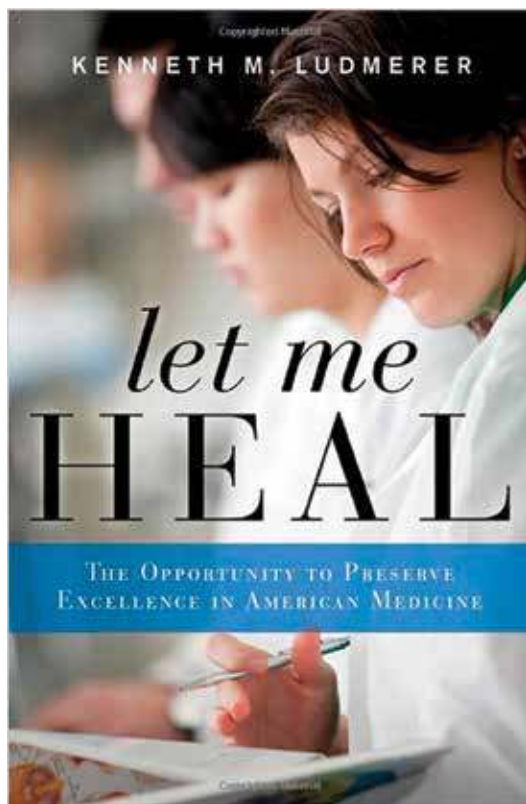


Reviews and reflections

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



Let Me Heal: The Opportunity to Preserve Excellence in American Medicine

Kenneth M. Ludmerer, MD (ΑΩΑ, Washington University in St. Louis School of Medicine, 1986, Faculty)
Oxford University Press, Oxford (UK), 2014, 456 pages

Reviewed by Paul B. Roth, MD, MS (ΑΩΑ, University of New Mexico, 1998, Faculty) and David A. Bennahum, MD (ΑΩΑ, University of New Mexico, 1984, Faculty)

There is likely no greater strategic question before the American people than coming to grips with the determinants of a healthy future. As the cornerstone of this conversation is not only whether the country will be able to afford safe, high-quality health care, but also how to best train the physicians of the future.

Medical schools are graduating more students, but

there is a growing bottleneck in the “capped” number of entry-level graduate medical education (GME) slots. This crisis regarding how many and what kind of residency programs should exist—and the economic and political influences—is not unique. It is the most recent in a series of challenges that have faced GME in this country over the past 150 years.

In *Let Me Heal: The Opportunity to Preserve Excellence in American Medicine*, medical historian and physician Kenneth Ludmerer provides an insightful account of this crucial aspect of medical education and the medical profession.

Until the later part of the 19th century, there was no formal training in the medical or surgical specialties in the United States. Most individuals expanded their understanding of medicine after medical school by volunteering in indigent hospitals and practicing on the poor. This rudimentary and often inadequate training was brought to light during and following the Civil War, when the quality of a surgeon was measured by the speed with which he was able to amputate a limb.

As Ludmerer notes, “In 1878 John Shaw Billings, who played a seminal role in planning the Johns Hopkins Medical School and Hospital, which opened in 1893, wrote that medical specialization could not be avoided ‘because it is no longer possible for any one man to grasp and retain a knowledge of all the branches of medical science.’”^{p10}

It was not until Abraham Flexner’s (ΑΩΑ, Raymond and Ruth Perelman School of Medicine at the University of Pennsylvania, 1946, Honorary) famous report in 1910 that a standardized science-based curriculum was implemented along with the beginning of post-graduate medical

educational models. The first models entailed the creation of advanced learning experiences—usually in a hospital setting—in which a physician-in-training worked to develop an expertise in one of the new medical specialties. The most popular venues for this additional training were general hospitals, mostly on the East Coast.

Trainees were required to work long hours in the hospital, and live there. It was expected that interns would not marry until the completion of their training.

Johns Hopkins University was the country's first research university when it was established in 1876. The medical school opened in 1893 after the heiress to the Baltimore and Ohio Railroad agreed to a large donation with the proviso that women be admitted to the school of medicine.

