help to have a French dictionary at hand. For example, in chapter 1, "The Wall of the Farmers-General": the wall, which was a tax-collection site for farmers bringing their produce into Paris, was derided by French citizens in the extremely clever epigram, *"Le mur murant Paris rend Paris murmurant"* [The wall surrounding Paris renders Paris murmuring or, stronger yet, growling] (p. 34).

The third chapter is representative of the format of the book and the structural flow of each chapter: Begin with an arresting title ("Let Them Eat Chips"), provide a journalist's eye for detail, and then weave the details about the person's life, cultural, civic, and scientific efforts and influence into a compelling story. Marie Antoinette may have uttered the famous phrase "Let them eat cake" to hungry and revolutionary French citizens. Jones, however, introduces us to Antoine Parmentier, trained as a medical chemist and later the chief apothecary to the Napoleonic armies. Parmentier first planted potatoes in the King's royal garden and then promoted them so avidly that the potato came to play an important role in the French diet.

This narrative strategy is faithfully followed in other chapters. For example, chapter 2, "From Ash to Ash," is devoted to the role of the element nitrogen in development of explosives from saltpetre to TNT, with attention paid to such luminaries as Lavoisier, DuPont, and Alfred Nobel. Chapter 7, "A Degree of Latitude," introduces us to the world of measurement (metrology) alive in Paris. It details the shaky foundations of the metric system as well as efforts to establish the Paris meridian. The last two chapters (8 and 9), "President Jefferson's Moose," and "Handing It On," introduce us to such biological luminaries as Buffon, Saint-Hilaire, Cuvier, and Lamarck. However, one looks in vain for a discussion of religion/science themes. These themes are rather muted, even when Lamarck or Darwin are on offer.

This is the American edition of *Revolutionary Science* and it carries a different title than the original British title: *No Need for Geniuses: Revolutionary Science in the Age of the Guillotine*. Jones's original title comes from an apocryphal comment made by one of the judges at the execution of Lavoisier (the tax-collector) by the guillotine. In fact, in the prelude (p. 32) and conclusion (p. 343), Jones claims that you are reading a book with that title. More rigorous editing was in order. The book would also benefit from more explanatory notes and a bibliography, though one should keep in mind that Jones did not aim to write an academic historical treatise. There is also another factual error on p. 68, where Jones states that the arrangement of the chemical periodic table is based on the atomic weights of the elements, rather than on their atomic number (that is, the number of protons in the nucleus).

All in all, this is a pleasurable book to read, giving an English-speaking reader a much better insight into the lives of many of these French administrative scientists (see p. 338). Many of them ended up as martyrs to the Terror. Those who survived, after pragmatically testing the winds of change, would later occupy many influential civic roles.

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ESSENTIAL READINGS IN MEDICINE AND RELIGION by Gary B. Ferngren and Ekaterina N. Lomperis. Baltimore, MD: Johns Hopkins University Press, 2017. 278 pages. Paperback; $32.95. ISBN: 9781421422909.

Essential Readings in Medicine and Religion is a companion piece to Ferngren's 2014 book, *Medicine and Religion* (see my review in *PSCF* 66, no. 4 [2014]: 256–258), and "supplies a collection of texts and places them in their respective contexts in order to specifically address the historical relationships between medicine and religion." The authors are knowledgeable about this subject: Ferngren is both a professor of history at Oregon State University and a professor of the history of medicine at First Moscow State Medical University; Lomperis is a PhD candidate in theology at the University of Chicago and holds a junior fellow position at the Martin Marty Center for the Advanced Study of Religion. In a manner similar to *Medicine and Religion*, this book provides a historical overview of human history at the intersection of medicine and faith over several millennia. The book has a straightforward format over its eight chapters. The authors provide an overview of a historical period; this is then followed by a series of writings from that geographic region and time. The authors provide histories of each period that are easy to read, and I believe the chosen writings are pertinent and illuminating.

