Craster (Marius Goring), whose teacher has appropriated his score for the ballet; a young dancer, Victoria Page (Moira Shearer), who aspires to be a prima ballerina; and an autocratic Russian impresario, Boris Lermontov (Anton Walbrook), who takes “art for art’s sake” to its extreme. To a balletomane who considers ballet to be “poetry in motion,” he responds that “it is more than that, it is a religion.”2 After he takes on Vicky as his protégée (sort of Trilby to his Svengali), he assumes that she should have no other aim than to be the best ballerina ever.

He also takes Julian under his wing after he learns that he had composed the ballet he had just conducted. Lermontov assuages the young man’s anger by telling him that it is much more disheartening to have to steal than to be stolen from. At Lermontov’s direction, Julian puts together the score for the ballet of The Red Shoes, based on a fairy tale by Hans Christian Andersen in which a peasant girl becomes enamored of a pair of red ballet slippers. After putting them on, the red shoes never tire and they push her to continue dancing as time, love, and life rush by until she finally dies. The ballet is a sensation, but while working together to rehearse it, Vicki and Julian fall in love and decide to marry. She explains to Lermontov that she wants the comfort of a human love. He is aghast because she will never fulfill his aim of her being the greatest dancer the world has ever known. In order to do so, she must fully commit to it, forfeiting even love and life. The impresario goes ballistic and falls into a depression and says he will never let her perform The Red Shoes again. He convinces her to return

Moira Shearer and Leonide Massine in The Red Shoes (1948), Eagle-Lion Films Inc./Photofest.
for one more performance, but tragedy strikes before the performance as the red shoes cast their spell. The distraught impresario opts to stage the ballet but instead of a ballerina he uses a spotlight in her place.

As Lermontov says, "a great impression of simplicity can only be achieved by a great agony of body and spirit," something that Fred Astaire and Alicia De Larrrocha among other great artists would have seconded. That ballet is an extremely demanding profession, both physically and mentally, is attested to by our daughter-in-law Mary Helen Bowers, a member of the New York City Ballet for ten years. In addition to the mental strain chronicled by Gelsey Kirkland in her autobiography Dancing on my Grave,\(^4\) dancers are haunted by concerns about physical injuries especially to feet, legs, and back. Mary Helen, who spent the better part of a year working with Natalie Portman to train her for the role in The Black Swan and was acknowledged for it at the Academy Awards, notes that, like many competitive endeavors, ballet is fraught with backstage intrigue, especially in that there can be only one prima ballerina and a limited number of supporting dancers. It's amazing that something so beautiful and so orchestrated, can be so filled with angst. I recommend The Red Shoes both for its beauty and for the stunning performance by Moira Shearer, who had no acting experience and at the time was the second ballerina to Margot Fonteyn at the Sadler Wells Ballet.

It also serves as a reminder of the Russian and French roots of the art form as Lermontov frequently lapses into beautifully spoken French.\(^5\)

**References**


Dr. Dans (AΩA, Columbia University College of Physicians and Surgeons, 1960) is a member of The Pharos’s editorial board and has been its film critic since 1990. His address is:

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The division chief picks me up
From home once a week.
He calls me his mentor,
Lets me use his hospital office
And his computer for the day.
But I do not have the door key and
His screen saver locks me out.
I keep putting off finishing the
Paper he keeps asking about,
But my new ideas yield negative
Results—hard to publish
Negative results.
He leaves at 7 but
I was ready to go at 4.
Until next week then.