The idea of combining a medical school with a teaching hospital took root when Johns Hopkins Hospital opened in 1889, and the first modern residency program was launched. Physicians who had trained in France or Germany had returned as the founding faculty of this stellar institution, including Sir William Osler.

The next phase of GME evolution occurred following World War II with new advances in the science of medicine, and the need to provide high-quality care for returning veterans.

Ludmerer, an internist and professor of history and biostatistics at Washington University in St. Louis, has not only captured the facts of past eras but the tone and style as well. He draws from personal letters and self-described accounts from physicians who described the day-to-day realities and drama of learning and practicing medicine from the early history of this country to modern times. He describes how societal pressures influenced the manner in which would-be doctors acquired their education and credentials in America. He explains how throughout the past two centuries, economics, politics, and advances in science helped shape the pedagogy and structure of medical education.

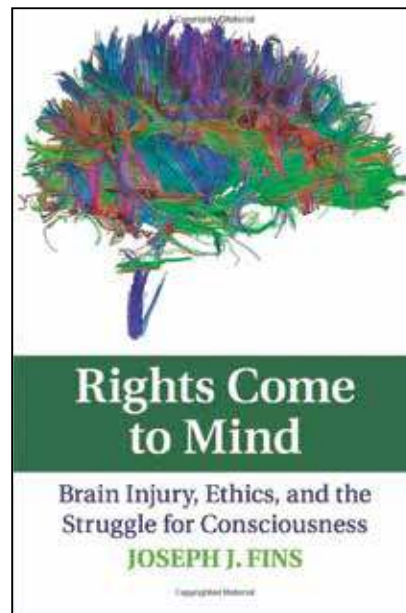
This book is a must for readers interested in the historical facts associated with GME, and for those who hope to gain insight into the lives of the forefathers of medicine and medical education, as well as the needs of the young physicians being trained today.

Dr. Roth is the Chancellor for Health Sciences, and Dean of the School of Medicine at the University of New Mexico. His address is:

MSC09 5300

1 University of New Mexico

Albuquerque, NM 87131-0001



Rights Come to Mind: Brain Injury, Ethics, and the Struggle for Consciousness

Joseph J. Fins, MD (AQA, Weill Cornell Medical College, 2011, Faculty)

Cambridge University Press, Cambridge (UK), 2015, 394 pages

Reviewed by Michael Roess, PhD

Broad cultural conflicts often receive preliminary hearings in the court of medicine. This is, in part, because medicine deals intimately and regularly with cultural taboos typically kept behind closed doors. In 1973, decades before the conflict over same-sex marriage, the American Psychiatric Association removed homosexuality as a pathology from the 2nd edition of the *Diagnostic and Statistical Manual of Mental Disorders*. In part, this is because technological developments in medicine unearth flashpoints for cultural conflict that medicine must deal with on a practical level.

In *Rights Come to Mind*, Joseph Fins makes the case that the medical community is in the midst of another such preliminary hearing over the rights of those in a minimally conscious state (MCS). He aims to persuade us that we must establish more robust rights for members of this group.

If anyone is qualified to make this case it is Fins, who brings decades of experience in medical ethics, work with those who have suffered a traumatic brain injury (TBI) and their families, and tireless pushing the medical community to recognize the distinction between persistent vegetative state (PVS) and MCS.

Minimally conscious state

Fins explains our current understanding of MCS with admirable clarity. Although we know little about the underlying physiology of traumatic brain injury, careful clinical observation and modern imaging techniques have allowed for significant strides, especially in distinguishing between PVS and MCS. Until recently, the standard model of TBI outcome, after an initial coma lasting up to 14 days, was either a return to consciousness or the development of PVS, which could persist indefinitely. The PVS patient was said to have a functioning brain stem (e.g., sleep-wake cycles, open eyes that appear to track), but a nonfunctioning or “dead” cerebral cortex.

In updating this model, Fins tells a compelling story about the discovery of certain PVS patients who demonstrated transient and minimal “but definite behavioral evidence of environmental awareness.” In individual cases, this might include the intermittent occurrence of smiling or crying in response to appropriate stimuli, following simple commands, reaching for objects, and intelligible verbalizations. These patients evidently had some—even if only minimal and transient—cortical activity.

