Alpha Omega Alpha Honor Medical Society
Founded by William W. Root in 1902

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Egyptian hieroglyphics at Temple of Kom Ombo.
Editorial

The Pharos of Alpha Omega Alpha

Richard L. Byyny, MD, FACP

GREETINGS

The Directors of Alpha Omega Alpha Society in presenting to the members of this first number of The Pharos bespeak for it a kindly reception and express the hope that it will serve as a “Beacon” and worthy exponent of the aims and purposes of our society.

There has been a demand for a medium of exchange through which the views of individuals, reports from chapters, and other interesting information could be made available to the entire membership.

The Pharos will be published semi-annually in the fall and the spring.

The society is most fortunate in having Mrs. William W. Root as managing editor. Through many years of association with the Founder of Alpha Omega Alpha, her lamented husband, she has gained an intimate knowledge of the organization of the society and familiarity with all its activities throughout its entire existence that ensures the success of this new venture.

—Walter L. Bierring, president

Alpha Omega Alpha first published The Pharos in January 1938. The inaugural greeting was from Walter L. Bierring, then-President of ΑΩΑ. The first page contained the ΑΩΑ key, recognition of founder, William W. Root, MD, and the ΑΩΑ motto.

Since its first issue, The Pharos has been a leading scholarly journal that represents medicine and humanities. Ernest S. Moore, MD, published “The Early Days of Alpha Omega Alpha” in The Pharos in May 1944, wherein he introduced the context under which Alpha Omega Alpha Honor Medical Society was established.

The medical educational pot was boiling briskly in 1900. Fundamental changes in medical education had begun to make themselves felt. Many schools had been, or still were, commercial ventures. Admission requirements were elastic; instruction largely by lectures and text-book study; laboratories generally inadequate, sometimes none.

This was before Abraham Flexner began his reform of medical education, and prior to medical school accreditation.
Treasures of the Nile, on papyrus.
The medical students were...a primitive group. They were emotionally hair-trigger men, quick to resent an affront, and prompt to avenge an injury. Their behavior in halls and classrooms was rough and boorish. They were loyal to their friends and to each other. Class spirit ran high, and class clashes, often of riotous proportions, were of weekly occurrence. They respected neither authority nor property. Whenever a class was lined up for supplies for a class period, more or less roughhousing was present.⁶

However, several of the students were primarily and sincerely interested in becoming doctors. Moore went on, “They respected and admired superior studentship.”³ Root was different than most students of that era. He was 35-years-old, had earned a Bachelor of Science degree in chemistry from Cornell University, had taught science, and had been a graduate student in chemistry at the University of Chicago. He was shocked by the behavior of the raucous students, and found cheating to be repugnant. He and some of his fellow students decided to provide leadership by establishing Alpha Omega Alpha Honor Medical Society in 1902 to foster scholarship, honesty, and to promote high medical ideals.

They wrote in the first Constitution of AΩA:

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 medical practice.⁴

They defined the AΩA motto:

To be worthy to serve the suffering.⁴

They established that membership in AΩA was to be based on both scholarly achievement and professional conduct. Root 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, to foster research and in all ways to ennoble the profession of medicine and advance it in public opinion. It is equally a duty to avoid that which is injurious to the welfare of patients, the public, or to the profession.⁵

Root and his colleagues provided the leadership and recruited exceptional leaders in academic medicine to join them in forming AΩA.

For nearly 115 years, election to Alpha Omega Alpha has been an honor signifying a lasting commitment to professional excellence and achievement, scholarship, leadership, service, teaching and professionalism.

The Pharos

The Pharos of Alpha Omega Alpha Honor Medical Society is named after the Pharos lighthouse of Alexandria. It is unknown how this symbol was chosen, but we know that our journal was to serve as a “Beacon” and worthy exponent of the aims and purposes of the medical society. The Pharos first featured the lighthouse of Alexandria on the cover in 1949.⁶

The Pharos lighthouse in Alexandria was one of the seven wonders of the ancient world built in Alexandria, Egypt in 279 B.C.

Ninety-five percent, or 380,000 square miles, of Egypt lies within in the Sahara desert of North Africa, with the Mediterranean Sea to the north, and the Red Sea to the east.

The Nile River, the longest river in the world at 4,258 miles, has made Egypt and the surrounding area habitable by man. On either side of the river is a band of fertile land.

The Nile, which terminates into the Mediterranean Sea, has shaped Egypt’s geography, molded its civilization, and determined its destiny. Circa 450 B.C., Herodotus wrote, “Egypt is the Nile and the Nile is Egypt.”⁷

In 3,200 B.C., the Egyptians had developed a hieroglyphic language for communicating and archiving information and knowledge. They recorded hieroglyphics in stone, on pottery vessels, and on papyrus for those who could read to have access to learning and knowledge.

Northern and southern Egypt were unified in 3,150 B.C., and a series of Egyptian dynasties, with pharaohs followed. The first pharaoh of the first dynasty was Narmer.

The first Egyptians worshiped Gods who exemplified aspects of nature and represented deities that the people felt held power over them.

Each god had an individual identity with a name and unique set of characteristics. These gods determined everything that happened to the people—good and bad. Each god was something in the natural world and had a physical reality.

Early Egyptians built magnificent temples and palaces for their gods. They provided the gods with servants and priests, to provide for their every need.
They created special images of gods in the form of a man, woman, or animal with the body or head representing the animal god. The Pharaoh would stand before the god, address it with proper name, and acknowledge its power and greatness in the form of various prayers. They then offered the god the very best of all things that humans desired, including food, drink, clothing, jewelry, and perfumes.

Since the sun rose daily in the east, and provided light there was the sun god, Amman, whose temples were located on the east side of the Nile. And, because the sun set in the west, the tombs for afterlife were located on the west side of the Nile.

The beginnings of the medical profession

The roots of Western medicine are thought to have begun in ancient Egypt. Homer, the Greek poet who authored the Iliad and the Odyssey, around 850 BC, wrote in the Odyssey, “in medical technology the Egyptian leaves the rest of the world behind.”

And, Sir William Osler noted, “we must come to the land of the Nile for the
origin of many of man’s most distinctive and highly cherished beliefs.”

The most famous Egyptian physician and medical professor was Imhotep, meaning “he comes in peace,” who lived in Egypt around 2,700 B.C.

Osler wrote that Imhotep was, “the first figure of a physician to stand out clearly from the mists of antiquity,” as he was practicing medicine, surgery and treating illnesses many generations before the famous and revered Greek, Hippocrates.

Ancient Egyptians, led by Imhotep, recorded details of their medical procedures on papyrus, and made important observations in human anatomy. They performed surgeries, set fractured bones in place, performed amputations, sutured large gaping wounds, and bandaged injuries and wounds. They immobilized injuries using splints, plaster, and tape, and incised and drained abscesses. They knew the properties of many plants that could be extracted and used to treat maladies—many of which are still used today. They were well rounded and had knowledge of magic, astronomy, philosophy, rituals, and formulas.

Imhotep and others are thought to have conceived of the human body as a system of channels or vessels to distribute air and fluids from the heart, lungs, kidneys, and digestive tract. They began to understand physiology and the importance of blood.

Imhotep used the standard history of the problem and a physical examination including inspection, palpation, and auscultation to acquire the clinical information for diagnosis and prognosis. He and his team looked for recognizable clinical patterns to determine the cause, and select an appropriate treatment. They would decide if they could treat the illness or trauma, simply provide care and comfort for the patient, or not treat the patient at all.

Imhotep diagnosed and treated more than 200 diseases. He learned by getting ideas or concepts from areas outside of his role as a physician. He was a poet, a priest, a judge, engineer, prime minister for the Pharaoh Zoser, and an architect. He designed and supervised the building of the first pyramid, the step pyramid of Saqqara. He was believed to be the only mortal to reach the position as a true and full god.

The Pharos and Alexander the Great

Homer wrote in the Odyssey, “Out of the tossing sea where it breaks on the beaches of Egypt, rises an isle from the waters; the name that men give it is Pharos.”

This is where the Nile flows through a delta and into the Mediterranean Sea.

The island of Pharos was a strip of white, sparkling, calcareous stone washed all around by the sea. It had a causeway connecting the island to the delta.

Alexander the Great succeeded his father, Philip II, to the throne of the Kingdom of Macedon at the age of 20. He conquered countries throughout Asia and Northern Africa, and created the largest empire of the ancient world. He was undefeated in battle.

He advanced on Egypt in 332 B.C., where he was considered a liberator, and deified as the King of Egypt.
Alexander founded 20 cities that have his name, most east of the Tigris. The first, and greatest, was Alexandria, Egypt, in 331 B.C.

According to one rendition, Homer appeared to Alexander in a dream and recited lines from the Odyssey about the island of Pharos. Plutarch then wrote:

Alexander left his bed and went to Pharos, which at that time was an island lying slightly south of the Canopic mouth of the Nile....He no sooner cast his eyes upon the place than he perceived the advantages of the site. It was a tongue of land, not unlike an isthmus, whose breadth was proportional to its length. On one side it had a great lake and on the other the sea, which there formed a capacious harbour.10

Alexandria’s harbor held more ships than any other port in the world, was a center of world commerce, and was the capital of Egypt for more than 1,000 years.

Alexander observed that the harbor near the island of Pharos provided the only safe anchorage along the Mediterranean coastline. There was no typical landmark, and numerous treacherous limestone reefs near the shore. A beacon for incoming ships was needed. Thus, he ordered the world’s first lighthouse—The Pharos—be designed and built.

Construction of The Pharos was begun by Ptolemy I in 299 B.C., and finished by his son, Ptolemy II Philadelphus, in 279 B.C. The tower was designed and built by the architect Sostratus, who used large blocks of stone made up of three stages. A lower, square section 240 feet by 100 feet, sat on a stone platform with a central core and a long ramp leading to a door. The middle section was an octagonal tower, and a towering cylindrical section topped off the lighthouse. All totaled, the Pharos was 450 feet tall.

On the top, there was an open cupola where a continuous fire burned. A large, curved mirror, thought to be of polished bronze, was used to project the fire’s light into a beam that reflected sunlight during the day. The light was reported to be visible day and night, as far as 29 miles away.

The Pharos was the first lighthouse in the world, and the highest man-made structure in the ancient world, other than the great pyramids at Giza. It became the model for other lighthouses for centuries, and remained in use for 1,500 years.11

Two earthquakes—one in 1303 A.D., and 1323 A.D.—reduced the Pharos to rubble.

### AΩA’s beacon

The November 1949 issue of The Pharos stated, “It seems appropriate to adopt the ‘Ancient Beacon of the Mediterranean’ as the Pharos of our Society, a fitting symbol of the spirit and purposes of Alpha Omega Alpha.

It was with great forethought and foresight that AΩA’s journal, The Pharos, took its name from this ancient beacon. Like the great light that once shone forth at Alexandria signifying light, truth, knowledge, learning, wisdom, worthiness, duty, hope, strength, scholarship, vigilance, integrity, reason, and clarity of vision, so does The Pharos serve as a beacon for the medical humanities—humanness, medical history, ethics, literature, law and politics, art, poetry, music, language, philosophy, and culture.

It is with this spirit that we continue to produce The Pharos 78 years after it was first published. Like the original Pharos, AΩA’s journal will continue to guide the future of medicine, and will shine well into the future.

### References:

6. Pharos Alpha Omega Alpha Honor Med Soc. 1949 Nov; 13(1); cover.
I always pictured my first patient to be wrapped in a dressing gown frail and thin laying in a hospital bed kindly, quietly answering the many questions I would ask as a beginning medical student.

My first patient is wrapped in muslin cold and swollen laying on a metal table kindly, silently answering the questions I never knew I would ask as a beginning medical student.

I always expected my most intimate patient moments to be dealing with the devastation of personal illness and loss described in words and punctuated with tears like the most intimate moments I’ve shared with family and friends.

My most intimate patient moment is peeling away layers of skin and flesh and bone to discover what lies beneath holding the nerve that controlled the hand that touched family and friends with warmth and love unlike anything I have ever experienced with another human being.

I always expected my first patient to teach me the clinical presentation of some disease process I recently learned in class the human side of disease and illness how to be a good doctor with words and stories and mannerisms.

I never expected my first patient to teach me that a cancerous lymph node looks like a black and white marble with the texture of a dried bean the specific sound of separating fibrous cobwebs of collagen encapsulating arm and leg compartments how to be a good human without ever speaking a word.

Alexandra Houston-Ludlam

Mrs. Houston-Ludlam is a member of the class of 2022 at Washington University School of Medicine in St. Louis. Her poem won second prize in the 2016 Pharos Poetry Competition. Mrs. Houston-Ludlam’s e-mail address is: ahousto@wustl.edu.
On the problems of chatting with angels

Thomas J. Poulton, MD

Thomas Poulton, MD (ΩΩA, The Ohio State University, 1975), is an Adjunct Professor of Pediatrics at Creighton University School of Medicine in Phoenix, Arizona, and, until recently, was a Pediatric Critical Care Physician at The Alaska Native Medical Center in Anchorage, Alaska.

Deep into that darkness peering, long I stood there...
—Edgar Allen Poe

I love these little people and it is not a slight thing when they, who are so fresh from God, love us.
—Charles Dickens

The agnostic implicitly declares he doesn’t know when he labels himself as one, but in fact he has the conviction that he knows plenty. Knows what he knows, and usually, also, what the rest of us know, and don’t know.

There is much to amaze us, but certainly no tomorrows after our todays. As my health spiraled downward—I was still walking about, but we all knew where this was headed—there were few questions to ask or answer. I know, after all.

Yet, there were so many plans to make—astonishingly—on what appeared to be the edge of the abyss. Insurance and investments to discuss; unfinished manuscripts that mattered a great deal, or not at all; and a doorbell cover, the sprinkler system, and a gutter to repair while I still could do it. The possibly important to the undeniably trivial, but they were all on my list.

The absurdity that I still chose to plan so many things made me laugh through my brief, largely private, season of goodbye tears. The plans and tears were not directly for me, but rather for those who would live a bit longer, and for those who have made my life so worthwhile.

I reflected with considerable satisfaction that my adored family and I had very little that had to be discussed. Lives lived well enough leave little enough unsaid.

My heart was broken—literally—and beyond fixing, so I came to sleep like a baby, by which it seemed, all the time. It became a source of some embarrassment as I slept big parts of my days away in what was becoming three naps most days. Not the way I wished to live, or to be remembered, but there really was no alternative.