Richard Frank Gillum, MD, MSc
Reviews and reflections

David A. Bennahum, MD, and Jack Coulehan, MD, Book Review Editors

Mr. Justice Holmes’ opinion in the 1927 Supreme Court decision of Buck v. Bell was short, but definitely not sweet. The issue at hand was the constitutionality of Virginia’s Eugenical Sterilization Act, which authorized involuntary sexual sterilization of inmates of certain Virginia state institutions when the superintendent of that institution “shall be of the opinion it is for the best interests of the patients and of society.” §289 The specific case was that of Carrie Buck, a woman who had been committed to the State Colony for Epileptics and Feebleminded by her foster parents in 1924 because she had become pregnant out of wedlock. Her biological mother was already an inmate at the Colony, having been committed several years earlier for lacking “moral sense and responsibility.” p106 Although Carrie was a prime candidate for sterilization, Colony authorities wished to use her as a test case before the United States Supreme Court because many questioned the legitimacy of Virginia’s new law. Speaking for the majority of the court (only a single judge dissented), Justice Holmes wrote, “We have seen more than once that the public welfare may call upon those who already sap the strength of the State for these lesser sacrifices.” p162 “Three generations of imbeciles are enough.” p169 Thus, involuntary sterilization laws in the twenty-three states that had already enacted them were accepted prima facie as constitutional, and seven additional states were encouraged to adopt such laws in the following decade.

I’ve been teaching medical students about Buck v. Bell for many years. It may be the single best example of the strength of the American eugenics movement in the early twentieth century and illustrates the many false beliefs and moral inequities upon which the eugenics movement was based. I was able to tell my students a few specifics about Carrie Buck herself (for example, the irony that neither she nor her baby were “imbeciles”), but I’d never searched behind the scenes to discover the full story of this infamous case. Now, in Three Generations, No Imbeciles, Paul A. Lombardo has provided us with a thoroughly compelling history of the case, beginning with the social and cultural context of the eugenics movement and continuing through its aftermath until the present. It’s a fascinating, but tragic, story that leaves the reader with a sense of moral outrage.

When we think of eugenics today, we tend to envision Germany and the Third Reich, when, in fact, much of the intellectual basis of the movement was home-grown right here in the United States. In the late nineteenth and early twentieth centuries, criminality, poverty, feeblemindedness and “moral turpitude” were widely believed to be inherited characteristics. It seemed natural then that society could improve its fitness by preventing criminals, wayward women, imbeciles, and other social misfits from reproducing. Scientific research, like the pedigree studies of Harry Laughlin, seemed strongly to support this view. Moreover, surgical sterilization techniques had been found safe and effective. It was in this context that state legislatures began to pass laws providing for sterilization of the feebleminded.

One contemporary definition of feeblemindedness was, “a state of mental defect existing from birth or from an early age and due to incomplete or abnormal development in consequence of which, the person affected is incapable of performing his duties as a member of society in the position of life to which he was born.” p140 This broad category potentially included anyone from the “simply backward boy or girl” p9 to the “profound idiot.” p9 The most operative phrases were “incapable of performing his duties” and “position of life.” In practice, the latter referred only to poor people, and the former was a judgment to be made by some state authority. No objective testing was required and, for all practical purposes, there was no appeal.
In Carrie Buck’s case, “moral delinquency” was the precipitating cause of her incarceration. After the seventeen-year-old girl became pregnant, her foster parents claimed they could no longer handle her. Carrie had been living with them for many years. Her father was dead and her mother, who had a record of prostitution, was an inmate of the Virginia Colony for Epileptics and Feebleminded. The foster parents argued that Carrie was dishonest, had temper tantrums, and performed “certain ‘peculiar actions.’” However, she had been able to complete five years of school without problems and had no known physical illness. On admission to the Colony, she was reported to have an IQ of 56. Carrie’s baby, Vivian, born in 1924, was immediately placed with the same foster parents and continued to live with them until her death from a complication of measles eight years later. At the sterilization trial, a doctor testified about the eight-month-old baby, “it seems to me not quite a normal baby.” [Notice the pronoun “it.”] On that basis, she was judged to constitute the third generation of feeblemindedness.