The book begins in the Ancient Near East, composed of ancient Egypt and Mesopotamia (including Israel) in which disease was attributed to actions of the gods (as retributive), to demons and sorcerers, or to a consequence of natural mechanisms (such as fractures). Early human writings in this region of the world described disease processes related to sin, which required forgiveness from a deity. It is fascinating to realize that such thoughts are still present in many aspects of human culture 3,000–4,000 years later. An introduction to Greek literature follows in which the professionalism of medicine is first codi-

fied from the writings of Hippocrates. Although Hippocrates had nonphysiologic-based beliefs that continued to hold sway for many centuries (such as the belief in "four humors"), he and his surrounding culture concentrated on the natural aspects of disease. Using a physician to cure disease was deemed essential ("Prayer indeed is good, but while calling on the gods man should himself lend a hand"), and the codification of medical professionalism began to occur via writings such as the Hippocratic Oath.

The authors then continue with a chapter on the Roman medical beliefs, in which a significant change occurred. Initially, the healing arts were colloquial, involving the male head of the household using folk remedies; however, over time Greek influences developed medical professionalism as early as the 200s BCE. The authors point out that although religious cults existed to cure disease, a naturalistic approach to therapy was emphasized. As Sophocles said: "No good physician chants incantations over a malady that needs the knife." Greek and Roman culture influenced Western thought in which individuals over the centuries have subsequently used medical professionals for healing of disease, as compared to the use of alternative spiritual/religious techniques.

Next the authors explore Christianity and medicine. They point out that Jesus performed exorcisms in the Gospels, but he also performed separate healing miracles. Thereafter, early Christians attributed disease to God, demons, or natural processes, but they also tended to minimize the association of sin with disease. Although at times persecuted, early Christians in Rome cared for the sick and buried the dead during times of plague throughout the empire. They were instrumental in the initial development of the idea of a hospital in 372 CE to care for the poor, sick, and orphaned. As a physician, I found it interesting to read the accounts of early hospitals, including those written by Jerome who wrote about Fabiola, founder of the first hospital in Rome in 390 CE, in that such institutions provide parallels to modern hospital care.

The authors follow with "The Middle Ages" and this period's emphasis on "library medicine," which included reading authoritative texts while ignoring any semblance of experimentation to improve care and outcomes. This chapter, in particular, has relevance to modern medical science, in which there is a growing concern that the understanding of translational science (the so-called "bench-to-bedside" phenomenon) has become a lost skill among physicians.[1] During this period, medical education shifted from monasteries to universities, a change with effects lasting to our current times. The chapter that follows ("Islam") is extremely beneficial, as that culture brought forth many innovations that are still used in modern medicine, including the importance of physical medicine, medical ethics, and "medical encyclopedism" that has some parallels to modern medical journals.

The chapter on "The Early Modern Period" emphasizes the influence of both the Protestant and Catholic reformations in relation to medical theory. Specifically, old ideas were reevaluated for relevance. Martin Luther believed society should use medicine but also believed that it should be recognized solely as a gift from God. Andreas Carlstadt recommended the detachment of the spiritual from bodily influences, such as food and medicine, while instead yielding to the will of God. These disparate ideas have influenced current false notions about medicine. The idea of reevaluating or reforming medical therapies based on the scientific method is extremely valid; however, movements that have entered the realm of pseudo-science, such as homeopathy and the anti-vaccination movement, have continued to be disastrous. The book ends with "The Nineteenth through the Twenty-First Centuries," the "modern" approach to the medicine and faith intersection. The authors discuss the growing influence of secularism, the use of faith-based organizations to provide medical outreach, the belief of some Pentecostals that only unbelievers use medicine, and the continuing ethical and moral issues raised by advanced medical technologies, including genomic medicine.

Overall, this book is very good, and I would recommend it to anyone who has an interest in faith-medicine issues. As a physician, I interact with families who would prefer to use prayer over medicine, and although this issue can be difficult to discuss in the clinic and hospital setting, I think understanding the historical background of such ideas can provide insight for further patient-family-physician conversations to improve care. Additionally, the book's format of providing a historical overview of a time period followed by relevant writings is extremely helpful, and this book may be most beneficial as a reference.