My work still mattered greatly to me, provided structure and meaning to some of my days, preserved a lightness to my step that might otherwise have left me, and nourished whatever my soul might be. The naps made it possible to continue to work many days every month.

I was embarrassed by my fatigue, but the naps were also a warm, welcome, remembered connection to the very young people I spent 40 years caring for as a pediatric specialist. I looked after their medical needs in the pediatric intensive care unit, the operating room, and in hospice. They paid me with the gifts of a strong sense of purpose, of understanding important things, and of belonging to something real and urgent and immediate, and always more important than I and my problems. My everyday work was being a part of thousands of personal histories.

My alliance with the kids was fascinating to me, a connection to me, my childhood and who I was 60 years ago. That we were all little once has always seemed an important shred of shared humanity, even if a remnant remembered by few, and unappreciated by most.

And so, I yet again felt myself slipping into the soft comfort of another afternoon slumber, from which I knew I would awaken with renewed energy and a fresh perspective. Symbolically, it was inescapable that every nap was a rehearsal for my approaching demise, yet my daily dormancy was usually a welcomed excursion. Lemons and lemonade.

I wish that I had accepted my declining health with more grace and wisdom. I was initially quite angry and hurt. But agnostics accept reality, so I came to accept, as best I could, what would come at some future time—all too soon.

While I slept on this day, I traveled unexpectedly to the backyard of my childhood home.

About 15 children talked, laughed, and played in small groups. A birthday party?

Two first-graders were struggling awkwardly to plant a budding forsythia bush—one of my favorite springtime flowers. Why were such small children being made to struggle with such a large project?

Others, played softball on the improvised neighborhood diamond where we all had played. Clean cheeks, clean clothes, clean bills of health.
Boisterous preschoolers squealed, giggled and ran as they kicked large floating beach balls around my yard. I knew none of these children, I thought. They were neither neighbors nor classmates of mine, and yet, there was something familiar about these kids. Maybe they were the children of my adult friends?

I smiled and waved at the groups as I walked about. They met my gaze and smiled back, some of them waving the exaggerated stage waves of kids excited to be acknowledged and recognized. Where, I wondered silently, were the teachers and parents? Who was looking after these kids?

A self-possessed 10-year-old boy approached me. He carried a clipboard and looked like a little stage manager. I marveled at his confidence and comfort in approaching me under what seemed unusual circumstances.

I was aware now that this was a dream that I was in, and so a few tears made their way down my cheeks, as I was again aware of the losses my wife and son—and, yes, I—would soon endure. I pivoted away so the kids, who seemed so real, would not see those tears, knowing they would be upset—or at least confused—by them, and swore a silent oath at my weakness.

“It’s okay. We know,” the boy said as several third- and fourth-graders nodded their concurrence and smiled at me. I quickly blotted my cheeks on the backs of my hands, but was perplexed and failed to understand, even as their words and smiles comforted and calmed me.

“We’re your kids,” a little red-haired girl in horn-rimmed glasses explained with firmness. This added no clarity for me. My kids?

“We’re the kids you took care of. When we died, we came here. We’re fine now!”

I gasped, and my breath failed me for several moments as I tried to absorb this.

Another smiling child shyly added, “This is a place for kids and people who are really nice to kids.”

A small group gathered around me. They briefly took my hands, leading me around the yard, patting me on the back. Kids, but they seemed so very mature. Old souls now, if not when I first knew them.

“We like you,” another offered quietly.

Stage Manager explained, “We are still kids, so you can read to us, and play with us, and just talk to us when you come here. We still need that.”

“Or make snacks for us,” another quickly interjected. “You’ll like it here. We’ll have fun. The flower bush is for you! See you later!”

I again tried to catch my breath, and was immediately warmed by, and deeply grateful for, the reassurances from these children. I fully believed, for a moment, that I had just visited Heaven.

I smiled as I slowly awakened, recognizing the dream as a harmless, but intense, subconscious self-deception that might make dying easier for some people.

However, I quickly grabbed a pen and paper to record what I remembered of it.

It is still a surprise that a mere dream brought so much comfort and acceptance. I regained a clear sense that, as for most of the past 65 years, all was well in my world—at least as much as it could be.

I am, I reminded myself, merely stepping across a line to become a part of history, as we all must. And I am doing so under much better circumstances than many, including most of “my” kids.

I remained bemused as I awoke further, unsure of what to make of the kids.

We all cope—or don’t—as we must, while our trajectories continue as they must. I remain comfortably lifted after my dream, by my conviction that our universe is a remarkable and strange enough place to challenge the best thinking and imagination of any of us, for as long as any of us has.

I had an exceptional, noteworthy, sustaining, dream. That’s what it was.

We know what we know, and what we do not know, after all.

Hope is a good breakfast, but it is a bad supper.

—Francis Bacon

What I want to do is go home and hug my kids...

—Kevin Bacon

References


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On the problems of chatting with angels
“It’s nice to meet you, I’m Julia,” I say. I smile, overeager, as you look away. “I’d like to examine you, if that’s okay.” No response. I continue my ballet. Your eyes adhere to my right arm. Your eyebrows quiver with alarm. I know it’s time to issue commands: “Follow my finger, squeeze my hands.”

But I am petrified, just like you are. Catatonic they say, an emotional scar or maybe an infection in your brain. What’s worse, a fractured soul or corporeal pain? I contemplate your eyes, I’m unable to speak. You’re supposed to start college next week. I make an awkward joke about a boy band. You smile then glare at your marionette hand. Why should I keep playing doctor today? More hanging questions won’t make you okay. Suddenly I am also only eighteen, and caught up in what your eclipsed expressions mean. We talk for an hour, but only I speak. You blush when your mom tells me you’re a geek. It’s psychiatric they say, the outlook, bleak. But you played soccer and went on a date last week! I refuse to see you through physician’s eyes. Talk of neurotransmitters feels like a misplaced disguise when your dad asks me, “What kind of puppeteer would make my son’s spirit disappear?”

Julia Jacobs

Ms. Jacobs is a member of the class of 2017 at Tufts University School of Medicine. Her poem won third prize in the 2016 Pharos Poetry Competition. Ms. Jacobs’ e-mail address is: julia.jacobs@tufts.edu. Illustration by Laura Aitken
Richard Gunderman, MD, PhD
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I made straight A’s and flunked ordinary living.

—Walker Percy¹

On the 100th anniversary of his birth, Walker Percy is best remembered as a novelist, though he was trained as a physician. He described his professional trajectory as a shift from the “physiological and pathological processes with man’s body,” to “the problem of man himself, the nature and destiny of man; specifically and most immediately, the predicament of man in a modern technological society.”¹

Though he has been dead for more than 25 years, his critique of the problems of modern life remains trenchant today.

A difficult start in life

Born in Birmingham, Alabama, Percy’s uncle was a former U.S. Senator, and his grandfather had been widely regarded as a hero of the Civil War.

When Percy was an infant, his grandfather took his own life, and when he was 13-years-old, his father did the same. Two years later, his mother died in an automobile accident that Percy regarded as a suicide.

Percy and his two younger brothers were raised by

¹ From Walker Percy: Burnout, and the Physician’s Pilgrimage, Richard Gunderman, MD, PhD, 2016.
THE PHYSICIAN’S PILGRIMAGE

Walker Percy in his Covington, LA, yard, June 8, 1977. AP Photo/Jack Thornell

It was while living with his uncle that Percy met his life-long best friend, the writer and historian Shelby Foote.

When Percy and Foote were young, they made a pilgrimage to Oxford, Mississippi, to meet Faulkner. Foote enjoyed the conversation immensely, but Percy remained in the car. He was so in awe of the great man that he could not bear to approach him.

Percy later attended the University of North Carolina, then studied medicine at the Columbia University College of Physicians and Surgeons, graduating in 1941.

### A writer is born

Though initially interested in psychiatry, Percy decided to pursue training in pathology.

While working at Bellevue Hospital, he contracted tuberculosis, and was sent for several years to a sanatorium. He later described his illness as an event that, “did not so much change my life as give me leave to change it.”

While in the sanatorium, he immersed himself in great books, including the writings of Kierkegaard and Dostoevsky.

Having inherited property from his family, he was able to devote the majority of his time to reading and writing, and in the 1950s published a number of essays in academic and literary journals. During this time, Percy also composed his first two novels, neither of which was published.

However, in 1959, an editor at The Knopf Doubleday Publishing Group received the manuscript that became *The Moviegoer*, which after multiple revisions, was published in 1961, and won the National Book Award for Fiction in 1962, beating out Joseph Heller’s *Catch-22*.


He also published a number of nonfiction works, including *The Message in the Bottle: How Queer Man Is, How Queer Language Is, and What One Has to Do with the Other* (1975), *Lost in the Cosmos: The Last Self-Help Book* (1983), and the posthumously published *Signposts in a Strange Land* (1991).

Percy discovered John Kennedy Toole’s *A Confederacy of Dunces* (1980), a riotously humorous picaresque novel, which won the Pulitzer Prize for Fiction in 1981. In his forward to the book, Percy describes the deceased author’s mother’s insistence that he read the manuscript:

> The lady was persistent, and it somehow came to pass that she stood in my office handing me the hefty manuscript. There was no getting out of it; only one hope remained—that I could read a few pages and that they would be bad enough for me, in good conscience, to read no farther. Usually I can do just that. Indeed the first paragraph often suffices. My only fear was that this one might not be bad enough, or might be just good enough, so that I would have to keep reading. In this case I read on. And on. First with the sinking feeling that it was not bad enough to quit, then with a prickle of interest, then a growing excitement, and finally an incredulity: surely it was not possible that it was so good.

Percy is one of the few writers who can claim to have won a Pulitzer Prize for another author.

Like Percy’s *The Moviegoer, A Confederacy of Dunces* recounts the exploits of a 30-year-old man based in New Orleans. And, like *The Moviegoer*’s protagonist Binx Bolling, Toole’s Ignatius J. O’Reilly senses that he does not quite fit into the world, though O’Reilly suspects that his travails reflect the agency of some higher power.

Binx, however, traces his sense of dislocation to the human condition itself, which prompts him to set off on a search:

> What is the nature of the search? Really it is very simple; at least for a fellow like me. So simple that it is easily overlooked. The search is what anyone would undertake if he were not sunk in the everydayness of his own life.

Many contemporary physicians know a similar sense of dislocation. Like Binx, they appear successful, but they are burdened by a lack of enthusiasm, feelings of ineffectiveness, and even a sense of meaninglessness. Studies have indicated that as many as 46 percent of physicians are burned out, with the highest rates in critical care and emergency medicine. Likewise, it is estimated that at least half of all medical students develop burnout at some point during their studies.

### Percy’s Diagnosis

Throughout his writings, Percy sheds light on aspects of contemporary medical practice—and life—which often
become so routine they are no longer noticed. Percy believed that no one can rightly understand what it means to become a physician unless it is conceived of as a journey or pilgrimage.

Too often, educational curricula, instructional methods, and assessment techniques are so tightly constructed that learners have difficulty salvaging the human being—the doctor or the patient—from the educational package in which they are presented. A good doctor needs to understand that there is more to sickness and health, life and death, than the textbooks suggest.

Beneath every diagnosis and treatment plan lies a real human being, and caring for patients requires that sufficient attention be paid to both the biological and psychological aspects of their being. While biomedical science has achieved many new anatomical, physiological, and pathological insights, Percy argued, there are many respects in which, “We don’t seem to know much more about the psyche than Plato did.”

To realize that a patient is dying raises many of the same fundamental questions about the meaning of life as it did 2,500 years ago. Merely doing well in school is insufficient, because it is possible to say, “I made straight As and flunked ordinary living.” Students need to work hard to retain a deep engagement and avoid at all costs the impulse to simply “shrug it off.”

For those who believe that they are here to enjoy the things money can buy, Percy offered a radically different perspective. He believed that the greatest danger in life is not failing, but succeeding to such an extent that you stop asking questions.

Both Plato and Aristotle said that the pursuit of wisdom begins in wonder. This implies that one of the greatest pitfalls before us is complacency, the sense that we already know everything we need to know. Through his writings, Percy worked to evoke a sense of wonder, the realization that we are being confronted by something for which it is difficult to give an account.

Percy regarded patients and physicians not only as biological organisms or consumers, but primarily as “wayfarers.” Before standing any chance of finding a better way, they must first recognize that they are lost, or at least not on the right path.

Percy described his fiction as “diagnostic.” Not that he is assigning medical diagnoses to his characters (and by extension, his readers), but that his writings can help to
recognize what is missing, or out of order in our lives. The principal problem, he argued, is that we have lost our sense of wonder at the world and ourselves.

Percy insisted that the meaning of life is not a scientific but a metaphysical question, for which only metaphysical methods would suffice. His novels represent an attempt to “incarnate such ideas in person and place.”

Is it not indeed more wonderful to understand the complex mechanisms by which the DNA of a sperm joins with the DNA of an ovum to form a new organism than to have God snap his fingers and create an organism like a rabbit under a hat. Instead of dismissing such matter, we should seek to cultivate a frame of mind in which we recognize that an ordinary butterfly is a creature of immense beauty and value.

Percy said the same about consciousness, including the wonder of our own desire to know, something for which he argues science can never account:

Please tell me how it came to pass that matter in interaction, a sequence of energy exchanges, neurons firing other neurons like a computer, can result in my being conscious, having a self, and being able to utter sentences which are more or less true and which you can understand?

Phenomena such as consciousness and language can never be accounted for in strictly scientific terms, any more than the sensation of being in love can be explained away in terms of hormones, or Raphael’s Orleans Madonna is simply a property of paint and color.

**Percy’s Therapy**

Percy wanted to snap people out of the “everydayness” of life; the merely going through the motions that produces an existential torpor. The solution, he believed lies, at least in part, in disasters.

From the Latin for “losing one’s star,” a disaster strips away many of the accretions of comfort, allowing for the ability see the essentials more clearly. In the words of Leo Tolstoy, “Truth is obtained, like gold, not by letting it grow bigger but by washing off from it everything that is not gold.” It is, “the wreck of the eight-fifteen,” wrote Percy, which enables us to discover “our fellow commuter as a comrade.”

In this respect, comfort and security work to our disadvantage; he asked, “Why did Mother Teresa think that affluent Westerners often seemed poorer than the Calcutta
beggar?”⁷ It is in the midst of a catastrophe—a natural disaster, a serious illness, or the breakup of a relationship—that we see most clearly what is really worth living for.