These observations led to the development of the Aspen Criteria for diagnosing MCS, and a contentious uphill battle getting these criteria recognized by the medical community. We now believe that there is a window of up to 12 months after brain injury in which a patient may transition from PVS to MCS, and that at least a few of those who do attain MCS can ultimately regain full consciousness. Those who do not transition to MCS are considered to be in a permanent (as opposed to persistent) vegetative state, from which recovery is thought impossible.

Moral judgment with imperfect knowledge

While the historical and technical virtues alone would make this a worthwhile read for those interested in TBI, the work also shines with Fins’ moral arguments. He interviewed nearly 40 former MCS patients and families, and his use of their voices is one of this work’s most effective features.

Too often, discussions in biomedical ethics speak of patient interest as if the issue were merely a rational calculus of utility maximization, or an abstract application of principles. Such an approach is necessary, but rarely sufficient to capture the full moral weight of the issue. This high level of abstraction occludes the very real and dramatically high emotional stakes for the families and patients involved. The hopes and joys as well as the frustrations and anxieties these families voice provide a helpful corrective to the

jargon-laden technical terms in which we often view such conversations.

When employing grief-stricken voices to make a moral argument there is always a temptation to oversimplify the issue, to rely on the emotional appeal of the family to stand in for moral argument. To his great credit, Fins avoids this temptation and is careful to convey that the burden of caring long-term for an MCS patient is not one that all families would choose, or should be compelled to choose. Moments of triumph are balanced with stark acknowledgments of limited recoveries.

Throughout, Fins remains a strong advocate for patient (and proxy) autonomy. While careful not to denigrate the importance or appropriateness of organ donation, Fins cites numerous examples of well-meaning overreach by those who do not want to see organs go to waste. From neurologists telling a mother that her son “doesn’t have the reflexes of a frog,”^{p29} in an effort to elicit consent for donation, to a mother’s observation that a social worker had to block the efforts of a representative of the organ procurement organization, Fins shows how our failure to grapple with the moral status of TBI sufferers can lead some to coerce family members into a choice they would not have made on their own.

Fins is wary of an inappropriate expansion of the “right to die” movement that conflates respecting the clearly expressed autonomous decisions of patients (or health care agents) with a zeal to prematurely end perceived suffering. He insists throughout that while respecting a patient’s right to die we must also “affirm the right to care.”^{p127}

Civil rights for TBI sufferers

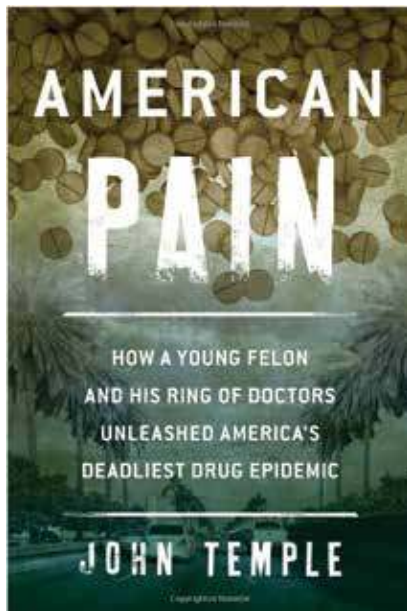
Fins ends his work with an impassioned call for advocacy. He sees the plight of those suffering a TBI as the next frontier in the civil rights movement. Too often, the families of TBI sufferers are forced to prematurely transfer their loved ones to facilities ill equipped to distinguish MCS from PVS, without physical therapies essential for recovery, all while being treated as though the hope they harbor for their loved one’s recovery is a delusional burden they are imposing on others.

While the civil rights frame does help make a strong moral case for his argument, placing it in a thriving and effective tradition of social change in the United States, it occludes some serious concerns. I would have liked to see Fins address the inevitable economic consequences of making what he rightly argues as appropriate and effective long-term care for MCS patients.

It is unfair to ask any one book to do all things. Fins

provides a fair and comprehensive overview of the historical, biological, technological, social, and political contexts surrounding TBI and MCS patients, while also acting as an advocate for patients and their families.

Michael Roess, PhD, is a Research Assistant Professor, Department of Family, Population and Preventive Medicine, Center for Medical Humanities, Compassionate Care and Bioethics, Stony Brook University. His email address is: michael.roess2@stonybrookmedicine.edu.



