

Preface

This book, intended to make you a more knowledgeable clinician, presents selected insights of some of the history's leading physicians, scientists, and scholars—the admonitions of Hippocrates, what Edward Jenner had to say about the end of smallpox, Sir William Osler's thoughts about uncertainty and probability in medicine, and Florence Rena Sabin's vocal commitment to believing in her work—and describes how their words are pertinent to the current practice of medicine. This book will show how much the thoughts of medicine's giants were prescient, and are manifested in what we believe and do today.

The book's title is inspired by the words of the English physicist and mathematician Isaac Newton in 1676: "If I have seen further it is by standing on the shoulders of giants" [1]. There is, of course, evidence that the metaphor describing *standing on shoulders* of predecessors predated Newton in various iterations [2]. Attribution squabbles notwithstanding, as we ponder this image, an example that comes to mind is the 1854 prophetic comment attributed to John Snow that the key to elimination of the great plagues, such as cholera, would lie in understanding how they are propagated. Today's knowledge of disease prevention is built upon the findings of Snow and others like him.

In this world of electronic medical records, virtual physicians, and *nocturnalists* (physicians who choose to work the "graveyard" shift in hospitals), why do we need a book based on the wisdom of our forebears? Perhaps the answer lies in the premise of the query: We have become deeply enchanted with the twenty-first century's dazzling technology, expansive communication options, and lifestyle-oriented practice choices. And in doing so, we risk losing touch with the passion for clinical excellence and commitment to service that made medicine what it is today.

There is another reason this book is important. Today's healers enjoy a level of societal confidence and trust that is the envy of our colleagues in other professions. In the 1940s, American author and newspaper columnist Damon Runyon quipped: "My old man used to say that he guessed the percentage of scoundrels was less among doctors than any other class of men, professional or otherwise, in the

world” [3]. This lofty status exists only partly because of the good works of we, the living, but is much more a legacy of the dedication, perseverance, and stature of those who created today’s house of medicine—the medical giants upon whose shoulders we stand. If only for this reason, we should all spend some time learning about our heritage.

The topics discussed are diverse. They range from basic science to philosophy, from doctors to patients and their families, and from classic descriptions of disease to how clinical caregivers view their world. Some quotations, such as Lewis Thomas’ observation that “most things get better by themselves” are presented with a hint of irony as we consider the heroic therapy often employed in modern clinical practice. Other discussions, such as Albert Schweitzer’s commitment to service, are unashamedly inspirational, and some have a touch of pragmatism, as in William Heberden’s advice to cease doctoring at the right time, before one can no longer do justice to patients. Some are reflective, as the thoughts of Elizabeth Blackwell, America’s first female medical school graduate, about being a pioneer. And I include a few notions that time has proved to be quite erroneous.

Is this just another book of medical quotations? Not really. The thoughts presented are, in most cases, whole paragraphs, allowing greater elucidation of the authors’ ideas than is possible with a single adage. One example is the paragraph taken from the 1927 article *The Care of the Patient*, by Francis W. Peabody, although, as you will see in Chap. 3, I might have quoted only the memorable last sentence. In the case of Elizabeth Kübler-Ross M.D., the selection is both extended and metaphorically vivid. Robert Lewis Stevenson’s representation of physicians as standing “above the common herd” cannot be summarized in a few words. On the other hand, pithy quotes such as the observation by Sir Dominic Corrigan that “The trouble with doctors is not that they don’t know enough, but that they don’t see enough” might reasonably be termed aphorisms. There are even a few poems included in the book.

Are all quotations from the past? Not by any means. In searching for sayings that resonated with my idea of what medicine should be, the characteristics of the ideal physician, and the broad panorama of medical practice in history and today, I came across a number of thoughtful insights penned by “modern” physicians, scientists, and other writers. And while some may hold that these persons have not yet been accorded the status of “giant,” I felt that their words merited inclusion in the book. Thus, in addition to Celsus, Hunter, and Pasteur, I have included the writings of some individuals, such as Edmund Pellegrino and Barbara Starfield, who have shared our time on this earth, and others, including Abraham Verghese and David Hilfiker, who are still contributing to medicine.