Through his novels and essays, Percy means to help us understand what such a predicament feels like, to put us in the shoes of a person in the midst of a crisis, and thereby open our eyes.

The highest role of the educator is the maieutic role of Socrates: to help the student come to himself not as a consumer of experience but as a sovereign individual.⁶

That we could somehow educate future physicians by downloading knowledge and skills into their heads would transform the practice of medicine from an art that calls on the very best a human being has to offer into a mere technical or industrial process to which the physician need contribute little or nothing.

More than a matter of physiology, learning to see is a matter of narrative. To a great extent, we see only what our stories prepare us to see. If we operate with truly robust accounts of what a patient is, and needs, and what a doctor is, and is capable of providing, then the practice of medicine can thrive.

If, however, we operate with defective narratives that present patients as nothing more than biological specimens, or consumers, then both patients and physicians will be left feeling hollow. It is not so much a matter of figuring life out, as it is discovering what it means to be truly present in living. Kierkegaard wrote that even someone who figures out himself and the universe perfectly by noon still faces the problem of living out the rest of the day.¹

Percy had a healthy respect for science’s limits. Science focuses on things that can be seen, dissected, weighed, and measured. By contrast, he said, many of the most real things in life, such as the self and the consciousness, “cannot be seen as things or measured as energy exchanges.”¹

This does not mean that we should turn away from science, but it does call for other ways of knowing—ways that do not ignore, or deny many of life’s most vital and immediate experiences. Science can keep diseased hearts beating, and kill cancer cells, but it “has not one word to say about what it means to be born a man, or a woman, to live, and to die.”¹

Today many medical students and physicians are struggling with burnout, depression, substance abuse, mental illness, and a sense that they no longer find the practice of medicine rewarding. As a diagnostician, Percy aimed
to uncover the roots of these problems, which cannot be found in purely economic, political, or even pharmacologic domains.

To believe otherwise would be to focus solely on symptoms. Instead, Percy said anxiety and depression might be trying to tell us something we don’t understand—“a sort of warning or summons to the self.” The problem is that by the time such a disorder becomes easy to diagnose, it is very often quite difficult to do anything about it.

Percy aimed to catch his readers at an earlier stage, when the diagnosis is more difficult, but there is still time to provide an effective remedy. The Moviegoer’s Binx seems to have it all—successful stockbroker, war veteran, and lady’s man—yet, he is plagued by an inner sense of emptiness that propels him along in a quest for a more meaningful life.

Over the course of his journey, Binx catches glimpses of the sources of burnout, and develops a clearer vision of what genuine engagement and dedication look like. By the novel’s end, he determines that instead of worrying about his own problems, he will help others cope with theirs. He will leave the playboy life he has known, get married, and go to medical school.

References

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Another I'm-turning-into-my-father moment,
My reflection in the mirror the trigger.
Naked, entering the shower,
I was unsettled by its intrusion.
It wasn't the shared physique.
I would have laughed at that.
No, it was the glimpse of an appraisal,
And the sense of an expectation, unfulfilled.
Nothing crystallized in the turbulence of the spray.
All insinuation seemingly washed away.
But the question lingered long after I dried and dressed.

Raymond C. Roy, MD, PhD

Reflection of my father

Illustration by Jim M'Guinness
THE KEY IN THE LOCK

Cardiac catheterization

Morton A. Meyers, MD, FACP, FACG
Morton Meyers, MD (AΩA, State University of New York Upstate Medical Center College of Medicine, 1959), is Founding Chairman Emeritus of the Department of Radiology, and Distinguished Professor Emeritus of Radiology and Medicine at the Stony Brook University School of Medicine.

Weighing less than a pound and about the size of a clenched fist, the heart is a marvel to behold. A healthy heart beats 48 million times a year, 2.6 billion times in a lifetime. Little wonder that mythology considered it the soul of man, and early surgeons viewed it as too formidable to intervene. An 1880 warning against surgery involving the heart was trumpeted by Theodor Billroth, the renowned Viennese surgeon, “A surgeon who tries to suture a heart wound deserves to lose the esteem of his colleagues.”¹

That warning fell to a 25-year-old German surgical intern, Werner Forssmann, who famously performed the first human cardiac catheterization in 1929—on himself!

In medical school, Forssmann had been inspired by a study undertaken by two French physiologists in 1861.
Dr. Werner Forssmann working in laboratory, 1956.
Bettmann / Contributor
Étienne Marey and Auguste Chauveau had inserted a thin tube into the jugular vein of a conscious, standing horse and guided it into its heart to the depths of the right ventricle, from which they recorded pressure readings of the heart’s chambers. This pioneering procedure was accomplished without disturbing the horse’s heart.²

The print from an old engraving depicting the event captured Forssmann’s imagination. He was surprised that this simple technique had not been tried on humans, and was determined that it should be possible to transfer this procedure to man. A dream had taken hold.

Forssmann received his medical degree from the University of Berlin in 1929, followed by an internship in surgery at the Auguste Viktoria Home, a Red Cross hospital in Eberswalde, 50 miles outside Berlin. He pleaded with his superiors for approval to try a new procedure—to inject drugs directly into the heart—but was unable to persuade them of his new concept’s validity. Even with the offer of doing it on himself first, the risk was considered too great.

Undaunted, Forssmann proceeded on his own. His goal was to improve on the delivery of drugs rapidly and safely to the heart in an emergency; at that time, the best but unsafe technique was to inject directly through the chest wall.

The circumstances of the dramatic incident on November 5, 1929, revealed by Forssmann in his autobiography *Experiments on Myself*,³ reflect his determination, will power, and extraordinary courage.

Over several weeks, he gained the trust of the surgical nurse who provided access to the necessary instruments. So carried away by Forssmann’s vision, she volunteered herself to undergo the historic experiment. Pretending to go along with her, Forssmann strapped her arms and legs to the table in a small operating room while his colleagues took their afternoon naps. When she wasn’t looking, he anesthetized his own left elbow crease. Once the local anesthetic took effect, Forssmann quickly performed a surgical cutdown to expose his antecubital vein and boldly manipulated a flexible ureteral catheter through the hollow needle 30 centimeters toward his heart. He then released the nurse, saying “It’s done.” Realizing immediately that she had been duped, she was furious but nevertheless continued to assist him.

They then walked down two flights of stairs to the X-ray department, where he fearlessly advanced the catheter into the right atrium of his heart, following its course on a fluoroscopic screen with the aid of a mirror held by the nurse. The tubing was too short to be pushed into his heart. He documented his experiment with an X-ray.

Forssmann recounted:

News spreads like wildfire in a hospital. Suddenly [a fellow intern] burst in, half asleep and his hair all tousled: ‘You idiot, what the hell are you doing?’ He was so desperate he almost tried to pull the catheter out of my arm. I had to give him a few kicks in the shin to calm him down.⁴

Forssmann successfully repeated his experiment on himself five more times over the next four weeks.

His report in the German medical journal *Klinische Wochenschrift*⁵ garnered him fierce professional criticism and scorn, and a Berlin tabloid newspaper sensationalized and distorted the technique as that of a medical daredevil. And, in response to a senior physician who claimed undocumented priority for the procedure, Forssmann was forced to provide an addendum to his report. Rigid dogmatism and an authoritarian hierarchy characterized the German medicine of that day. The human heart, as the center of life, was still considered inviolable to instrumentation and surgery.

Forssmann’s surgical career was subsequently severely curtailed. Desperate to get a lectureship in a university hospital, he was advised by an influential surgeon that he might lecture in a circus but not in a respectable German university.

But, he was a man on a mission, and continued his experimental pursuits with injection of X-ray dyes through a catheter into dogs, and on his own body. Hospitals at that time did not have accommodations for experimental animals, so Forssmann’s mother cared for the dogs in her home. Forssmann would sedate the dogs, place them in a potato sack, and transport them on his motorcycle to the hospital.

As in the experiments that had been conducted by the French physiologists, Forssmann would insert a catheter through a vein in the dog’s neck and into its heart. He would then inject dyes and attempt X-ray documentation. In the hope of documenting the rapid flow through the heart’s chambers, the X-ray exposures had to be made quickly but without precise timing. By placing a number of them in sequence, he was thrilled to see they illustrated the heart’s action.⁶

Forssmann had assured himself of the safety of the iodine-containing contrast solution in humans by pressing
it against the lining of the inside of his mouth for several hours, without reaction.

On subsequent experiments on himself, the catheter tip deflected into a neck vein rather than toward the heart. When the contrast dye was injected after proper positioning of the catheter, he felt only a mild irritation of the nasal membranes, an unpleasant taste in his mouth, and a transient dizziness. Unfortunately, he was unable to document the flow of contrast dye in himself.

Forssmann entered a catheter into his heart nine times. It was said that he stopped his self-experimentation only when he had used all of his veins with seventeen cutdowns.

When he presented the results of his studies at the annual meeting of the German surgical society in Munich in April 1931, he received an icy response. There was no applause and no discussion.

In 1932, Forssmann joined the Nazi Party, a year before they came to power, which facilitated his obtaining positions at a number of hospitals through the decade. Around 1937, Heinrich Himmler’s personal physician offered to help Forssmann with his research by providing subjects, but he quickly declined. “To use defenseless patients as guinea pigs was a price I would never be prepared to pay for the realization of my dreams.”

In 1939, Forssmann enlisted in the Wehrmacht, served as a surgeon on the Eastern front in Russia, and became a prisoner of war under the Americans in 1945.

Because of his Nazi associations, after the war, he was forbidden from practicing medicine. However, in the 1950s, the order was rescinded and he was able to practice urology in a small hamlet in the Black Forest.

It was not Forssmann but two New York physicians, André Cournand and Dickinson Richards, who, in 1940, advanced cardiac catheterization of the right heart in humans. In a long-term project, catheters with pressure gauges, and a device to collect samples of blood gases enabled further study of cardiac and pulmonary function in both health and disease.

Cournand readily acknowledged Forssmann’s explorations, and years later, contributed the preface to Forssmann’s autobiography. He described Forssmann as, “not lacking in pride of self, a man at once disputatious, full of resources and will power, and endowed with physical courage, if not with great political perspicacity.”

In 1956, the Nobel Committee for Physiology or Medicine announced it would award that year’s Nobel Prize to Forssmann, Cournand, and Richards. Plucked out of obscurity a quarter century after his exploits and told of the news, Forssmann, then a country doctor in the Black Forest, told a reporter, “I feel like a village parson who just learned that he had been made bishop.”

Cournand stated in his Nobel lecture that, “the cardiac catheter was...the key in the lock.”

With the presentation to Forssmann, it was stated that he “was not given the necessary support; he was, on the contrary, subjected to criticism of such exaggerated severity that it robbed him of any inclination to continue. This criticism was based on an unsubstantiated belief in the danger of intervention, thus affording proof that—even in our enlightened times—a valuable suggestion may remain unexploited on the grounds of a preconceived opinion.”

References

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A fearful mishap leads to revolutionary advances in cardiology

Mason Sones, MD, in the submerged pit looking up at an intensified image. The circular unit on the right is the 35-mm cine camera. Photo courtesy Cook Corporation

Morton A. Meyers, MD, FACR, FACG

Morton Meyers, MD (AΩA, State University of New York Upstate Medical Center College of Medicine, 1959), is Founding Chairman Emeritus of the Department of Radiology, and Distinguished Professor Emeritus of Radiology and Medicine at the Stony Brook University School of Medicine.

As the great vessel, the aorta, carries oxygenated blood from the contracting left ventricle of the heart, its immediate first branches nourish the heart muscle itself.

Prior to 1958, investigators had never dared to enter the openings of the coronary arteries with a catheter to introduce contrast material to enable their visualization by X-rays. This was because of two perceived calamitous effects that would deprive the heart muscle of oxygen—spasm of the coronary artery induced by the catheter, and replacement of its blood by an unoxygenated iodine-containing contrast fluid.

A host of indirect methods were attempted at numerous research centers over several years, but no investigator would attempt to selectively catheterize a coronary artery in a human. Instead, the tip of the catheter was often placed in the thoracic aorta—as close as possible to the openings of the coronary arteries—to deliver the contrast fluid.

Then, in 1959, an abstract appeared in the journal Circulation based on an oral presentation at the annual
meeting of the American College of Cardiology, by F. Mason Sones Jr., MD, and associates from the Cleveland Clinic. Its opening sentence declared, “a safe and dependable method has been devised for contrast visualization of the coronary arteries to objectively demonstrate atherosclerotic lesions.” What stirred only a ripple of interest at the time was soon recognized as a landmark achievement. For the first time ever, the location, number, and severity of blockages of the coronary arteries could be identified. This would advance cardiology as much as the electrocardiograph had done half a century earlier.

How Sones’ method had been devised was not openly acknowledged until many years later, after the technique had been universally adopted in the revolutionary advance of reconstructive coronary surgery.

Sones, a pediatric cardiologist, had been recruited to the Cleveland Clinic to develop a cardiac catheterization laboratory, having learned the technique at the Henry Ford Hospital in Detroit. Complementing cardiac catheterization with angiocardiography, his work initially involved congenital heart disorders in children, and rheumatic heart disease in adults.

The catheterization laboratory in the basement of the clinic looked medieval. Sones had excavated a deep pit four feet beneath the floor to accommodate a six-foot-long vertical unit designed to enhance fluoroscopic images. Looking like a submarine commander peering into his periscope, he would sit within the pit at a level below the patient, who would be laid out on the X-ray table above. It was only in this manner that he could view the progress of the catheter and photograph images of the heart with the image-intensifier. Another operator would inject contrast dye into the patient’s aorta or the heart chamber, carefully avoiding the opening to the coronary artery.

On October 30, 1958, Sones was working on a 26-year-old man with rheumatic heart disease. His assistant inserted the catheter into the patient’s brachial artery just above the right elbow and directed it up through the aorta toward the heart with the tip of the catheter just above the aortic valve. Sones was monitoring the progress of the catheter on the fluoroscopic TV screen. From under the table he had no control of the catheter, and his assistant could not see the X-ray images.

“Inject,” he called up to his assistant. From his place in the pit, Sones watched in horror as the tip of the catheter flipped around and at least 30 milliliters of dye was injected directly into the patient’s right coronary artery, which was visualized superbly with all its branches. This was a frighteningly large amount of dye, never imagined for use in the human heart.
Fearing a cardiac arrest, and in a panic, Sones screamed, “Pull it out, we’re killing him,” as he rushed out of the pit to the patient’s side and grabbed a scalpel to be able to open his chest and massage the heart. The patient had no heartbeat for several frightening seconds, though he was still conscious. Sones then remembered that a strong cough could clear the contrast dye from the heart because of the contracting diaphragm muscles.