I found a minimal number of weaknesses in the book. I would have preferred more writings from China and India, which have had a significant influence on the field of medicine. Moreover, I think the book would have benefited from even more modern writings, especially with regard to theology and the genome, as well as theology in relation to medical ethics—extreme prematurity care, use of biologic agents, healthcare costs, and end-of-life care come

to mind. However, more writings can be included in future editions. I would highly recommend this book to anyone who is interested in the relationship between faith and medicine as it stretches across human existence.

[1]A. Schafer, ed., *The Vanishing Physician Scientist?* (Ithaca, NY: Cornell University Press, 2009).

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ORIGINS

EVOLUTION: Scripture and Nature Say Yes! by Denis O. Lamoureux. Grand Rapids, MI: Zondervan, 2016. 196 pages. Paperback; $16.99. ISBN: 9780310526445.

The title of Denis Lamoureux's newest book says more than a reader might get from a first glance. A first glance might suggest that this is simply one more book arguing that scripture, properly understood, does not preclude a belief that living things arose through the natural process of evolution. *Evolution: Scripture and Nature Say Yes!* does make that argument, but the title also reveals Lamoureux's deep commitment to learning from both scripture and nature. He argues that "[t]ogether these two divine books provide an integrated revelation of our Creator, his creation, and us" (p. 181) and that Christians who limit themselves to one or the other will find their understanding of God, creation, and themselves to be incomplete.

Lamoureux unfolds this argument by first disassembling the belief that Christians must choose between science and faith—between evolution and Christianity. He does not dismantle this common approach to science and faith without leaving the reader with another option. He opens "Two Divine Books" in chapter two, offering an alternative to biblical concordism and including excellent examples of scientific findings that support evolutionary theory. In chapter three, he provides language that more clearly defines beliefs and belief systems. He clearly explains what it means for evolution to be a scientific theory. He distinguishes between purposeless and purposeful creation. He concludes chapter three by offering a new way to think about the relationship between science and faith that is free from an "either/or" dichotomy (p. 60).

Chapter four delves into a discussion of design. Again, Lamoureux provides helpful and important distinctions and definitions. He distinguishes between Intelligent Design Theory and the general concept of intelligent design. He also lays out his understanding of special revelation and general revelation. He argues that "creation offers a divine message that is active, understandable, non-verbal, never ending, universal, revelatory, rejectable, and makes humans accountable" (p. 73). He carefully avoids overextending the limits of creation's witness when he makes it clear that "though the physical world clearly reveals that there is design, it does not tell us precisely who the Intelligent Designer is" (p. 83).

The idea that the Bible contains ancient science is the focus of chapter five. Lamoureux's theological and biblical argument for accommodation is compelling and helpful. He includes examples of ancient science from botany, human reproduction, taxonomy, astronomy, and geology. I think readers would find it difficult to finish reading this chapter and not agree with his conclusion that the Bible is not a book of science, but rather a book that "convicts us of our sinfulness and reveals that Jesus can restore our relationship with God" (p. 112).

I found the last chapters of this book quite helpful. Chapter six lays out various positions along the Young Earth Creation/Dysteleological Evolution continuum. Chapter seven considers the historical example of Galileo to illustrate how both scripture and science can be misused, and makes a compelling case for complementary roles for scripture and science.

Chapter eight discusses Darwin's personal struggle with religion. Lamoureux cites Darwin's own words to dispel the perception that Darwin was a steadfast atheist. Some readers may find comfort in learning that Darwin's questions about faith mirror their own. The book ends with a personal chapter in which Lamoureux narrates moving stories of students who have shared with him their struggles with an either/or worldview.

Lamoureux, who holds PhDs in both biology and theology in addition to a doctor of dental surgery degree, has a remarkably personal and accessible writing style. His tone is conversational, inviting the reader not only into the depths of his biblical and biological knowledge but also into his personal journey of faith. In fact, it may be this simple, personal, open voice that is the greatest strength of his book, which makes it more accessible than his earlier *Evolutionary Creation: A Christian Approach to Evolution*. Some of the arguments in the book are condensed and simplified versions of the arguments he laid out in *Evolutionary Creation*. However, the audience for this book is different from his earlier book.

This book is not for those who have comfortably settled in the Evolutionary Creation/Theistic Evolution