In assembling my sources, I was forced to make some decisions. First of all, should I return to the same source more than once? In fact, I could easily have presented an Oslerism on every third page. I decided that, for the sake of variety, I would cite major extracts from the works of Galen, Freud, Sydenham, and other familiar names only once in a chapter, and that I would lean toward including a

broad range of “giants.” Hippocrates, Virchow, Osler, and a few others do, however, show up more than once in the book.

I also faced the question: Who is medical giant? It is someone, and not necessarily a physician, whose thoughts, words, and deeds have helped make medicine what it is today. I concluded that some writings by nonmedical authors such as Aristotle, Rudyard Kipling, and Michael de Montaigne have influenced how we view medicine and physicians, and hence their words are included.

A few giants have given us a treasury of medical quotes, sometimes including a notable “signature” adage. In these instances, I have given preference to the well-known saying, even though some writings that are less well known are also perceptive. For example, the words “Chance only favors the prepared mind” will always be linked to Louis Pasteur.

A more vexing issue was this: What about publications with multiple authors? I have found some astute thoughts in committee-authored articles, some with as many as five or six contributors. I decided that these words had been polished by many hands and also, I suspect, were subsequently buffed by unnamed editorial assistants. Thus I could not describe the entire team of authors as “giants,” although some multiauthor publications are cited in my annotated comments.

For the most part, this book is grounded in literature, not simply the product of my personal reflections (although there are more than a few of the latter), and source-based annotations are supported by reference citations. Most are from the mainstream medical literature—published books, historical documents, peer-reviewed journals such as *The New England Journal of Medicine*, and so forth. And, in an effort to make the content timely and relevant, I have also used some less traditional resources such as the *Wall Street Journal*, the *New York Times*, and the *World Wide Web*.

This book may never lead you to a “eureka” diagnosis or guide a brilliant therapeutic drug choice. I hope that it will, however, influence how you think about your profession, your patients, and your career, and help you avoid the fate of becoming an “automated medical kiosk” [4]. I will be delighted if this book helps rekindle your idealism regarding what medicine is at its core, and that it reminds you how being a physician can be what Osler termed “a daily joy” [5].

On the Shoulders of Medicine's Giants is intended not as a text or reference source, but as an *enrichment book*. It is, fundamentally, a collection of perceptive quotations, with comments. Perhaps you will experience an “Aha” moment of recognizing the historical origins of why we think this or do that. I hope that you will find it fun to read—perhaps on a quiet evening or while passing the time on a long plane ride—and that your life will be a little richer for it.

1. Turnbull HW, Ed. The correspondence of Isaac Newton, vol 1. London: Cambridge University Press; 1959; page 416.
2. Dorizzi RM. Standing on the shoulders of giants—Isaac Newton? Bernard of Chartres? Priscian! (letter). Pharos. Alpha Omega Alpha Honor Med Soc. 2012;75:1.

3. Runyon D. From the author's long-running newspaper column: "The Brighter Side." c.1943. Available at: http://nostrums.blogspot.com/2010_03_01_archive.html.
4. Bynum W. Why physicians need to be more than automated medical kiosks. *Acad Med.* 2014;89:212.
5. Osler W. *Aequanimitas*, ed 3. Philadelphia: Blakiston; 1932, page 423.

Portland, OR, USA
Norfolk, VA, USA

Robert B. Taylor, M.D.

<http://www.springer.com/978-1-4939-1334-3>

On the Shoulders of Medicine's Giants
What Today's Clinicians Can Learn from Yesterday's
Wisdom

Taylor, R.B.

2015, XIV, 251 p. 100 illus., 48 illus. in color., Hardcover

ISBN: 978-1-4939-1334-3