“Cough, goddamn it!” he shouted at the patient. Startled, the man complied, letting out four hearty coughs. It worked. To everyone’s relief, his heart started again, without any further complications.

The misadventure taught Sones that, contrary to views held at the time, non-oxygen-carrying fluid could safely be injected into a major coronary artery. He had discovered a technique for obtaining clear and detailed pictures of the entire coronary circulation.

During the ensuing days I began to think that this accident might point the way for the development of a technique which was exactly what we had been seeking. If a human could tolerate such a massive injection of contrast directly into a coronary artery it might be possible to accomplish this kind of opacification with small doses of more dilute contrast agent. With considerable fear and trepidation, we embarked on a program to accomplish this objective.

Sones constructed a catheter with a flexible, tapered tip that permitted easy direct entry to a coronary artery. By 1962, he had successfully performed selective coronary arteriography with small doses of contrast—four to six milliliters—in more than 1,000 patients.

A brief paper on his technique and experience was published by the American Heart Association in its monthly leaflet Modern Concepts of Cardiovascular Disease. Despite the enormous importance of the work, the report was written in modest style and it was only four pages long. However, its impact was explosive, leading to the rapid growth of the technique during the 1960s.

Coronary arteriography led to many new observations: spasm of coronary arteries; spontaneous coronary dissection; systolic narrowing of an epicardial segment of a coronary artery (myocardial bridges); the septal dance of left bundle branch block; the diastolic shudder of constrictive pericarditis; mitral valve prolapse; and hundreds of anatomical variations and congenital coronary anomalies.

In 1967, Sones reported that he and his colleagues had performed motion-picture coronary arteriograms (cine-angiography) on 8,200 patients, representing all types of atherosclerosis. In more than 99 percent of the cases, both the left and the right coronary arteries could be seen. Branches as small as 100—200 microns were visualized.

For optimal angiographic use, Sones also constructed a rotating cradle for the table top.
Sones was a perfectionist who worked prodigiously, often 14–18 hours a day, sometimes seven days a week. All who knew him were alert to his forceful and frequently bumptious personality. He was intensely focused and scrupulously honest to the point of bluntness. A contemporary said, “The timid and lazy find him a trial; the active and dedicated, an inspiration.”

A small, chubby, ruddy-faced man who swore with gusto, his dominant characteristic was a zealous striving for perfection, accuracy, and truth. This was often manifested at major medical meetings as open disagreement with a lecturer making a scientific presentation. He quickly acquired a reputation for being aggressive, and even disrespectful.

Intemperate outbursts in his relentless pursuit of truth caused more than one public speaker to suffer some indignity, as he had to fight to impose his pioneering ideas to dispel myths still defended by eminent cardiologists.

In September 1983, Sones received the prestigious Albert Lasker Clinical Medical Research Award. His brief acceptance speech was characteristic of the man:

What a fascinating time it was to develop high-speed X-ray-motion picture photography—60 X-ray pictures a second! My God, you can slow down what goes on inside the pump and even an idiot can sit there and look it over and over again and finally figure out what the hell’s going on. So I’m most grateful for this experience. It’s awe-inspiring.

Sones’ office was typically darkened as he was always reviewing angiograms—those of his own patients, those brought for consultation by his colleagues, and increasingly those referred by hundreds of cardiologists around the world.

An inveterate smoker, he would use a long, sterile forceps placed on a nearby tray during catheterizations to pick up a cigarette, and have a nurse light it for him. After taking a few puffs, he would return the forceps to the tray, with the tip overhanging to keep everything sterile. He died of lung cancer, in 1985, at the age of 66.

Donald Effler, Sones’ surgical colleague at the Cleveland Clinic, said, “Figuratively speaking, Sones’s catheter pried open the lid of a veritable treasure chest and brought forth the present era of revascularization surgery.”

On May 9, 1967, another surgical colleague, René Favaloro, performed the first coronary artery graft in a 57-year-old woman with angina pectoris who had been diagnosed with a completely blocked right coronary artery. Eight days later, Sones used his coronary arteriography techniques to take motion pictures of the rerouted blood flow in the woman’s heart. This event revolutionized the surgical treatment of coronary artery disease.

Within three years, Favaloro and his colleagues performed 1,086 operations with an acceptably low mortality. The Cleveland Clinic became a mecca for angina patients who could benefit from surgical revascularization. By 1975, there were 18 staff physicians and 42 fellows, making the Cleveland Clinic Department of Cardiovascular Surgery the largest in the country. By 1978, six cardiac surgeons were doing almost 3,000 operations a year.

Today, about 400,000 coronary artery bypasses are done each year in the United States. Further accomplishments stemming from coronary arteriography include the interventional cardiology techniques of coronary angioplasty and stent placement.

References

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I find you outside, smoking
oxygen tank placed carefully to the side
basking in the last colors of the fall
I would’ve covered you in nicotine patches
gone back in time and snuffed your cigarette
when you first stole one from Dad’s pack
and lit it out behind the shed
trying to hide the scent with Febreze
and orange-scented hand sanitizer

With each drag, your cells shivered
swelling until some poor intern
sat down on the edge of your bed
and stuttered out a death sentence
“We’ve found something”
as if it could be treasure or puppies
and isn’t always something ugly and slimy
slithering forth from an organ system
you’d long stopped considering

I sit down on the bench beside you
and watch the ambulances go by
You smile crooked and ask if I want one
I laugh, knowing my wife will kill me
just for having the smoke on my jacket.
and that bitter look in the back of my eyes
A moment of silence slides past us
joining the bustling exodus
of newly christened and sacred old

Finally, you turn and ask me how long
I’m sure your world will never be green again
but will end in brown or red or gold
Instead I tell you it’s hard to know
and you pull deeply on your cigarette
Each of us charts our course
and waits for the last leaf to fall.

Michael Slade

Mr. Slade is a member of the class of 2017 at
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Illustration by Jim M’Guinness
A clash of values
A clash of values

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On a recent evening a patient, whom I shall call Mrs. Kahn (not her real name), walked into our labor suite wearing a shalwar kameez and hijab, the traditional dress and head-covering of a Pakistani Muslim woman. Her gravid belly, her worried facial demeanor, her stooped gait, and the protective manner with which her husband accompanied her down the hallway to the reception desk told much about her. She was pregnant, in the ninth month, she was scared, and she was in labor. And, she might insist upon being cared for only by a female care provider.

By the time the nurse’s intake assessment was complete, it was apparent that Mrs. Khan was indeed in labor, she was indeed frightened, and she did indeed insist upon a female care provider. The problem? I was the attending physician on-call and in that capacity was ultimately responsible for her care.

Though our residency training program is more than 80 percent female, the two residents on duty were both men. No midwife was in the hospital, and our nurses, all women, had not been trained to perform deliveries. The only other available resource with which to satisfy the patient’s wishes was the female medical student, a person whose practical experience in obstetrics consisted of assisting with one delivery.

What to do?

Actually, this is not an unusual circumstance. Signs posted in the outpatient clinic declare that we do not, and cannot, accommodate expectations regarding the gender of hospital staff. Despite these signs, and despite reiterated oral reminders, somehow patients arrive in Labor and Delivery entertaining precisely that expectation.

Respect for autonomy and cultural sensitivity demand that we attempt to comply with patient wishes. However, such requests are in direct conflict with the exigencies of managing a complicated call schedule, and with our own values. We shouldn’t engage in gender bias, regardless of the gender being targeted.

Obstetrics has evolved over the years into a specialty practiced predominantly by women. To a certain extent this trend is driven by patients. In one survey of 125 post-operative and postpartum women in an American university hospital, 53 percent preferred a female physician, 10 percent preferred a male physician, and 37 percent stated no gender preference.1 Twenty-five percent of the subjects considered gender to be one of the three most important factors in the selection of a physician.

These figures are far from neutral. Instead of having no bias, nearly two-thirds of female patients have a gender-based provider preference, and among these, 84 percent prefer a female obstetrician/gynecologist.

These preferences affect medical education. In an anonymous survey published in 2010 of medical students completing their third-year Ob/Gyn rotation at a large urban medical school,2 men were far more likely than women to experience patients refusing to allow them to participate in a clinical interview (61% versus 17%, p < 0.0001), and physical examination (82% versus 37%, p < 0.0001). It is a completely predictable outcome of these and other realities that the proportion of men in obstetrics and gynecology residency programs dropped to less than 19 percent by 2010.3

I believe that, on average, there is no inherent difference between male and female physicians in any of the many elements that determine quality—caring, skill, knowledge, experience, effective communication, and judgment. In the patient survey cited above, when asked whether gender was more important than competence, only 0.8 percent of subjects responded in the affirmative. Thus, it appears that for a significant proportion of women, physician gender rises to the level of a determining factor only after all other qualifications are considered equal. When this theoretical principle is applied in the real world, where patients have access to a plethora of doctors who meet their minimum qualifications, they are at liberty to use gender to make their selection.

However, Mrs. Khan was in labor, and we had run out
of time to prepare for an inpatient experience in which her choice might have been honored.

What to do?

With the help of a medical interpreter, I explained to Mr. and Mrs. Khan that I could not surrender my duties to the member of our crew with the least training and experience—the medical student. Mrs. Khan kept her eyes averted and allowed her husband to speak on her behalf. He gave me a brief lesson in Islamic law, according to which the necessary treatment of women may be delivered by providers in the following order of preference: female Muslim, female non-Muslim, male Muslim, and finally male non-Muslim. Thus, if there were no other providers in the unit, a male non-Muslim obstetrician would serve with no compromise of religious laws of modesty. And yet, this did not seem to satisfy Mrs. Khan, who was visibly uncomfortable receiving care from a male doctor.

When I asked for her opinion she demurred, stating that she wished for her husband to make decisions for both of them. I remember being struck by the irony of the fact that my obligation toward Mrs. Khan’s autonomy (a value of the highest order in our Western ethical construct) extended to honoring her right to surrender that autonomy to her husband (a value of equal importance in her culture).

Eventually, we arrived at a compromise: both the student and I would scrub in on the delivery, and I would try as much as I could to have the student do all the touching. Mrs. Khan was clearly uneasy with my presence in the room while she was uncovered, and I was sorry to be an encumbrance to her ability to focus only on her labor. I tried as much as I could to be unobtrusive, but of course, in the end, that was not possible.

The student was excited to assume the role of primary accoucheur, and with guidance executed that role with great enthusiasm and sensitivity. I was able to guide her through a beautiful normal delivery, and the parents (and student) were ecstatic with the outcome.

Looking into my eyes while wiping the tears from her own, Mrs. Khan whispered, “Thank you,” and I replied that she was most welcome.

Physicians frequently deal with collisions between a patient’s right to autonomy and the doctor’s obligation to do no harm. Our complicated task is to minimize the damage such collisions can inflict on patients, on ourselves, and on medical systems. Perhaps we should work harder to ensure that we always have a qualified female provider on call, but somehow that seems like a capitulation to gender discrimination.

Must we ensure that we have providers of all races, ethnicities and religious backgrounds available to appease any and all patient requests? How do we differentiate preferences that are valid from those that are discriminatory?

To me, the important distinction may lie in the focus of the request. For my patient, the restriction was directed inwardly—she was bound by a standard of modesty she applied to herself. Often, in cases we find objectionable, the bias tends to be directed outward.

And, if a patient has a right to certain discriminatory requests, there is still the question of how we fulfill those requests in the real world. Does their right apply to an emergency care unit like labor and delivery? Does it apply only if we happen to have the resources to satisfy it a given time?

Perhaps there are no good answers to these questions. One is tempted to declare that physical care of the patient must take precedence over a secondary consideration such as gender preference. Yet, this is done at the risk of disregarding emotional aspects of well-being, which, like the body, fall under our obligation of beneficence.

And what of our own sense of justice, which prohibits prejudice? Part of the difficulty lies in the fact that this fundamental value of justice, called to action every day in the modern American labor and delivery unit, clashes with another, quintessential American value—respect for personal freedom.

And so, the best course of action is not always clear. We’re still working on it.

References

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Buried in the “et al” . . .
. . . better than the “not at all”? I made a contribution, but got no attribution. I listened to the presentation, . . . and there was no hesitation, to take all the credit and the fame; I never even heard my name. Life is not always fair, a truth I must humbly bear, as pride goes before a fall, . . . buried in the “et al.”

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Therese S. Woodring

Therese Woodring is a medical student, Class of 2019, at the University of Illinois College of Medicine at Peoria.

When I first saw your hand, I was terrified. It caught me by surprise—a week, maybe two, after our first cuts into the confined field of the thorax. I was just gaining familiarity with the textures, smells, and mechanical forces of cadaver dissection.

Your hand slipped out from under the sheet.

My first thought was that you were reaching out to me. It is a universal human gesture—one person moving his hand toward
another, conveying intentions, invitations, directions, pleas. We see it as communication before we even have a chance to ascribe conscious meaning to it.

So you might understand my fright.

At the time, any humanness seemed incompatible with what we were doing. We had committed part of our first year of medical school to the piecemeal, often inept, disassembly of your body. I had prepared for dissection by deliberately separating the person who you were from the body I was picking apart. There was personhood, soul, and human being—and then there was cadaver. I could cut apart the cadaver, apply this significant and irreversible force, only because it was so far removed from the person you were, and therefore from any true violence.

But then, your reaching out to me—your hand inevitably coming my way, with all the humanness that it could still carry. On what grounds was I making this convenient distinction between your humanness and your body, deciding that your specimen of anatomy came to me cleansed of lingering personhood, somehow washed out in the chemistry of embalming? Wasn't it facile—if not overtly self-serving—to resolve my hesitation to cut into you with some sort of binary between living human and dead matter? Your body, after death, could still emanate humanness.

Humanness is inscribed on the living body. I have scars that capture adventures, and mistakes, and places, and times. My insides bear marks too—like the souvenirs of that fateful spring when my brother and I both got tonsillectomies. I have also learned that my body contains the accumulated humanness of my ancestors. Of other people long gone. I will never forget when I was with my Tante Hannerl—a beautiful, witty Bavarian woman who 50 years ago took care of her best friend as she was dying of cancer. She stopped me, put her time-worn hand on mine, and told me that my smile reminded her of my grandmother, the woman whose name I carry. I had never met my grandmother, but she was there, again, in me, next to her best friend, my Tante. Perhaps the humanness of many people can inhabit a single body.