*Three Generations, No Imbeciles* tells the story of Dr. Albert Priddy, the Colony’s superintendent, and Arthur Estabrook, a eugenics researcher, who in 1924 carefully developed the case that Carrie Buck’s sterilization would benefit not only society at large, but also improve Carrie’s own health, a requirement specified by law; of Eugene Whitehead, Carrie’s attorney, who was himself an advocate of eugenic sterilization; and of the various trials and appeals that eventually led to the Supreme Court in 1927, by which time Dr. John Bell, the new superintendent, had replaced Dr. Priddy as plaintiff. In the end, the major constitutional questions at issue were:

1. Does the state’s police power permit it to mandate that certain citizens undergo involuntary sterilization?
2. Does the fact that the law applies only to persons confined to state facilities violate the Fourteenth Amendment’s due process requirement?

The answers, in brief, were “yes” and “yes.”

The latter part of the book deals with the history of forced sterilization in the eight decades since *Buck v. Bell*, including a chapter on the Nazi eugenics program and the citation of *Buck v. Bell* as a defense at the Nuremberg doctors’ trials. Lombardo also devotes attention to subsequent court cases, such as *Skinner v. Oklahoma* (1932), which repudiated other eugenics laws. Perhaps the most touching thread of this story, though, is Carrie’s subsequent life. After discharge from the State Colony, she married and lived with her husband for decades until his death. She later moved to a retirement community and often spent the day solving crossword puzzles with a friend. In conversation, she was “embarrassed” about her role in the famous Supreme Court case. “She showed no anger, but she did convey her feeling that she had been treated unfairly.” Her daughter, Vivian Buck, was reported by a social worker to be “very bright” and had completed second grade prior to her death in 1932. Carrie’s mother Emma remained at the State Colony until she died of pneumonia in 1944.

This is a book you won’t forget. Unlike many scholarly works, *Three Generations, No Imbeciles* has plenty of narrative drive. Though much of its content is troubling to read, the book is difficult to put down. It raises issues of ethics, law, and social policy that we still struggle with, and reminds the reader how fallible our moral vision can be.

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**Cutting for Stone**

Abraham Verghese
New York, Vintage Books, 2010

Reviewed by Taylor Prewitt, MD

When I decided to go into pre-med, one of my fellow interns told me, “I went to see my home town doctor. He took care of our family for years. He made house calls. We could always get hold of him when we needed him. That was the kind of doctor I wanted to be. I knew he’d be proud of me, so when I got back home for the holidays, I went straight over to his office and told him I was going to go to medical school. And do you know what he said? I couldn’t believe it. He looked at me for a minute, and then he said, ‘You’ve got to be crazy!’”

Maybe so. “I’ve told my kids never to be a doctor,” too many of my colleagues say, “Medicine is not like it used to be. You’d make more money as a plumber. The government has ruined it. The paperwork will drive you crazy. The young doctors don’t want to work. Night call is much worse now.”

Maybe so. There is some truth in all these assertions, but not everybody believes them. Marion Stone didn’t believe them. Marion is the narrator in Abraham Verghese’s novel,* Cutting for
The story of the twins’ miraculous birth is the mainspring of the story. They grow up so close to each other that their communication is often nonverbal. But Shiva is a strangely different identical twin: brilliant, but lacking in some of the sensitivity and scruples of his brother. The humanistic values of medical service are nicely brought out in the story of Shiva’s career: he doesn’t bother with medical school; he works with Hema in the obstetrics and gynecology clinic, devoting himself to the problem of women with vesico-vaginal fistulas, who are shunned by all because of the smell resulting from the incontinent flow of urine and sometimes blood.

We see the Missing Hospital, where Ghosh, an internist who marries Hema and becomes a father to the twins, fills in as a surgeon after the departure of the brilliant Dr. Stone, Marion’s biological father. Matron is the pragmatic boss of such dedication to his work that he keeps the secret of his death.

There are even bits of “magical realism” in Marion’s uncanny ability to identify his friend Genet’s presence with his dog-like sense of smell, and in the diagnostic powers of the sense of smell in some circumstances.

