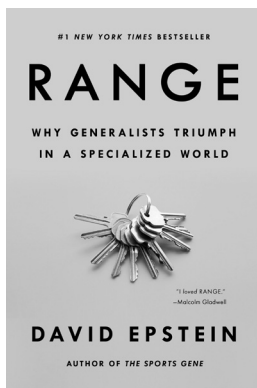


BOOK AND MEDIA REVIEWS

Range: Why Generalists Triumph in a Specialized World

David Epstein

New York: Riverhead Books, 2019, 352 pp., \$28, hardcover



Family physicians have a complicated relationship with generalism. On one hand, what most distinguishes us from other physicians is our ability to manage a broad range of acute and chronic conditions in patients from cradle to grave—to care for the

entire patient rather than a single body part or organ system. On the other, we can be acutely sensitive to put downs such as “jack of all trades, master of none,” and often respond that we, too, are specialists—in “the skin and its contents,” in “health care integration,” or in the “whole person.”¹ The subtitle of David Epstein’s *Range* suggests that generalists can outshine specialists in a variety of professions. Although only a few pages directly refer to medical practice, *Range* nonetheless provides important messages for family medicine educators.

The book begins by questioning the widely held notion that the best way to develop a superstar athlete is through early narrow specialization, with the most famous example being the golfer Tiger Woods. It turns out that the more common narrative is that of Roger Federer, who dabbled in wrestling, swimming, skateboarding, and soccer deep into his teenage years before focusing on tennis. Epstein writes, “The challenge we all face is how to maintain the benefits of breadth, diverse experience, interdisciplinary thinking, and delayed concentration in a world that increasingly incentivizes, even demands, hyperspecialization” (p 13).

Compared to subspecialists, generalists are more likely to be comfortable with conceptual reasoning and applying broad principles to situations outside of previous experience. Epstein recalls an undergraduate chemistry professor who posed test problems that challenged students to make multiple reasonable

estimates to come up with ballpark approximations, illustrating the point that “detailed prior knowledge was less important than a way of thinking” (p 52).

To the public, medicine probably appears to be a narrow set of procedures to be mastered through repetition—a view that could also apply to math and music, subjects of two chapters in *Range*. Practice helps, of course, and for people whose training goes no further than grade school, performing by rote may be the easiest path to generating the correct answers or playing an instrument competently. But Epstein observes that learners acquire a more durable and flexible knowledge base when they first struggle at a subject and work through “desirable difficulties,” which “intentionally sacrifice current performance for future benefit” (p 85).

A later chapter explores how experts make economic and foreign policy forecasts. Epstein contrasts “narrow-view hedgehogs,” who spend their careers on one problem or view all problems through a single discipline-specific lens, with “integrator foxes,” who attain a breadth of expertise and are superior at long-term forecasting. Professionals with range are better equipped to tackle novel problems where familiar tools don’t work, such as the O-ring failure that led to the space shuttle Challenger explosion. Faced with uncertainties surrounding a launch decision on a 40-degree day, NASA managers regressed to what they knew best, which was to demand (nonexistent) data to support the engineers’ suspicion that the O-rings were more likely to fail in cooler weather. Lacking such data, NASA overrode these concerns and approved the fatal launch.

Two examples in *Range* derived from medicine involve interventional cardiology and arthroscopic knee surgery. Even after randomized, controlled trials demonstrated that patients who underwent stenting for stable coronary artery disease² or arthroscopic surgery for knee pain and a torn meniscus³ did no better than others who had medical or physical therapy alone, these procedures continue to be performed thousands of times each year. Lacking a generalist’s view of the body as a complex integrated system, cardiologists or orthopedists who focus on “small pieces of a

larger jigsaw puzzle in isolation” (p 267) simply can’t believe that their tools don’t work in these situations.

What lessons can family medicine teachers share from *Range* with their colleagues and students? Even subspecialists benefit from first undergoing generalist training (Roger Federer). Teaching new skills within a broad conceptual framework rather than as disconnected individual tasks may be more difficult for the student, but it creates more lasting knowledge. Breadth has advantages over depth of expertise, particularly in solving novel problems where familiar tools don’t work. Appreciate that the human body is a complex integrated system, and use caution before recommending invasive procedures to fix one malfunctioning piece of the puzzle.