Undeniably, much of that embodied humanness remains after death. Scars don’t disappear. Staples from old surgeries stick around.

You are missing part of your finger, testament to some experience you had that I will never know. Did you have grandkids who marveled openly at your hand, so different from all other hands they’d seen? Did you have a spouse who, through years of partnership, ceased to even notice your missing part, in the same way that your familiarity with your own body allowed you sometimes to forget?

Your humanness was before me each week, and once I realized it, I clung to it. I held your hand when we sawed, and ripped, and blindly poked around. Even after we’d thoroughly dissected your arms, I grasped your bones, and tendons, and slips of muscle while the bone saws squealed through crania all around us. I wanted to communicate back to you, to tell you that you would be all right. Because I held your hand, you would be all right.

And, of course, you would! It was I who needed reassurance. It was so clear that I was the one being held, by your hand, by your very intensely present humanness, the meaning of your gift, telling me that I would be all right, that I could find strength to do things that terrified me. Because you held my hand, I would be all right.

And you were right. Connected to you, I made it, though feeling scared, overwhelmed, and paralyzed by the new and intimate relationship I was gaining with the human form. I was all right.

Scared, overwhelmed, paralyzed. I know I will have these feelings again throughout my career as a doctor. That is certain. I will face emotional challenges I can’t even anticipate—just as I could not have anticipated those of the dissection experience. Just as you gave me strength in the lab, you will give me strength in these future moments—in the memory of holding your hand, and the message that you communicated to me in your donation.

You believed I could do something good for other people. You asked me to take your body to learn as much as I could, so that I could someday take care of other bodies, other human beings.

You may no longer live, but your humanness still reaches me. And I am reaching back. I will never cease to hold onto it.

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Photo by Apic/Getty Images
Lord Byron’s lameness

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George Gordon Byron, sixth Baron Byron, (1788–1824), commonly known as Lord Byron, wrote some of the most beautiful poetry of the Romantic period, including “Childe Harold’s Pilgrimage,” “Manfred,” “Don Juan,” and short lyrics such as “She Walks in Beauty,” and “So, We’ll Go No More A Roving.”

However, many don’t know that Byron had a physical disability. Dr. Julius Millingen (1800–1878), physician and early biographer, wrote, “The lameness...was a source of actual misery to him; and it was curious to notice with how much coquetry he endeavored, by a thousand petty tricks, to conceal from strangers this unfortunate malformation.”

Byron was plagued by a feeling of entrapment in a deformed and degenerating body that went beyond the typical grappling with human mortality.

Byron’s gait abnormality

By all accounts, Byron had a limp, or in the popular jargon of the time, he was lame. Edward Trelawny, a close friend of Byron’s described his walking as a “halting gait.”

Byron had a curious gliding or slithering movement. From an orthopaedic perspective, a halting or slithering gait implies that he walked with an asymmetric cadence, and a shortened stance phase on the involved leg.

Despite the lameness, his functional disability was minimal as he could swim, fence, box, and ride with consummate skill. The poet Thomas Moore noted, “The
Lord Byron's lameness

lameness of his right foot, though an obstacle to grace, but little impeded the activity of his movements.  

Various diagnoses have been suggested as the cause of Byron's lameness including clubfoot, idiopathic dysplasia, poliomyelitis, and cerebral palsy (Little's disease).  

Dr. Denis Browne (1892–1967), an Australian-born, British surgeon, summarized the literature on Byron's lameness as a situation where, "so much ink has been spilt, so many inaccurate statements confidently made, and a considerable number of lies told." A recent Google search for "lord byron lameness" turned up 35,200 hits in 0.50 seconds.

Which foot was it?  

However, Byron was extremely sensitive about his deformity and took great pains to hide his legs in public, and in private.  

The British biographer Fiona MacCarthy wrote about, "the degree to which he created and then manipulated his visual image, attempting to control the reproduction of his portraits."  

Trelawny wrote, "His trousers were very large below the knee and strapped down so as to cover his feet."  

Even during his last illness, Byron refused to let the doctors apply blisters to his legs (the standard of care in 1824), telling his doctor, Millingen, that as long as he lived, he would not allow anyone to see his lame foot.  

The more famous portraits of Byron by Richard Westall 1813, Thomas Phillips 1814, James Holmes 1815, and GH Harlow 1815 show only the poet’s head and trunk. In an early full-length portrait by George Sanders (1807), Byron wears voluminous sailor’s trousers, and the darkly painted lower extremities are indistinct and blend into the background.  

A portrait by Joseph Denis Odevaere (1826) of Byron on his deathbed shows the right lower extremity completely covered by a shroud. However, the portrait by Compt d’Orsay (1823), and those by C. Stanfield and William Parry, show a short lower extremity with the foot in equinus.  

The accounts of his contemporaries conflict not only on the nature of Byron’s deformity, but also on which side of his body was afflicted. However, there is credible evidence that the condition involved his right foot, and that it was congenital.  

John Hunter (1728–1793), one of the most distinguished surgeons of the time, examined Byron as an infant and diagnosed a clubfoot.  

In a February 16, 1791 letter, Byron’s father, John “Mad Jack” Byron (1756–1791), wrote that he was happy to hear his son was doing well, but thought his walking would be impossible because the infant was club-footed. And, in a May 8, 1791 letter to her sister-in-law, Byron’s mother, Catherine Gordon (1770–1811), states, “Georges foot turns
inwards, and it is the right foot; he walks quite on the side of his foot." 12

Elizabeth Pigot, Byron's friend from Southwell; Agusta Leigh, his half-sister and lover; and the Nottinghamshire cobbler who made special shoes for the young Byron, all agreed that the deformity was on the right leg. 12

Dr. Matthew Baillie who examined Byron's foot in 1799, said, "The right foot was inverted and contracted as it were in a heap and of course did not go fully and flatly to the ground. 9

And, Moore wrote, "one of his feet was twisted out of its natural position, and this defect (chiefly from the contrivances employed to remedy it) was a source of much pain and inconvenience to him during his early years. The expedients used...were adopted by advice, and under the direction, of the celebrated John Hunter." 6

Treatment consisted of painful forced manipulations, and clunky leather boots with leg irons constructed by trussmakers.

The journal Lancet published a report in 1828 by a Mr. T. Sheldrake who claimed to have examined Byron when the poet was 20 years old. 13 Sheldrake, a brace maker and bone-setter, said that Byron's leg was much smaller, and he stood on the outside of his foot. The article includes two sketches of a foot, allegedly from a cast of Byron's foot. The sketches depict a clubfoot of the left foot, not the right foot. However, as Charles Cameron, MD, noted in a 1923 article, Sheldrake's woodcut drawings were identical to those showing a clubfoot in every textbook of the time. 10

However, D. Browne, in his 1960 Proceedings of the Royal Society of Medicine article, pointed out that the boots were constructed not to correct the deformity but to disguise it, specifically with padding to augment a thin calf and a wedge to compensate for the abnormal foot, and that the boots in the photographs are actually inner boots, devoid of heels and toe-caps and are meant to be worn under the socks and with regular shoes. 8 The poet could wear normal shoes on top of the compensatory boot.
In his 1858 Recollections of the Last Days of Shelley and Byron, Trelawny claimed to have secretly uncovered the legs of the dead poet when alone with the body. “Both his feet were clubbed, and his legs withered to the knee the form and features of an Apollo, with the feet and legs of a sylvan satyr.” However, when Trelawny republished his book in 1878, he changed the text to read, “It was caused by the contraction of the back sinews, which the doctors call ‘Tendon Achilles’ that prevented his heels resting on the ground and compelled him to walk on the fore part of his feet. Except for this defect the feet were perfect.”

Canon T.G. Barber the vicar at Hucknall Parish Church where Byron was placed to rest on July 16, 1824, opened Byron’s vault June 15, 1938, to take stock of what lie in it. The Vicar wrote, “The feet and ankles were uncovered and I was able to establish the fact that the lameness had been of his right foot.”

The diagnosis of cerebral palsy (Little’s disease) and poliomyelitis are unlikely, as in cerebral palsy, the feet are normal at birth, and spasticity causes progressive deformity with growth. In polio, the extremities are normal at birth, become flaccid after the infection, and gradually deform as the child grows. Although dysplasia is still a possibility, it is an extremely rare condition.

Clubfoot is one of the most common congenital malformations, occurring in one out of every 1,000 births. It is more common in boys, and more frequently unilateral. The calf is about 10 percent smaller than the uninvolved side, the leg is shorter, the foot is inverted and in equinus, and walking occurs on the lateral aspect of the foot. All findings consistent with Byron’s condition.

Byron’s poetry and personality

Byron’s clubfoot tormented him, both in the degree of physical pain he experienced and in the mental anguish it caused.

His father died in 1791, when he was three-years-old, and his mother was impulsive, had a violent temper, and was prone to frequent outbursts of anger.

A February 26, 1898 New York Times article, “Byron as a Boy. His Mother’s Influence – His School Days and Mary Chaworth,” noted that he owed to his mother, “besides his constitutional tendency to fatness, his irritability, jealousy, and caprice…personal vanity, his melancholy, his superstition.” The article also described how he had been mistreated by a servant who, “was perpetually beating him.”

Byron’s prospects improved at the age of 10 with the death of his great uncle, William Lord Byron. He inherited the title along with the estate, Newstead Abby in Nottinghamshire, placing him in the aristocracy.

In 1805, he went to Cambridge with, “too much money, an idle, dissolute life and the temptations that beset a lad of seventeen.” His title and guaranteed income permitted him to escape the constraints of his early life and become Lord Byron, the poet.
He wrote in the following poem January 22, 1824 on his 36th birthday:

If thou regrett’st thy youth, why live?
   The land of honourable death
Is here: - up to the field, and give
   Away thy breath

Byron was haunted by anxiety and insomnia which is reflected in the wanderings of “Manfred:”

The lamp must be replenish’d, but even then
   It will not burn so long as I must watch:
My slumbers – if I slumber – are not sleep,
   But a continuance of enduring thought.

According to Marguerite, Countess of Blessington, who in 1834 published her Conversations with Lord Byron, Byron confessed, “My poor mother, and after her my schoolfellows, by their taunts, led me to consider my lameness as the greatest misfortune, and I have never been able to conquer this feeling….It requires great natural goodness of disposition, as well as reflection, to conquer the corroding bitterness that deformity engenders in the mind.”

Biographers have attributed his childhood as an explanation for his psychosexual “polymorphperversity.”

Like his poetic character Don Juan, Byron searched in vain to find sexual gratification with multiple partners, irrespective of their sex or age. Rollin notes that he had homosexual lovers at Harrow, Cambridge, and later in Athens. He used, then abused, his wife, Anabella Milbanke, and his lover, Lady Caroline Lamb. He had affairs with women of all social classes, but seemed to be most happy with women who combined the attributes of a mistress and a mother, such as Lady Oxford, almost 20 years his senior, and Lady Melbourne, almost 40 years his senior.

In his introduction to the Oxford World’s Classics edition of Byron’s works McGann notes that Byron writes himself into his poetry, and that all his heroes are surrogates of himself.

Many of his heroes lived under a curse such as Cain in “Manfred:”

   And a magic voice and verse
Hath baptized thee with a curse;
   And a spirit of the air
Hath begirt thee with a snare;
In the wind there is a voice
Shall forbid thee to rejoice;

And to thee shall Night deny
All the quiet of her sky;
And the day shall have a sun,
Which shall make thee wish it done.

Byron’s posthumously published poem, “The Deformed Transformed” (1824), offers a view into his thoughts and feelings concerning his disability. Arnold, the hero, is deformed and unloved because of a hunchback and a lame cloven foot. He makes a deal with a stranger (Lucifer disguised as Caesar) to swap his deformed body for a perfect body like that of Achilles. Arnold’s mother, Bertha, screams at him as did Byron’s own mother:

Bertha.   Out, hunchback!
Arnold.   I was born so, mother!
Bertha.   Out
   Thou incubus! Thou nightmare!
   Of seven sons,
   The sole abortion!
Arnold.   Would that I had been so,
   And never seen the light!
Bertha.   I would so, too!

Bertha’s rejection of Arnold becomes vituperative when in line 24 she says:

   Call me not
   Mother; for if I brought thee forth, it was
As foolish hens at times hatch vipers, by
   Sitting upon strange eggs. Out, urchin, out!

Arnold goes to a spring and observes his reflection in the water. He is revolted by what he sees and expresses the self-hate generated by his deformity (line 46):

   They are right; and Nature’s mirror shows me,
What she hath made me. I will not look on it
Again, and scarce dare think on’t. Hideous wretch
That I am!

Arnold is understandably suspicious of the opportunity to swap his body for one of beauty. He reflects on how a physical deformity can motivate the deformed to achieve greatness, like Tamburlaine the Great, who had a limp (line 316):

   There is
   A spur in its halt movements, to become
Lord Byron's lameness

All that the others cannot, in such things
As still are free to both, to compensate
For stepdame Nature's avarice at first.

Arnold considers the situation, but the burden of the deformity and the allure of the perfect body are too much to resist. He capitulates and accepts the swap (line 327):

Had no power presented me
The possibility of change, I would
Have done the best which spirit may to make
Its way with all Deformity's dull, deadly,
Discouraging weight upon me, like a mountain,
In feeling, on my heart as on my shoulders-
A hateful and unsightly molehill to
The eyes of happier men.

Cameron, commenting on Byron's clubfoot, pointed out, “To his lameness Byron was exquisitely sensitive; he never for a moment forgot it, and it poisoned his whole life.”

Body dissatisfaction has been shown to be associated with a range of physical and psychological health problems such as exercise dependence and eating disorders, both of which Byron exhibited. Byron's drive to excel physically (swimming the Hellspont), his extreme dieting, alcohol abuse, and womanizing, are considered compensation for his disability.

The opening lines of “So We'll Go No More a Roving” reflect his loneliness and the sadness that came from his inability to form a lasting, loving relationship:

So we’ll go no more a roving
So late into the night,
Though the heart be still as loving,
And the moon be still as bright.

Rollin noted that, “If Byron had not existed, it would have been impossible to invent him: to have created a character in fiction to match Byron would have been to stretch credulity to absurdity.”