The author is a good storyteller, and the entrance of the obstetrician, Dr. Kalpana Hemlatha (Hema), into the operating theater as the twins are being born is nothing if not dramatic.

The author, Abraham Verghese, is professor and senior associate chair for the Theory and Practice of Medicine at the Stanford University School of Medicine. His parents were Indian teachers in Ethiopia, where he grew up and began his medical training until Emperor Haile Selassie was deposed. He finished his medical training at Madras Medical College and then came to the United States for residency training. All these facts are pertinent to Cutting for Stone, his second novel. One should keep in mind that even though the medical and surgical details identify the author as a physician, he and the reader are not limited by the laws of probability and credibility that we ordinarily expect in a rigorously trained medical scientist.

The story is a sweeping one that follows Marion from his miraculous birth in Ethiopia to a career as a hard-working surgeon in New York City at age fifty. It is a rollicking story in which young Marion and his twin brother Shiva live by their wits in the lawless turmoil of a revolution. They trick a marauding soldier into crashing his stolen motorcycle and, after the villain dies in a gunshot accident, bury the body in quicksand and keep the secret of his death.

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We see the Missing Hospital, where Ghosh, an internist who marries Hema and becomes a father to the twins, fills in as a surgeon after the departure of the brilliant Dr. Stone, Marion’s biological father. Matron is the pragmatic boss at Missing: she accepts money from a Texas church, but she responds to its representative’s theological misgivings with a pensive reflection: “God will judge us, Mr. Harris, by . . . . what we did to relieve the suffering of our fellow human beings.”

And we get a good look at American medical care as perceived by the foreign medical graduates (FMGs) who work with Marion at Our Lady of Perpetual Succor in one of the boroughs of New York, where the other residents explain the facts of life to him: There are Mayflower hospitals, flagship hospitals that are teaching hospitals for big medical schools, staffed by descendants of those who came on the Mayflower. And there are Ellis Island hospitals, where “All the house staff are foreigners and so are many of the attending physicians.”

These physicians will complete their training and “go to the small towns that need us. Like Toejam, Texas, or Armpit, Alaska. The kinds of places American doctors won’t go and practice.” And why not? “Because, salah, in those villages there’s no symphony! No culture! No pro-ball team! How is an American doctor supposed to live there?”

Marion finds direction in Sir William Osler’s aphorism, “The master-word is work,” as a guide to his own life, and he finds that his biological father, Thomas Stone, has retreated to his work and little else. Such single-mindedness can lead to much good being done. Paradoxically, however, pursuit of this particular master-word may also lead to legend or scandal. The stories that result can keep communities entertained for months or years. In this tale of a young physician’s coming-of-age, we follow Marion as he matures into a physician of such dedication to his work that he rivals any priest in poverty and chastity. One hopes that as he enters his second fifty years he will take a little time to stop and smell the roses.

Abraham Verghese has skillfully knitted together a collection of legendary and sometimes scandalous stories into one “sweeping, rollicking” novel with enough authenticity to prompt the reader to reflection about our world that is still a work in progress, with much work to be done. But it is sweeping and rollicking and entertaining. And to the prospective medical student: This is one to read before you go talk to your dad or your dear old family physician.

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in the face of evidence to the contrary, some of these pioneers continued to use and push treatments they believed in. He describes in detail how William Stewart Halstead and his followers in the first part of the twentieth century continued to insist on radical surgery for breast and other cancers when there was clear evidence that the patients were not benefiting. He tells about the physicians who tried to question the premises and methods used by their powerful contemporaries.

Mukherjee then goes on to describe how Geoffrey Keynes and Dr. George Crile Jr. and George Crile III, father and son, came to question Halstead’s dogmas. In the mid 1920s, they studied the long-term recurrence of cancers after radical surgery and noted that breast cancer still recurred in their patients in subsequent years. Yet the dogmas and beliefs in radical surgery were strong and it took another thirty years before this practice was changed; only after Bernard Fisher was able to create randomized trials was it finally proved that radical surgery could not be justified.