American Pain: How a Young Felon and His Ring of Doctors Unleashed America's Deadliest Drug Epidemic

John Temple
Lyons Press, Boulder (CO), 2016, 320 pages

Review by Cindy Bitter, MD, MA, MPH

America is in the throes of an opioid epidemic. Opioid overdoses now exceed motor vehicle collisions as the leading cause of accidental deaths. Combining investigative journalism, character studies, policy analysis, and social commentary, John Temple's *American Pain* describes the factors that led to the development of Florida's pill mill industry and the epidemic of prescription drug abuse it fostered.

The book starts in 2008 with the Georges, twin brothers who ran a "rejuvenation" clinic that sold steroids to

bodybuilders. A physician convinced them that pain pills would have a bigger potential market, and they partnered to open South Florida Pain Clinic. Soon, people were lining up to receive their prescriptions. The clinic expanded, hiring clinic manager-bouncer Derik Nolan and additional doctors, whom they found by posting job announcements on the Internet.

The clinic changed names and moved several times, but its patient base had been established, including a large number of people from other states. During the two years the clinic was in operation, its doctors prescribed nearly 20 million pills. Four of the physicians were among the top 10 physician-purchasers of oxycodone in the United States, and one of the doctors was linked to more than 50 overdose deaths.

Narratives from families affected by opioid abuse give context to the human suffering caused by the clinic. Temple also explains the larger forces that played into the growth of such irresponsible pain clinics, including a lack of regulatory oversight in Florida that allowed pill mills to flourish. Despite a prior felony drug conviction, Chris George was able to obtain a license for the pain clinic. Florida allowed clinics to dispense medications directly, a practice that increased profits and evaded monitoring by outside pharmacies. Also, the lack of a prescription drug monitoring database made it easy for patients to doctor-shop. While the State Board of Healing Arts or the Drug Enforcement Agency (DEA) oversaw physicians, it was very difficult to pursue non-physician owners of pain clinics, like the Georges.

The story actually begins more than a decade earlier, in the 1990s. Legitimate concerns about inadequate treatment of pain at the end of life, and racial disparities in pain management led to the concept of "oligoanalgesia." In addition, drug companies seeking to expand their market share misrepresented safety data, flooded medical journals with articles by ghostwriters and editorials, funded patient advocacy groups, and aggressively pressured physicians to prescribe narcotics for a long list of ever-increasing indications. In addition, the American Pain Society started the "Pain as the 5th Vital Sign" initiative, which was adopted by the Veterans Health Administration and The Joint Commission.

Professional norms around narcotic analgesics for chronic pain became more permissive. Patient satisfaction surveys included questions on pain relief which reinforced the perception that liberal prescribing was good business practice.

Temple provides insight into the fight against

Reviews and reflections

prescription drug abuse. The DEA set quotas for drug manufacturing, and successfully ended prior outbreaks of amphetamine and methaqualone abuse by restricting quotas. In 1993, before the release of long acting formulations, there were 3,520 kilograms of oxycodone produced. Production peaked at 149,375 kilograms in 2014, with small reductions in 2015 and 2016. Reversing the epidemic will require increased use of adjunctive treatments, prescribers who are better informed about risk factors for opioid misuse, and effective treatment for those addicted, including medication-assisted treatment.

Temple's writing is engaging and insightful, and will

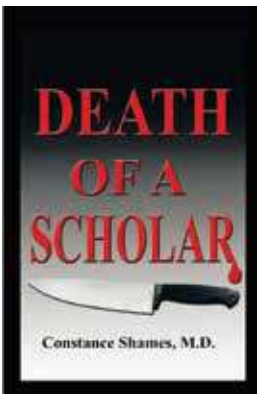
appeal to the general population as well as a medical audience. Some readers will find descriptions of the riotous clinic atmosphere and owners' callous attitude toward the patients they called "junkies" to be disturbing, albeit effective.

American Pain is a worthy read for anyone seeking a deeper understanding of the opioid crisis in America.

Cindy Bitter is Assistant Professor of Surgery at the Saint Louis University School of Medicine. Her email address is drcyn@prodigy.net.