References

Acknowledgements
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**Medicine in the movies**

**Star-crossed: Love, death, and adolescence in two films**

Therese (Tess) Jones, PhD, Movie Review Editor

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**The Fault in Our Stars**

Starring Shailene Woodley, Ansel Elgort, Laura Dern, Sam Trammel, Willem Dafoe.


Rated PG 13. Running time 133 minutes.

**Me and Earl and the Dying Girl**

Starring Thomas Mann, Olivia Cooke, RJ Cyler, Connie Britton, Nick Offerman, Molly Shannon.


Rated PG 13. Running time 106 minutes.

O, here/ Will I set up my everlasting rest,/ And shake the yoke of inauspicious stars/From this world-wearied flesh.

Eyes, look your last!/Arms, take your last embrace! and, lips, O you/The doors of breath, seal with a righteous kiss.

—William Shakespeare, Romeo and Juliet

Is there any subject so exquisitely wonderful and terrible than the complications of young love, especially when that love is threatened by feuding families, rival gangs or serious illness?

Every year, English teachers count on their students’ fascination with, and empathy for, ill-fated romance by assigning Romeo and Juliet to 93 percent of all ninth-graders in American high schools.1 In addition, Hollywood continues to build its catalogue of teen cancer dramas, most notably in the last decade with titles such as My Life Without Me (2003); Keith (2008); Restless (2011); and Now Is Good (2014).

Two recent films also take on the agony and ecstasy of love, death and adolescence: The Fault in Our Stars and Me and Earl and the Dying Girl. Each features teen characters either living with, or bearing witness to, terminal disease. Each attempts to transcend—even mock—the tried-and-true conventions and self-indulgent sentimentality of the genre. However, one is much more successful in moving beyond the formulaic tear-jerker and giving us an illness narrative that is neither too mawkish nor platitudinous.

**The Fault in Our Stars**

Hazel Grace Lancaster (Shailene Woodley) is a 16-year-old cancer patient who meets and falls in love with Augustus “Gus” Waters (Ansel Elgort), a similarly stricken teen. They instantly connect at a youth support group that Hazel reluctantly attends to placate her concerned mother (Laura Dern). The film is based on the bestselling novel of the same name by John Green.

Since her initial diagnosis of thyroid cancer at age 13, followed by metastases to the lungs, Hazel has had her share of near misses—she nearly died from pneumonia—to near miracles, such as a last-ditch experimental drug that is actually working.

With tubes in her nose and oxygen tank in tow, she now faces reality with an acerbic wit and a mature resolve to avoid any pretense or pity: “I’m a grenade,” she warns Gus, as he makes a move towards intimacy. However, Gus is both irresistible and tenacious, wooing Hazel with his own brand of self-deprecating humor (he has lost a leg to osteosarcoma), and charming originality.
The critical response to the film has largely focused on its tone, with many reviewers agreeing that its gallows humor, lively dialogue, and authentic performances save it from becoming teen-flick maudlin.

At one point, Hazel's father (Sam Trammel) proudly notes that the Lancasters, “are not sentimental people,” a statement that might be a rallying cry for what the film is aspiring not to be.

The film also cannily thwarts any temptation towards cynicism in viewers with the introduction of a reclusive and alcoholic author, Peter Van Houten (Willem Dafoe), whose one book is Hazel's all-time favorite novel, An Imperial Affliction. The novel not only provides a literary analogue to the film—it is the author's story of his own young daughter's illness and subsequent death from cancer—but also serves as somewhat clumsy plot device.

Meeting Van Houten is Hazel's fondest wish, and when Gus is able to arrange a visit to Amsterdam where the author lives, she comes prepared with a list of questions about the narrative, which mysteriously ends in mid-sentence. Van Houten's lack of compassion for her condition—“You are a failed experiment in mutation,” he sneers—as well as his contempt for her quest to find meaning, crystallizes a major theme of the film: because there just is no making sense of such an affliction in someone so young, life—including love and pain—can and must be experienced even for a fleeting moment. What Hazel will later call a “little infinity.”

If viewers are still not getting the message, the young couple's subsequent visit to Anne Frank's attic and their first kiss upon hearing words from her diary—“Think of all the beauty in everything around you, and be happy”—will put a lump in their throats and bring tears to their eyes.

It’s the scene that divides critics between those who applaud the romantic sweetness of the film, acknowledging its success in making viewers laugh and cry, with those who bristle at its strict adherence to narrative convention and emotional manipulation. The film, however, is more sophisticated than that, as it subtly calls attention to the challenges of telling the story without reverting to formula, or provoking sobs.

At the beginning of the film, Hazel herself dismisses the sentimentality of what she calls the “cancer genre,” but by the end, she recognizes that sometimes banality is all we have left.

**Me and Earl and the Dying Girl**

Written by Jesse Andrews and based on his novel of the same name, Me and Earl and the Dying Girl premiered at the 2015 Sundance Film Festival and won its Grand Jury Prize. The critical response was overwhelmingly positive with praise for the performances of the young actors playing Greg (Thomas Mann), Earl (RJ Cyler) and Rachel (Olivia Cooke), the dying girl.

Similar to The Fault in Our Stars, a well-intentioned mother (Connie Britton) is the catalyst for a relationship between her son, Greg, and classmate, Rachel, who has been recently diagnosed with leukemia. Greg eschews any and all emotional and social connections, even describing Earl whom he has known since elementary school as a “co-worker.”

Greg's goal as he ends his high-school experience is to continue a policy of isolationism in which he maintains diplomatic ties with all cliques but has no real alliances with anyone. Thus, it is especially awkward when Greg is forced by his mother to visit Rachel because she has cancer (she is similarly appalled by his obligatory pity call), but it becomes even more discomfiting for him when they develop a genuine friendship.
Through voice-over narration, Greg can both openly express his insecurities and slyly undercut expectations that the plot will take a turn towards the conventional teen romance. More than once, he explicitly warns viewers that he and Rachel will not lock eyes, declare their love and fall into each other’s arms.

Greg has been able to foster and maintain his distance, if not indifference, from others because he is a filmmaker—his default position is behind a camera, peering at life and arranging its props and characters. He and Earl have an entire oeuvre of short parodies such as “Pooping Tom,” “A Sockwork Orange,” and “Senior Citizen Kane.” When Greg finally finds the courage to show them to Rachel, she appreciates them, taking pleasure and finding respite in their goofy absurdity from the all-too-real, all-too-debilitating treatment for cancer. In fact, it is Rachel’s own subtle quirkiness and discriminating eye that disallow any aura of tragic romanticism to diminish the character.

Greg wrestles with the almost impossible challenge of producing a film about Rachel’s illness: “I have no idea how to tell the story. I don’t even know how to start it.” He and Earl record and reject every cliche (“Stay strong, Rachel!”) and convention of the cancer script. The film that Greg ultimately makes for Rachel is more akin to Ingmar Bergman’s experimental masterpiece, Cries and Whispers, than the quintessential 1970 tear-jerker, Love Story (both of which feature beautiful females dying from cancer). After years of making silly jokes, Greg creates something authentic, if incomplete.

Both movies recall Lorrie Moore’s darkly funny story, People Like That Are the Only People Here: Canonical Babbling in Peed Onk. When the narrator—a novelist—learns that her child has a potentially fatal malignancy, she discovers that it is impossible to write the experience, that life is simply unsayable. Me and Earl and the Dying Girl is more successful than The Fault in Our Stars in its attempt to say the unsayable without resorting to melodrama, but both films call attention to the centrality of storytelling in response to serious illness and the human impulse to create coherence and make meaning in situations that are simply incomprehensible.

References

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

When Breath Becomes Air
Paul Kalanithi, MD (AΩA, Yale University School of Medicine, 2007)
Forward by Abraham Verghese, MD (AΩA, James H. Quillen College of Medicine of East Tennessee State University, 1989, Faculty)
Epilogue by Lucy Kalanithi, MD (AΩA, Yale University School of Medicine, 2007)
Random House, New York, 2016, 228 pages
Reviewed by David A. Bennahum, MD (AΩA, University of New Mexico, 1984, Faculty)

The author, Paul Kalanithi, MD, wrote an extraordinary memoir of his life prior to his death of lung cancer at the age of 35 in 2015. This is a beautiful, difficult, and at times painful, book that can bring the reader to tears, especially if that reader is a physician. A resident at Stanford Medical Center, he begins with his discovery of his imminent mortality.

I flipped through the CT scan images, the diagnosis obvious: the lungs were matted with innumerable tumors, the spine deformed, a full lobe of the liver obliterated. Cancer widely disseminated. I was a neurosurgical resident entering my final year of training. Over the last six years, I’d examined scores of such scans, on the off chance that some procedure might benefit the patient. But this scan was different: it was my own. p3

Growing up in Kingman, Arizona, a way station for those driving west on U.S. Route 40 to Nevada and California, a city that his East Indian-born parents—his father Christian and his mother Hindu—selected so that his father could practice cardiology where he would be truly needed, Kalanithi and his brothers had a very western American childhood.
From my desert plateau, I could see our house, just beyond the city limits, at the base of the Cerbat Mountains, amid red-rock desert speckled with mesquite, tumbleweeds, and paddled-shaped cacti. Out here, dust devils swirled up from nothing, blurring your vision, then disappeared. Spaces stretched on, then fell away into the distance...My friends and I loved the freedom, too, and we spent our afternoons exploring, walking, scavenging for bones and rare desert creeks.... I found the wild, windy desert alien and alluring.

An exceptional student, Kalanithi was accepted to Stanford University where he studied literature and philosophy, and some biology, unable to resolve an internal conflict over the call of medicine that challenged his love of literature. He went on for a Master’s degree in English Literature writing a thesis on Walt Whitman, but even then was drawn to science.

But I couldn’t quite let go of the question: Where did biology, morality, literature, and philosophy intersect? Walking home from a football game one afternoon, the autumn breeze blowing, I let my mind wander. Augustine's voice in the garden commanded, “Take up and read,” but the voice I heard commanded the opposite: “Set aside the books and practice medicine.” Suddenly, it all seemed obvious. Although—or perhaps because—my father, my uncle, and my elder brother were all doctors, medicine had never occurred to me as a serious possibility. But hadn’t Whitman himself written that only the physician could truly understand “the Physiological-Spiritual Man”?

Kalanithi then consulted a premedical advisor at Stanford, organized his studies to complete the work in 18 months, and then finding that he had a year before he could enter medical school, went on to Cambridge University for a Master’s degree in the History and Philosophy of Science.

...I found myself increasingly often arguing that direct experience of life-and-death questions was essential to generating substantial moral opinions about them. Words began to feel as weightless as the breath that carried them. Stepping back, I realized that I was merely confirming what I already knew: I wanted that direct experience. It was only in practicing medicine that I could pursue a serious biological philosophy. Moral speculation was puny compared to moral action. I finished my degree and headed back to the States. I was going to Yale for medical school.

He then goes on to wonderful descriptions of the anatomy lab, his reactions to the required dissection of a cadaver, the initial shock before death, and the gradual necessary desensitization to, and objectification of, the dead that medical students experience. But, he also learned an important lesson from one professor.

Early on, when I made a long, quick cut through my donor’s diaphragm in order to ease finding the splenic artery, our proctor was both livid and horrified. Not because I had destroyed an important structure or misunderstood a key concept or ruined a future dissection but because I had seemed so cavalier about it. The look on his face, his inability to vocalize his sadness, taught me more about medicine than any lecture I would ever attend.

Paul goes on to describe his years in medical school and how he discovers his pride in neurosurgery. He writes that, “While all doctors treat diseases, neurosurgeons work in the crucible of identity: every operation on the brain is, by necessity, a manipulation of the substance of our selves, and every conversation with a patient undergoing brain surgery cannot help but confront this fact.”

After graduating from Yale he marries a classmate, Lucy, and they head back to California where Paul will intern at Stanford University Medical Center, and Lucy at the University of California San Francisco Medical Center; he in neurosurgery and she in internal medicine.

He describes the extraordinary workload that neurosurgery demands during the six years of training, and one year committed to research that Stanford requires. Not only is too much asked of the resident, but also too much of friendship and marriage, something that will be all too familiar to most physicians who trained in the American system.

While very sympathetic and even admiring of Kalanithi, I cannot see that the knowledge, experience, and excellence in neurosurgery, and all of medicine to which he aspired, is really any less than that of the best physicians in other disciplines. He writes, “Perhaps, unique in medicine, the ethos of neurosurgery—of excellence in all things—maintains that excellence in neurosurgery is not enough. In order to carry the field, neurosurgeons must venture forth...
and excel in other fields as well... The most rigorous and prestigious path is that of the neurosurgeon—neuroscientist."

Perhaps the image of a knight “carrying the field” is harmful to the education and training of young doctors in whatever specialty they have chosen. Certainly 100-hour work weeks for six years is harmful. Indeed, in the next to last year of his training Paul and Lucy went through a crisis in their marriage, something that many physicians experience. Fortunately, they found their way back to each other, only to discover the catastrophe of his cancer.

But what I found most wonderful about this book is how Kalanithi meditates as he moves through his training.

I had started in this career, in part, to pursue death: to grasp it, uncloak it, and see it eye-to-eye, unblinking. Neurosurgery attracted me as much for its intertwining of brain and consciousness as for its intertwining of life and death. I had thought that a life spent in the space between the two would grant me not merely a stage for compassionate action but an elevation of my own being: getting as far away from petty materialism, from self-important trivia, getting right there, to the heart of the matter, to truly life-and-death decisions and struggles ... and surely a kind of transcendence would be found there? p81

Sadly, in residency he discovers that physicians become inured to suffering. It cannot be otherwise if they are to survive to serve the next patient. He watches fellow residents who quit the field, and ponders how he can retain his compassion. He finds solace in the experiences of William Carlos Williams and Richard Selzer. He confesses “Amid the tragedies and failures, I feared I was losing sight of the singular importance of human relationships, not between patients and their families but between doctor and patient.” p86

In the latter part of the book, Paul tells how he and Lucy discovered the cancer, their efforts to find treatment, their marvelous oncologist, Emma, and the decision to have a baby. "I knew a child would bring joy to the whole family, and I couldn't bear to picture Lucy husbandless and childless after I died, but I was adamant that the decision ultimately be hers...” p143

The book goes on to tell of treatment and recovery, and then the final relapse. The baby is born and there is a joyful
photograph of Paul, Lucy and the baby, Kady. A lovely epilogue written by Lucy after Paul’s death on March 9, 2015, concludes the book.

Even now, after a second reading and writing this review, I am brought to tears for this extraordinary man, whose spirit touches the reader so deeply.