In the field of “aggressive” and “hyperaggressive” chemotherapy, including bone marrow transplantation, another physician researcher, George Canellos, challenged the madness of “more is better.” Canellos could not alter the path that mainstream hematologists and oncologists were taking, but he was proven right when the results of several trials were in. Sadly, as often happens when obsessions override good judgment, a South African oncologist was found to have falsified his data.

The descriptions of Mary Lasker and other celebrities who worked in the cause of cancer are interesting and often amusing. One might ask how much of such dedication is due to altruism and how much to egotism and self-interest? But that is perhaps too harsh.

The author remains a strong supporter of clinical trials as the best way to establish the efficacy of new treatments and to discover problems related to any treatment. A valuable feature of the book is his ability to describe “statistical methods” and their limitations succinctly and clearly. Yet the author also has a good understanding of human frailty and describes how bias and preformed ideas can hinder the success of clinical trials.

Another section of this book describes the fundamental structure and function of the cell and the changes that lead to a normal cell’s conversion to a cancer when the body’s immune system fails to kill emerging cancer cells. These chapters are a pleasure to read—yes, the author makes reading molecular biology a pleasure.

In his final chapters Mukherjee links the application of the basic science knowledge of the 1940s and the development of antimetabolic agents of that time to the understanding of molecular biology and how that has led to new “targeted” therapies. He alludes to the limitations of these targeted therapies, but with an optimistic note. He quotes Harold Varmus thus:

We have not slain our enemy, the cancer cell, or figuratively torn the limbs from his body . . . In our adventures, we have only seen our monster more clearly and described his scales and fangs in new ways—ways that reveal a cancer cell to be, like Grendel, a distorted version of our normal selves.

And there lies a metaphor for war on cancer or cure for cancer.

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**Letters to the editor**

"Visionary art"

The article "Visionary Art" (Winter 2011, pp. 4–10) gives us a fascinating new way of thinking about Upper Paleolithic cave art. Interested readers will find Juniper Fase: Upper Paleolithic Imagination and the Construction of the Underworld (Wesleyan University Press, 2003) by the noted poet, Clayton Eshleman, to be a remarkable and beautiful examination of his decades of experiences in those caves. In part he sees an ongoing process of separation of human consciousness from the animal world in the art. As Dr. Claman indicates, visiting the caves is a remarkable way to look at our origins and the beginnings of creativity and pictorial art.

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Dr. Claman’s article on paleolithic art and the meaning/orIGIN of “abstract designs” was interesting. But when I looked at the montage I didn’t see any abstractions. To me, it was full of very real, meaningful things: ladders, bridges, platforms, path, river, even the line of dots a sign saying “This Way!” (The Tao?) anything and everything a shaman could use to do his job—connect to the spirit world. He doesn’t need physical bridges or ladders, the power is in the image and in him when he is in a trance. That may be why the Shaman of Lascaux is ithyphallic.

How do I make this assertion? From familiarity with Lao textiles and the animistic symbolism of the traditional designs that have been passed down for generations. Shamans wear shawls called healing cloths. There is a long shawl called a healing cloth that links the sacred and the profane. One end of the cloth has a large diamond shape known as the Lantern—to light the way to the spirit world. It is surrounded by intricate overlapping bodies of naks—the sacred, powerful and protective water serpent. The far end has many bands of different patterns that are considered a ladder to ascend to the spirit world, or for the spirits to come down.

Other textiles have heua hong, literally “flying boats” made out of the bodies of the sacred hong birds that ascend into the spirit world. Funeral banners have heua hong with human figures in them, the soul/spirit of the dead rising to the other world. That concept has persisted in Buddhist temples where funeral banners are hung from poles that are topped with the sacred hong bird to fly the soul of the deceased to heaven.