Brief reviews

The Pharos receives many more books than we can possibly review. A number of these books are by members of AQA. In addition to the regular book reviews, we are beginning a new section with abbreviated reviews of other interesting books and a list of recent books by AQA members. As always, we welcome suggestions of books to review in future issues.

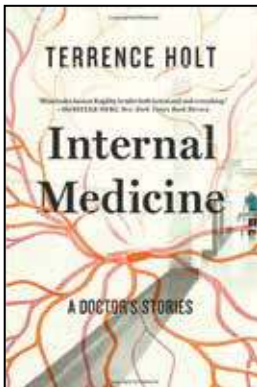


Death of a Scholar

Constance Shames, MD (AQA, State University of New York, Downstate Medical Center, 2007, Alumnus)

AuthorHouse, 2011, 190 pages

This is an unusual book by a retired internist and former Chief of Service at Kings County Hospital, Brooklyn. She reflects on the hospital; her own career; the difficulties that existed in medicine for women of her generation; the extraordinary mix of cultures and people that make up Brooklyn; and the tragic 1991 case of Yankel Rosenbaum whose care and death was much criticized in the New York press.

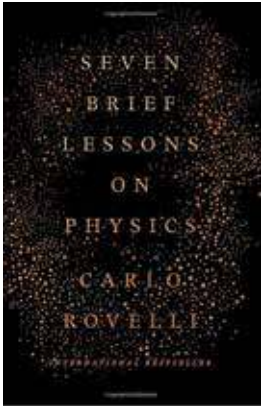


Internal Medicine: A Doctor's Stories

Terence Holt, MD

Liveright, New York, 2015, 288 pages

This book is an autobiographical reflection on the life, work, and experience of an internist. Good stories worth the reader's time.



Seven Brief Lessons on Physics

Translated from Italian By Simon Carnell and Erica Segre

Carlo Rovelli

Riverhead Books, New York, 2014, 96 pages

Rovelli is a wonderful writer and Director of the Quantum Gravity Group of the Centre de Physique Theorique de Luminy, Aix-Marseilles University. In a short 96 pages he explores and explains fundamental concepts such as heat, quanta, cosmology, probability, time, and black holes in lucid and playful prose that seeks to reassure the importance of science, and the scientific process to the rigorous search for truth. One should also look at his biography of Anaximander the sixth century philosopher who first postulated that the Earth exists in a void surrounded by the sun and stars. Rovelli credits Anaximander as the founder of modern scientific thinking.

More AΩA member books

In the Crucible of Chronic Lyme Disease: Collected Writings & Associated Materials, by Kenneth B. Liegner, MD (AΩA, New York Medical College, 1975), Xlibris, Bloomington (IN), 2015, 892 pages

In-Training: Stories from Tomorrow's Physicians, by Ajay Major, MD, and Aleena Paul, MD (AΩA, Albany Medical College, 2016), Pager Publications, Inc., 2016, 372 pages

MBA for Healthcare, by Joseph S. Sanfilippo, MD, (AΩA, Rosalind Franklin Univeristy of Medicine & Sciences, 1992, Alumnus), Eric J. Bieber, David G. Javitch, and Richard B. Siegrist, Oxford University Press, Oxford (UK), 2015, 352 pages

Physicians' Untold Stories: Miraculous experiences doctors are hesitatnt to share with their patients, or ANYONE!, by Scott J. Kolbaba, MD (AΩA, University of Illinois, 1976), CreateSpace Independent Publishing Platform, Charleston (SC), 2016, 240 pages

The Death of Cancer: After Fifty Years on the Front Lines of Medcine, a Pioneering Oncologist Reveals Why the War on Cancer is Winnable—and How We Can Get There, by Vincent T. DeVita, Jr., MD (AΩA, George Washington University, 1961), and Elizabeth DeVita-Raeburn, Sarah Crichton Books, New York, 2015, 336 pages

Your Health, Your Decisions: How to Work with Your Doctor to Become a Knowledge-Powered Patient, by Robert Alan McNutt, MD (AΩA, Michigan State University College of Human Medicine, 1992, Alumnus), The University of North Carolina Press, Chapel Hill (NC), 2016, 168 pages