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By the Bedside of the Patient

Nortin M. Hadler, MD (ΑΩΑ, Harvard Medical School, 1968)
The University of North Carolina Press, 2016, 224 pages

Reviewed by Norman H. Edelman, MD (ΑΩΑ, New York University, 1961)

During a brief break in the action in a fellows’ sub-specialty clinic, which I supervise, I was trying to think of a metaphor which would reflect the essence of this book when a staff member walked in to inform us that “the suits are here.”

Indeed, there were about six unfamiliar people in business attire busily taking notes. They were not an administrative or regulatory team, as we have increasingly come to expect, but a group of people from a well-known clinic seeking to franchise their expertise and reputation in the care of a common chronic illness. I think that in several ways this reflects the source of Dr. Hadler’s unhappiness about the state of our medical care enterprise. He is mostly concerned about physicians’ loss of control to the “suits”—administrators, corporate and government payers, regulators, consolidating and marketing entrepreneurs.

In this regard, the book is similar to others which bemoan how physicians have lost the rather extensive and cherished autonomy that has been built since Hippocrates’ time. And, like the others, loss of autonomy per se is not recognized as the central cause of the dysphoria. Instead, such a loss is claimed to have seriously impaired the doctor-patient relationship to the detriment of care.

A short beginning section describes Hadler’s early training and career progress to become a “master clinician,” an entity which he believes was central to the success of our traditional system, but is becoming extinct. Those who have trained in the same or similar institutions, and who are of a certain age, will likely enjoy the nostalgia.

The bulk of the book is devoted to angry attacks on specific examples of relatively recent changes which Hadler believes are destroying the profession, with the battle cry, “I am a loose-cannon internist.” They include the success of the National Institutes of Health extramural grants program which favored research-oriented faculty and made clinical teaching a step-child; the misinterpretation of the cause of Libby Zion’s death leading to drastic changes in resident work hours of unproven value; the Institute of Medicine’s gross overstatement of the significance of hospital deaths due to medical errors, as in most instances the patients were fated to die anyway; the electronic health record, sold as a way to improve patient care but really designed to facilitate administration; and overly restrictive Medicare rules for attending physicians in teaching settings.

Handler also cites two examples that are less well known but important. One is the pervasive conflicts of interest inherent in the National Quality Forum, the entity which serves as a clearing house for quality measures proposed by most entities, including Medicare.

The other is the unbalanced composition of the Resource Utilization Committee, a committee of selected professional societies convened by the American Medical Association, that advises Medicare on the distribution of RVUs (relative value units) between specialties. This lack of balance favors the interventional specialties thus perpetuating the large gap in reimbursement between these and the cognitive specialties. The irony here is that this committee is not a product of the “suits” but of our own professional organizations.

The last section is devoted to two proposals for changing the financing of medical care. One is a form of prepaid health insurance with a twist allowing for a separate pool of funds for services that are not evidence-based but in demand by patients.

The other is an extension of the workers’ compensation system with which Dr. Hadler has had much experience.
He proposes a Clinical Effectiveness Panel that has the responsibility of determining which services should be available under this system. The panel is to be composed of nine members, a majority of whom are physicians, whose expertise and integrity are so well recognized as to eliminate the possibility that their judgments could be influenced by political or other conflicts of interest—just like the Supreme Court.

In closing, I must note that I occasionally found Dr. Hadler’s tone irritating. He relies on citing his credentials as support for a point of view a bit too often, and in his diatribe against a popular electronic health record he goes a step too far by including a personal attack on the developer.

I don’t know how many readers of *The Pharos* will find this book to be worth their time, but it may enlighten non-physicians who simply cannot understand why physicians of a certain age are so angry at their profession that they advise their progeny to stay away from it.

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**Matthias Buchinger: The Greatest German Living**

Ricky Jay
Siglio, Los Angeles, 2016, 160 pages

**Reviewed by Gerald Weissmann, MD (AΩA, New York University, 1965, Alumnus)**

Ricky Jay describes his stylish monograph as “Peregrinations in Search of the ‘Little Man of Nuremberg.’” Jay’s peregrinations form a fitting tribute to his hero, Matthias Buchinger (1674–1739), a “29 inch-tall phocomelic overachiever.” The richly illustrated story of that quest includes graphic curiosities by and about this overachiever. It’s a handsome, enchanting volume replete with portraits, broadsides, family trees, and coats of arms that portray the feats of skill at magic, musketry, skittles, and musical performance, all bearing the telltale signature of “Matthias Buchinger born without hands or feet.”

Ricky Jay has the credentials to make Buchinger matter as some consider Jay today’s greatest sleight-of-hand artist as well as a scholar, historian, and collector of curiosities.¹

**Magic and magnification**

Jay has written about Buchinger before, as one in a gallery of other interesting historical characters.²³ In this volume, Jay addresses Buchinger’s mastery of micrography—the art of writing texts almost invisible to the naked eye.

Enlarged images show how Buchinger cunningly wove miniature texts into the crannies of calendars, portraits, and coats of arms. In Buchinger’s posthumous portrait of Queen Anne (1718), limned in ink on vellum, the curls of the queen’s hair are formed by micrographic letters that spell out three chapters from the *Book of Kings*.

In a stippled engraving from a 1724 self-portrait, Buchinger shows micrographic lettering used to form his florid wig. It spells out seven complete Psalms and the Lord’s Prayer.

Jay tells us that viewers “respond to Buchinger’s micrography as they do to the performance of magic: when they are stunned, or stumped, they seek an explanation.”

**A body maim’d**

Jay was drawn to Buchinger not only for the little man’s skill at micrographics, by also by the story of a fellow conjurer who performed sleight-of-hand without hands.

From his childhood in Bavaria, where he was called a “thimble,” Buchinger became progressively famous in Western Europe as a skilled performer. He was a whiz at card-play, swordplay, and dancing the hornpipe in a Scottish kilt. He entertained audiences at street fairs, manor houses, public inns, and royal seats. He appeared in venues from Leipzig to Dublin, and the Tuileries Palace in Paris to the Court of Saint James in London. A 1726 broadside described him as “The Greatest German Living.” This in the reign of George I, the Hanoverian.

Equally surprising was Buchinger’s private life. He wed four wives, and claimed fatherhood of 14 children.

Readers figuring out how this “body maim’d” became a paterfamilias, will also wonder how Buchinger mastered miniscule calligraphy without the aid of optical gadgets. Jay was also worried, and posed the question to several eminent artists. Their verdict was the use of lenses. Art Spiegelman, Erich Fischl, David Hockney, and Ed
Ruscha surmised that Buchinger used magnifying lenses, possibly fixed to a ring-stand apparatus, not uncommon at the time.

**Phocomelia, thalidomide and retinoids**

Jay pays more than passing attention to Buchinger’s bodily form. Evolution dictates that in phylogeny, fins come before limbs. In phocomelia, limb ontogeny stops cold. Jay quotes 18th century and 19th century authorities who speculated that phocomelia resulted from “maternal imprinting,” then defined as “a traumatic stimulus encountered by any pregnant woman.” Local officials, therefore, banned Buchinger from performing at fairgrounds, worried that women frightened by his appearance might bear children similarly malformed.

Epigenetic effects of thalidomide and retinoids on our inner fish serve as models of what may have happened to the little man from Nuremberg. Recent work on the molecular pharmacology of thalidomide has implicated a metabolite of the drug as a possible culprit, and permitted discovery of how the protein cereblon acts to blunt limb development.

Both before and after thalidomide, another culprit has been implicated in phocomelia—at least in the lab. Following the work of Dr. Dame Honor B. Fell and her students at the Stangeways Research Laboratory in Cambridge, studies of how high doses of vitamin A affect embryonic limb development have moved to the molecular level. Excess vitamin A affects “maternal imprinting.” High-dose retinoids produce changes in stem cell differentiation that dictate how fins become limbs in the course of evolution.

How would hypervitaminosis A account for limbless Buchinger? Prompted by the happily digressive tone of Jay’s book, I’ll make a bold suggestion. I doubt that Buchinger’s mother munched on too many carrots; I’d suggest an overdose of *Gruenkohl*—green kale, cabbage, or kraut. Kale, a staple of the Bavarian diet, has the highest vitamin A content of any food available in Buchinger’s time.

Could a Bavarian mother have been imprinted by an overdose of kraut? That notion seems as improbable as four wives and 14 children fathered by a “Little Man from Nuremberg.”

**References**


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**NeuroTribes: The Legacy of Autism and the Future of Neurodiversity**

Steve Silberman
Avery, New York, 2015, 542 pages

Reviewed by David A. Bennahum, MD (AΩA, University of New Mexico, 1984, Faculty)

This is a remarkable book by a journalist who has done rigorous research and writes with consummate skill to help the reader understand the enigma of the modern epidemic of autism. As the grandfather of a nine-year-old who is on the autism spectrum, I was astonished to find so much information on what Silberman concludes is not a disease but rather a common variant of what human society considers “normal.”

The book begins with a discussion of the great, but most peculiar, 18th century scientist Henry Cavendish, who was the first to measure the density of the Earth. Cavendish had a loving, aristocratic father who...
encouraged his interest in science and left him sufficient means so he could avoid institutionalization and do his experiments in peace.

Partly owing to Cavendish’s great wealth, his preference for solitude was often confused with arrogance, selfishness, or disdain. A fellow scientist once described him as “the coldest and most indifferent of mortals,” while others characterized him as insensitive, blind to the emotions of others, or mean. But he was not a nasty or vindictive man; he simply had no idea how to conduct himself in public. After a conversation with Blagden about the Monday Club, Cavendish explained his behavior by saying that some men lack “certain feelings,” declining to be any more specific than that. In his diary, Blagden sympathetically described his mentor as a man of “no affections” who none the less “always meant well.”²²⁶

Silberman describes a number of scientists whose personalities are similar to that of Cavendish. He follows a historical trail to show how autism was confused with other mental disorders such as schizophrenia in the 20th century.

The brilliant work of pediatrician Hans Asperger at the Heilpadagogik Station at the University of Vienna, is discussed in great detail. Asperger joined a tight-knit staff at the Station that included psychologist Anni Weiss, psychiatrist George Frankl, psychologist Josef Feldner, and Sister Viktoria Zak. In the 1930s, Asperger and his staff examined more than 200 children. "He came to believe that they were representative of a distinct syndrome that was not at all rare but had somehow escaped the notice of his predecessors.”

Asperger’s insight that autism was a common disorder or variant was published in a paper, Autistic Psychopathy in Childhood in German in 1944. However, his findings would remain little known to the psychiatric community until translated in the 1980s by the husband of the British psychiatrist Lorna Wing, who had an autistic child. Wing, like so many parents of autistic children, argued that her child’s disorder was rare, and a continuum or spectrum.

In the United States in the 1930s and 1940s, a Jewish Austrian émigré pediatric psychiatrist Leo Kanner, who joined the faculty of Johns Hopkins University, reported on a small group of children he defined as autistic. Whereas Asperger thought the syndrome of autism to be quite common, Kanner thought it quite rare.

Kanner contributed to the notion that unloving, high achieving, professional parents were often responsible for the psychological disturbance of their children, an idea that was furthered by Bruno Bettelheim at the University of Chicago. Fortunately, as a result of research on twins and families, Kanner realized in 1969 that blaming parents for autism was unsustainable.

Silberman goes into great detail on the struggles of parents to win treatment and schooling for their children. The recognition by the public that autism is a common condition was helped by James Stuart’s role in the 1950 film Harvey, and later by Dustin Hoffman’s 1988 performance with Tom Cruise in Rain Man. Another stimulus to the public’s understanding of autism was the observation by the late Dr. Oliver Sacks in his 1995 book, An Anthropologist on Mars, about a patient who seemed to be autistic.

Silberman gives the example of the 2003 novel by Mark Haddon, The Curious Incident of the Dog in the Night-Time, dramatically presents autism through a single individual, and is now on the stage in New York.

Today, with the help of the Americans with Disabilities Act, autism is recognized as a disability that qualifies children for publicly funded education, physical and occupational therapies, and a number of other support services. However, there is little assistance available once a child turns 18 years of age.

For further reading, a January 25, 2016 article in the New Yorker by Steven Shapin, “Seeing the Spectrum: A new history of autism” reviews a number of new books on autism and provides a primer for what Silberman has so thoroughly researched and explored.

This is a book that opened my eyes, and would be a valuable resource in every physician’s library.

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Letters to the editor

“Time matters in caring for patients: Twenty minutes isn’t enough”

The recent editorial in The Pharos “Time matters in caring for patients” (Spring 2016, pp. 2 –8), a concise summary of the evolution of medical practice compensation, prompted me to consider my own experience with health care, 45 years after graduation from medical school and a career that included practice and managing medical practices.

Blessed with excellent lifelong health, it has only been since retirement that I’ve experienced significant interactions with our health care system as a patient, including a few primary care visits, knee reconstruction following traumatic injury, total hip replacement, cataract extraction, and two colonoscopies.

The dominant impression evoked by my recent experiences with health care is that our system is mostly impersonal. I sat in the waiting room of a large ophthalmologic practice while 15 to 20 patients were called and taken to other rooms in the suite. None of the staff who escorted the patients introduced themselves or explained their roles. None of them smiled, and none of them said where they were leading the patient. One of the staff escorted me to a room in the same impersonal manner, performed an eye exam, and returned me to the waiting room without a single word of explanation about any of it. After watching this process for 90 minutes, I concluded this was not a place I wanted to obtain health care and left without seeing a physician.

An ophthalmologist at another practice described his eye exam while a scribe entered the information into the computer. He spoke so fast that even I, who knew the vocabulary, couldn’t understand what he said. He was in the exam room less than five minutes prior to our next contact in an operating room.

I was required to have a “complete medical exam” in a primary care office prior to my two major orthopedic procedures. Each involved fully-clothed exams, including chest auscultation through undershirt and dress shirt, and abdominal palpation through shirts and trousers. The only history obtained was the form completed in the waiting room. I was left wondering if the physician and physician’s assistant I saw knew how to perform a real physical exam.

As suggested by Dr. Byyny’s editorial, I would be more likely to recognize my car mechanic than the gastroenterologists who had significant responsibility for my health, albeit for short periods of time.

Notably, both of the orthopedic surgeons I saw for major surgery spent enough time with me to explain the procedures, risks, and probable course of rehabilitation. They sought sufficient understanding of my lifestyle to explain and discuss potential outcomes.