So I think it more likely the paleolithic designs of path, bridges, and ladders are not the products of hallucinations but designs deliberately placed in hidden sacred places accessed only by the shaman to be used by him in his trance state to cross over into the spirit world. The painted images embody the spirit of those structures, all that is needed to access the world of spirits.

As for the Shaman of Lascaux and the bison with his intestines hanging out, I was immediately reminded of Roman augurs “reading the entrails” of sacrificial animals. But among some Tai groups a water buffalo is sacrificed at funerals to guarantee the deceased will go to the highest heaven. Like beauty, meaning seems to be in the eye of the beholder.

**References**

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**The Permission Poem**

My library floor is littered with attempts—
here is the one that celebrates the passions of the body
here is the one that suspends the rules, over there
is the hard-to-refuse-what-love-requires poem
and then there’s the one that
makes words finally able to say everything.
I like that one but notice none
have been published
they sit on the floor like truths we struggle to believe.

David Watts, MD

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In 1982, the board of directors of Alpha Omega Alpha established five student research fellowship awards to encourage and support student research. Since then, the awards have grown in number and dollar amount. As many as fifty $5,000 awards are made, and $1,000 is available for travel to a national meeting to present the research results. In 2004, the name of the fellowship program was changed to the Alpha Omega Alpha Carolyn L. Kuckein Student Research Fellowship awards in honor of Carolyn L. Kuckein, AOA’s longtime administrator, who died in January 2004.

Evaluations of the fellowship proposals were made by reviewers: C. Bruce Alexander, MD; Thomas T. Andersen, PhD; Robert G. Atnip, MD; Jeremiah Barondess, MD; Syamal K. Bhattacharya, PhD, CLD; John M. Boltri, MD; John C.M. Brust, MD; Paul A. Bunn, Jr., MD; Joseph A. Califano III, MD; Randy Q. Cron, MD, PhD; Gerald V. Denis, PhD; N. Joseph Espat, MD; Ruth-Marie Fincher, MD; Daniel Foster, MD; James G. Gamble, MD; Mary A. Gerend, PhD; Richard B. Gunderman, MD, PhD; Suzanne Leonard Harrison, MD; Joseph A. Hill, MD, PhD; Marc G. Jeschke, MD, PhD, FACS; Rae-Ellen W. Kavey, MD; Anne T. Mancino, MD; Mirjana Maletic-Savatic, MD, PhD; James H. Millonig, PhD; Thoru Pederson, PhD; Suzann Pershing, MD; Sheryl Pfeil, MD; Don W. Powell, MD; Robert Rifkin, MD, FACP; William A. Robinson, MD, PhD; Sarah M. Roddy, MD; William M. Rogoway, MD; Shashi K. Salgar, PhD; David Shibata, MD, FACS; John Tooker, MD, MBA, FACP; Gerald Weissmann, MD.

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University of Vermont College of Medicine
*Contribution of Kv channels, matrix metalloproteinase activity and EGF receptor tyrosine kinase activity to enhanced parenchymal arteriole constriction following subarachnoid hemorrhage*
George C. Wellman, PhD, mentor
Jeffrey Klein, MD, councilor

**Bennett Battle**
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C. James Graham, MD, councilor

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O. Wayne Isom, MD, councilor

**Cindy Cai**
Columbia University College of Physicians and Surgeons
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Donald C. Hood, PhD, mentor
John C. M. Brust, MD, councilor

**Kathy Jo Carstarphen**
University of Alabama School of Medicine
*Effects of Parent Education on HIV Knowledge and Safe Sexual Practices in Lima, Peru*
Juan Echeverria, MD, and Michael J. Mugavero, MD, MHSc, mentors
Stephanie D. Reilly, MD, councilor