One hypothesis for explaining how medicine evolved to be so different from what I learned is that, indeed, “time matters.” It seems likely that most of the behaviors described above are determined by the incentives created by managers of health care, and work to minimize the use of an expensive resource, physician’s time.

Those physicians who still own their own practices shape their daily activities to spend as little time as they reasonably can with each patient. This is understandable considering that Medicare pays physicians $45.63 for a new patient office visit, and other services are compensated similarly. Is it possible today to purchase for $45 anything equivalent to a new patient physician visit for life value?

It is highly unlikely that the evolution described in The Pharos editorial will change directions. Health care already consumes nearly 20 percent of GDP (gross domestic product). Our society cannot spend substantially more on health care.

It seems clear that we as a society have chosen access to expensive new technologies, especially as we approach the end of life, as a higher priority than personal health care.

Rod Lorenz, MD
(AΩA, Vanderbilt University, 1970)
Peoria, Illinois

“Bosch and Bruegel: Disability in sixteenth-century art”

I enjoyed the very interesting and beautifully illustrated article on Bosch and Bruegel by Dr. Rutecki in the Winter 2016 issue of The Pharos (pages 44–54). However, I would like to suggest an alternative ophthalmologic diagnosis for the king with the red cape in Pieter Bruegel the Elder’s The Adoration of the Kings.

Dr. Rutecki attributes the right upper lid drooping or ptosis to a seventh or facial nerve palsy, which is the same diagnosis given in his Reference 5. An acute facial nerve palsy typically would cause a widening of the ocular lid fissure, rather than a ptosis, unless chronic aberrant regeneration of the nerve has occurred. I would rather diagnose a third nerve palsy which would typically cause the severe but not total ptosis seen in this picture. Although it is a stretch, if one looks under the ptotic right upper lid, one can sense that Bruegel has painted the right eye as deviated outward (exotropic), as would be found in a third-nerve palsy, compared to the alignment of the left eye. The ptosis of the left upper lid is consistent with a typical age-related mechanism.
Letters to the editor

In addition to this striking ocular abnormality, inspection of Bruegel’s painting (as viewed on the Internet with magnification) reveals several other persons with ophthalmologic problems. On the far right side of the picture, as Dr. Rutecki has noted, there is a man with exophthalmos, identical to that seen in the *Head of a Mercenary*. In addition, beside him, there is a man wearing spectacles. A commentator states that this may indicate that those around the baby Jesus are blind to the significance of this event. There is a soldier in a brown surcoat and steel helmet who demonstrates marked retraction of the upper eyelids. This could be due to thyroid eye disease though other diagnoses could be possible as well.

Robert M. Feibel, MD
(AΩA, Harvard Medical School, 1969)
St. Louis, Missouri

“Thank you, Dr. Dans”

Thank you for framing what are surely many thank you notes from the many loyal readers of “The physician at the movies.”

In the Spring 2016 issue of *The Pharos* there was a table listing the many giants who had taught and mentored Dr. Dans (page 53). Surely the reason there was no list of those of us who had been taught and mentored by Dr. Dans was that it would have filled the entire issue.

The establishment of the Office of Medical Practice Evaluation at Johns Hopkins School of Medicine represented the first of its kind, and Dr. Dans set the bar for what became health services and outcomes research. Many of us who were asked to direct clinics and clinical divisions under and near the Dome depended on Peter for his expertise and direction.

He recruited many faculty to be small group discussion leaders for the first Johns Hopkins School of Medicine course Ethics and Medical Care, and we all learned, as much from the students as they did from us—all under the steady eye of the course director, Dr. Dans.

With his *The Pharos* reviews and his books, *Doctors in the Movies: Boil the Water and Just Say Aah*, and *Christians in the Movies*, he showed us how humanities could play a role in our lives as physicians.

That his moviegoing companion and dear wife Colette’s sage and piquant comments often found their way into his reviews showed that family, too, could play an important role in our professional thoughts and lives.

Peter’s photographic ode to *Life on the Lower East Side: Photographs By Rebecca Lepkoff, 1937-1950* has a place of pride on my side table at home.

Recently, Peter published books he wrote for his grandchildren, *Perry’s Baltimore Adventure: A Bird’s-Eye View of Charm City*, and *Sergeant Bill and His Horse Bob*. It is a joy to read them to my Baltimore and Boca Raton grandchildren.

The many, many of us who have had the privilege of working with, and learning from, Dr. Peter Dans join *The Pharos* in saying “thank you, Dr. Dans.” Now sit back and enjoy.

Timothy R.B. Johnson, MD
(AΩA, University of Virginia, 1997, alumnus)
Ann Arbor, Michigan

“The significance of the Circle of Tugo”

I enjoyed the piece in the Winter issue of *The Pharos* that included Revere Osler (pages 28–35). On a visit to battlefields in Belgium last September, in the company of a retired Royal Army Medical Corps physician friend, I was able to visit the grave of Edward Revere Osler near Ypres. The British Army military cemeteries are quite a sight. One of the friends accompanying us was the granddaughter of a director of the War Graves Commission.

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(AΩA, Keck School of Medicine of the University of Southern California, 1966)
Mission Viejo, California
A ΩA held its biennial councilor meeting April 4–5 in Burlingame, California. Fifty-four councilors attended, making it the largest ΩA councilor meeting.

The meeting began with Executive Director Richard Byyny, MD, FACP, and Board President Robert Atnip, MD, welcoming the councilors. Dr. Byyny highlighted ΩA’s national priorities, which include making the role of councilor a leadership opportunity; expanding opportunities to elect members; developing a professional social network; and discovering better ways to support the chapters and councilors.

Dr. Atnip shared a moving example of the very real responsibility ΩA members have to be prepared and present when called upon to serve the suffering.

Serving as moderator for the meeting, Lynn Cleary, MD, councilor, State University of New York Upstate Medical University College of Medicine, and chair of the Councilor Task Force took over.

Councilor Task Force members, Dr. Cleary, Sheryl Pfeil, MD, The Ohio State University College of Medicine; Mark Mendelsohn, MD, University of Virginia School of Medicine; Regina Gandour-Edwards, MD, University of California Davis School of Medicine; and Richard Gunderman, MD, Indiana University School of Medicine, worked closely with councilor participants throughout the two-day conference to develop best practices to help guide ΩA’s 129 chapters across the country. (Councilor and task force member Charles Griffith, MD, University of Kentucky School of Medicine, was unable to attend due to inclement weather.)

During the afternoon of the first day, the councilors were broken into five groups that task force members and ΩA staff visited to discuss budget and fundraising; maximizing student engagement; expanding resident membership; banquets and visiting professorships; and the role of the chapter in the medical school.
The second day began with the task force representatives from each of the previous day’s groups sharing a summary of the topics discussed, the group’s experience, and suggested best practices.

AΩΑ staff members Dee Martinez, chief of staff, and Jane Kimball, director, Chapter and Member Services, visited with the councilors to get a better understanding of what the national office is doing well, what it can be doing better, and improvements that can be made to increase efficiency, effectiveness and visibility for the councilors and chapters. Three priorities were identified:

1. Develop a listserv for councilors to ask questions and share best practices.
2. Provide more member information on the AΩΑ website, and aid in finding missing and relocated members.
3. Restructure the AΩΑ Councilor Handbook to be more of a resource guide that includes sample budgets and template letters. Also develop an online library/repository for councilors to share forms, ideas and sample documents.

Retiring Managing Editor of The Pharos Debbie Lancaster was recognized and honored by the councilors for her many years of service to AΩΑ, and her unending support of the chapters, councilors and students.

The meeting concluded with each of the councilors sharing a recent accomplishment at their Chapter.

Many of the councilors commented that they appreciated the opportunity to be with such a diverse and experienced group, and said they would be returning to their institutions full of new ideas and ways to engage their students, deans, and community.

The Councilor Task Force will continue its work of identifying best practices, and will guide the national office staff during the implementation of the three identified priorities.
Excerpt from Dr. Atnip’s opening remarks

Be Worthy to Serve the Suffering

It is far better to think of it as the first day of spring training than the last day of the World Series. As the explorer Sir Frances Drake said in 1578, “There must be a beginning to any great matter, but the continuing unto the end, until it be thoroughly finished, yields the true glory.”

We have not yet achieved true glory. Everyone here knows that. Especially everyone who puts their hands on patients, and vows that we will try to relieve their suffering.

For the last few months, I have been actively treating a patient whom I have known for almost 10 years. Originally, I did a femoral to tibial artery bypass for severe vascular disease and limb-threatening ischemia. He did very well until about six months ago when he came to see me with new problems with the same leg. I began treating him, but it seemed that at every step, things did not go as planned. I could not relieve his pain or treat the condition effectively. He was in and out of my office, and in and out of the hospital. His surgical wound became necrotic and broke down. The pain was incapacitating.

Trying to find answers, I began ordering tests, at first methodically, but finally in desperation. One afternoon, the radiologist called me to say that a CT scan showed that my patient had metastatic cancer. Further workup showed multiple metastases and an unresectable primary lesion, all previously undiagnosed. Other than the notorious failure-to-thrive, my patient had not shown signs or symptoms that would have pointed to this diagnosis.

When I met with him and his family to discuss this shocking development, they were upset but stoic, and he vowed to beat the cancer.

He made it out of the hospital and went to a rehab facility to get stronger so he could begin chemotherapy. Luckily, it was the rehab hospital where I see wound care patients.

On a recent afternoon, his neurotic surgical leg wound eroded into his bypass graft and he began to hemorrhage massively. As I stood there holding pressure on his leg while he lay on his blood-soaked sheets and sobbed, we looked into each other’s eyes. I will not be able to forget the look of sorrow, terror, and hopelessness that I saw on his face, or the look of grief and despair that gripped his wife. He was transferred back to the main hospital, and that evening I amputated his leg above the knee.

Why do I tell this story of failure and misery? Because suffering exists, and even our supreme, well-intended efforts are not always enough to defeat it.

As individuals, and as a profession, we have made unimaginable progress against suffering and disease. It is the best time in history to be a physician. But in a sense, we start over again every day. What succeeded yesterday may be of no avail today.

I ask you to reflect on the motto and mission of AOΑ. I cannot think of a better way to illustrate how important it is for us to have an organization like AOΑ, and to be active in it. To embrace its ideals. To devote ourselves to serving the suffering. To teach our students and residents how to use skill with selflessness and caring. To teach the need for lifelong learning, and the need to pass on what we know to each other and to future generations. To do it all with relentless effort and relentless humility. To single out those who do these things exceptionally well, so we can learn from each other, and pull each other up to higher ground.

It is a monumental and unyielding task, but we are called to do it. It is what we have chosen to do, and therefore we must do—every day—whatever it takes to “Be Worthy to Serve the Suffering.”
University of South Carolina School of Medicine Greenville added as 129th active AΩA Chapter

I had the unique privilege of enjoying the graduating student awards ceremony for our inaugural class. The event was made even more special by our ability to announce our first AΩA members consequent to an undoubtedly expedited approval of our AΩA Chapter. And then, of course, there was my selection for AΩA membership—personally meaningful more than you can imagine.

— Jerry Youkey, MD, Dean

On April 27, the Alpha Omega Alpha Honor Medical Society Board of Directors approved the establishment of the Gamma South Carolina chapter at University of South Carolina Greenville School of Medicine.

The first USC School of Medicine Greenville commencement with AΩA students was held May 5, with the first class of AΩA inductees wearing their green, white, and gold honor cords.

The USC School of Medicine Greenville is a four-year medical program developed as a partnership between the University of South Carolina and the Greenville Hospital System. Since 1991, Greenville Hospital System has provided clinical education to third- and fourth-year medical students of the USC School of Medicine Columbia. In 2009, the decision was made to expand to a four-year medical school. USC School of Medicine Greenville welcomed its charter class of 50 students in 2012. The school received full LCME accreditation on February 23, 2016.

USC School of Medicine Greenville is one of only a few U.S. medical schools to require all of its medical students to receive full EMT certification (200+ hours of training), and spend 12 hours a month serving the community in an EMT capacity. It also fully incorporates wellness and lifestyle medicine, including the importance of physical activity, stress management, and nutrition throughout the curriculum.

After completing the AΩA site visit, Executive Director Richard Byyny, MD, FACP, and AΩA Board Member Alan Robinson, MD, recommended establishment of an AΩA chapter due to extraordinary support from the dean and dean’s staff; a plan to elect students using academic performance preceding selection based primarily on evidence of leadership, volunteerism, highest ethical standards, and professionalism; a guarantee to create a chapter characterized by active commitment to service (not just the honor of being selected); and commitment to engaging faculty, community physicians, residents, and student AΩA members in the chapter’s activities.

The founding dean of USC School of Medicine Greenville is Jerry Youkey, MD (AΩA, University of South Carolina School of Medicine Greenville, 2016, Faculty). The AΩA Councillor is Robert Gates, MD (AΩA, Marshall University School of Medicine, 2000, Resident), and the Secretary Treasurer is Donald W. Wiper III, MD (AΩA, Case Western Reserve University, 1990).

USC School of Medicine Greenville is the ninth AΩA chapter chartered at a new U.S. medical school in the last four years.
The AΩA Pharos Inaugural Moser Award
Casting Light on the Many Paths of Medicine

A writing prize to honor one of the great leaders in American medicine

Alpha Omega Alpha is now accepting original biographical essays for its inaugural $4,500 Moser Award.

The AΩA Moser Award celebrates and honors the life of Dr. Robert H. Moser who enriched the world through a career that spans medical practice, personal achievements, leadership, serving as the editor or medical journals, serving our country in the armed services, and numerous contributions to community.

Submit essays online at http://alphaomegaalpha.org/moser.html.

The deadline for submissions has been extended to September 15, 2016.

For more information, visit http://alphaomegaalpha.org/moser.html, or contact Dee Martinez at (650) 329-0291, or moser@alphaomegaalpha.org.

Be a pioneer like Dr. Moser and submit an original biographical essay on the physician, from any era, that you most admire – a physician for all seasons and a distinguished leader in medicine!
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By artist Jim M’Guinness

Pharos Art Director Jim M’Guinness created A Pictorial History of Medical Care for The Pharos in 1973, when it was published as a black and white drawing on the Spring 1973 cover. We recently republished the art in color on the Winter 2015 cover of The Pharos, and we are now offering it in three formats for purchase.

The 18 x 24” print is available on our online store as a poster or giclee art print on fine art acid-free paper.

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