**Saydi Chahla**
University of Minnesota Medical School
*A Cross-Sectional Study of the Influence of Daily Activity on Osteocalcin Level*
Lynda E. Polgreen, MD, MS, mentor
Charles Billington, MD, councilor

**Jason Chan**
The Warren Alpert Medical School of Brown University
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Derek Stein, PhD, mentor
Charlotte M. Boney, MD, councilor

**David Chen**
Northwestern University, The Feinberg School of Medicine
*A Novel Approach Using Transdermal Delivery of Nanoparticles for Gene Suppression to Treat Primary and Metastatic Melanoma*
Amy S. Paller, MD, mentor
John P. Flaherty, MD, councilor

**Linda Chen**
Duke University School of Medicine
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Alfredo Quiñones-Hinojosa, MD, mentor
Salvatore Pizzo, MD, PhD, councilor

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**Makeda Agonafer**
Morehouse School of Medicine
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Frances J. Dunston, MD, MPH, councilor

**Humera Ahmed**
New York Medical College
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**Stefanie Ames**
Southern Illinois University School of Medicine
*Fatigue and Inflammation in Breast and Endometrial Cancer Survivors Compared with Healthy Controls*
Laura Q. Rogers, MD, MPH, mentor
Andrew J. Varney, MD, councilor

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Uniformed Services University of the Health Sciences F. Edward Hebert School of Medicine
Clinical and immunological effects of desensitization on polysensitized mice
Edward Mitre, MD, mentor
Robert E. Goldstein, MD, councilor

Claire Detweiler
University of Texas Medical Branch School of Medicine
Are bacterial agents of community-acquired gastroenteritis under-diagnosed? Impact of stool antigen tests for Campylobacter and Enterohrenorrhagic E. coli
Mike Loeffelholz, PhD, ABMM, mentor
Lisa R. Farmer, MD, councilor

Frederick Flo
University of Rochester School of Medicine and Dentistry
An Investigation of spirituality and functionality in patients with Amyotrophic Lateral Sclerosis (ALS)
Paul T. Twydell, DO, mentor
Heidi B. Schwarz, MD, councilor

Mark Fox
University of Iowa Roy J. and Lucille A. Carver College of Medicine
Evaluation of results of the Brazilian Ponseti National Program
Jose A. Morcuende, MD, PhD, mentor
Christopher Cooper, MD, councilor

Neil Issar
Vanderbilt University School of Medicine
Comparison of Ventral Intermediate Nucleus and Caudal Zona Incerta as Targets for the Treatment of Tremor with Deep Brain Stimulation
Joseph S. Neimat, MD, MS, mentor
John A. Zic, MD

Vasili Karas
Rush Medical College of Rush University Medical Center
Preparation of chondral defects in cartilage repair procedures: Surgeon ability to remove or preserve the calcified cartilage layer (CCL)
Vincent M. Wang, PhD, and Brian J. Cole, MD, MBA, mentors
Richard J. Abrams, MD, councilor

Elizabeth Keating
Mayo Medical School
Thiamine Deficiency in Sick Infants in Cambodia
Philip R. Fischer, MD, mentor
Carola Arndt, MD, and Judith Kaur, MD, association chairs

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Texas A&M Health Science Center College of Medicine
Predictors of recurrence in chronic subdural hematoma: Do nutritional status, hepatic synthetic function, serum osmolality, or other factors matter?
Leonide Gerard Toussaint III, MD, mentor
Mark L. Montgomery, MD, councilor

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Southwestern Medical School
Mechanisms of Intradialytic Hypertension and the Potential Role of Dialysate Sodium
Jula K. Inrig, MD, MHS, mentor
Kevin Klein, MD, councilor

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Effect of cyclosporine and ustekinumab on extracellular trap formation in psoriasis
Allen T. Bruce, MD, PhD, mentor
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Dissect the immunomodulatory roles of VPAC1 receptor in experimental autoimmune encephalomyelitis (EAE), a mouse model for multiple sclerosis
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Arthur H. Wolinz, MD, councilor

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The University of Texas School of Medicine at San Antonio
Sodium Coupled Glucose Transporter (SGLT) Expression in the Human Diabetic Kidney
Luke Norton, PhD, mentor
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Sandia Clark, MD, mentor
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Lauren Orenstein
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Barbara Rechert
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Whitney Ross
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**Embryonic calcium nutrition: testing a model for developmental calcium deprivation**
Tom W. Ecay, PhD, mentor
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Michael Lim, MD, mentor
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Ana Fernandez-Sesma, PhD, mentor
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Anish Shah
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**Alternative Cardiac Sodium Channel Splicing in circulating White Blood Cells of Heart Failure Patients**
Samuel C. Dudley, Jr., MD, PhD, mentor
Charles A. Owens, MD, Christopher M. Miles, MD, and Gary Rifkin, MD, councilors

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Carl R. Fuhrman, MD, councilor

Chad Teven
University of Chicago Division of the Biological Sciences The Pritzker School of Medicine
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Russel R. Reid, MD, PhD, mentor
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Medical College of Wisconsin
**CXCR4 desensitization and cell-adhesion in colonic carcinoma cells — occurs through a β-arrestin-independent signaling pathway**
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Owen Phillips, MD, councilor

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**Do Antiandrogens Protect Against Pneumoperitoneum-Induced Renal Ischemia during Laparoscopic Surgery?**
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T. J. Hundley, MD, FACP, councilor

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University of California, Irvine, School of Medicine
**pH-dependent Mechanisms of Electromechanical Cartilage Reshaping**
Brian J. F. Wong, MD, PhD, FACS, mentor
Michael L. Berman, MD, and Ranjan Gupta, MD, councilors

Andrew Zhang
Case Western Reserve University School of Medicine
**Developing a new class of cancer chemotherapeutics**
Chris Dealwis, PhD, mentor
Jeffrey L. Ponsky, MD, councilor
She glides
Into the exam room,
This dead-girl-walking,
Languid and serene,
Paler than pale.

Outside the door
Children are chasing each other down the hall,
laughing.
A baby is wailing his protest of shots.
Here
In this room
All commotion is stopped.

She sits still, calm,
All possessed,
Her hands folded in her lap, her feet together,
Energy conserved.
She makes no unnecessary movements,
Her smile, a faint upturn of the corners of her mouth,
Her lips, white as her teeth,
Nor indulges any excess in her complaint: “I am tired.”

She is not dizzy as she rises from the exam table,
Her spleen swollen, her hemoglobin four,
Her blood pressure normal.

She sits straight-backed and tall,
Staring back at me,
Teaching me,
with what little we can live.

Joyce Hooley-Gingrich, MD, MPH, FAAP

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Illustration by Laura Aitken
The lark descends
The panda scowls
The cheetah limps
The parrot growls
The beaver tires
The ant gives up
The bee is lost
The cat won’t sup
The salmon fall
Rhinoceri fret
Horses can’t gallop
Elephants forget
The world’s undone
Love’s labour’s lost
The heart beats still
In summer’s frost
The stilled heart beats
Through sorrow’s might
And memory’s pain
And shrouded sight
Then slowly slowly
On the wing
A lark ascends
Again, to sing
The lark ascends
The rhinos snooze
The salmon leap
The panda coos
Parrots parrot
Honeybees dance
Cheetahs race
While horses prance
Elephants remember
That beavers whirr
And ants march on
And kittens purr
So grief will thaw
Though never leave
So hearts will gladden
As they grieve

Emanuel E. Garcia, MD

Dr. Garcia (A21A, University of Pennsylvania, 1986) is a psychoanalyst and the author of The Case of the Missing Stradivarius, a novel set in Victorian London. His e-mail address is: emanuelegarcia@gmail.com. Illustration by Jim M'Guinness.

In memoriam Edward D. Harris, Jr., MD