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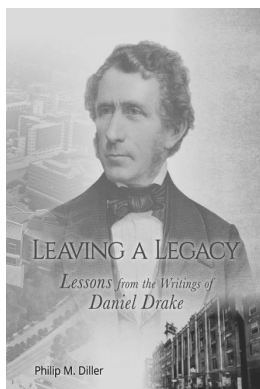
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Leaving a Legacy

Philip Diller

Cincinnati, OH, University of Cincinnati Press, 2019, 271 pp., \$34.95, hardcover



Leaving a Legacy is a collection of excerpts from various writings of Dr Daniel Drake (1785-1852), a physician who lived and worked in and around Cincinnati, Ohio, attended medical school at the University of Pennsylvania, and played not only a pivotal role in shaping Cincinnati, Ohio, but also a more subtle role in shaping modern medicine. Each passage in the volume is chosen for its specific message from Daniel Drake to his children, his fellow citizens, his colleagues, and the

world. The passages are all followed by questions formulated and put forth by Dr Diller and designed to help the reader digest, ponder, and then imagine how they might apply each piece of Drakean wisdom in their own lives to improve themselves, their families, and their communities. The book is organized into five main parts focused on Dr Drake the man, citizen, writer, educator, and physician.

Raised in Ohio, Philip Diller, MD, PhD, is an avid medical historian and family doctor. It is clear that he believes a good physician is also a good citizen of the world, and his love for both medical history and community involvement is evident in his writing, as is his devout interest in the details of Dr Drake’s life and teaching.

Dr Drake was born into a working-class farming family and grew up being only intermittently able to attend school. However, it was his father’s lifelong dream for him to become a doctor, and at the age of 18 he was sent out into the world to become a doctor’s apprentice. This would be his launching point onto the long, winding road of becoming a physician for both individual patients and families and communities. Dr Drake left Ohio to be trained at a world-renowned institution, but quickly found his way back to his Ohio roots and home soon after graduating.

This is certainly not a high-yield book; it is not a page turner. This book is not a comprehensive biography of Dr Daniel Drake, nor is it a comprehensive description of medicine in the 1800s, or of life in the 1800s in Cincinnati, Ohio. Rather, it is a collection of life lessons on how to be a good physician and an exemplary citizen, that will endure over the centuries, and can be passed on from generation to generation of physicians, teachers, and historians.

Two examples of Drake’s writings that are still applicable today are his thoughts on the importance of the physician’s place in their community, and his advocating for the role of communities in taking care of immigrants:

Medicine is a physical science, but a social profession. What skeletons are to the comparative anatomist, and plants to the botanist, people in health and disease are to the physician. Both his elementary studies and his after duties are prosecuted in their midst, and can be pursued no where else. He may be in feeling a cynic, or in taste a recluse, but practically, he must be ever present among the masses, acting, and being reacted on by them. Thus, per necessitatem, he is made a member of the community

in which he follows his vocation, and becomes more or less colored by its characteristic dyes.

...With the design of extending charity to the needy who in consequence of their recent arrival here can demand nothing from the overseers of the poor, and to those citizens who are, through misfortune, and in want of temporary assistance, a number of charitable persons associated themselves in 1814, under the name of the Cincinnati Benevolent Society. They appointed two managers in each ward of the town, and by the voluntary contribution of a respectable portion of the inhabitants, a sum was obtained that has enabled the society to dispense relief to a number of suffering immigrants...

One example of Drake's writings that highlights his thoughts on slavery, although thankfully not directly applicable today, and certainly embedded with the error of thought that one race is superior to another, still includes one aspect of truth: if you feel someone is lesser than you, the next logical step is to help them, not to push them down further.

... This natural inferiority to the white man has been given as a reason for reducing [the slave] to bondage. But the heartlessness of such an argument is only equaled by its logical absurdity; for where there is a disparity, in mental and moral power, the legitimate conclusion is that the stronger should help, not prey, upon the weaker. To reverse this is to set aside the laws of the moral world, and establish a reign of force and anarchy. [Letter Two]

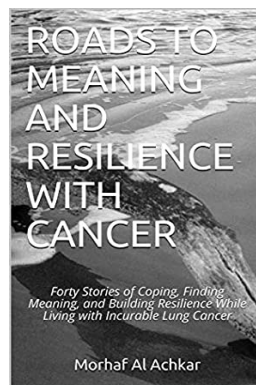
For anyone particularly interested in medical history, life, and medicine during the 1800s, or the history of Ohio, and Cincinnati specifically, the book will be of particular interest. For this family physician who also spent a significant amount of time living and working in Ohio, it was fascinating to learn about the incredibly different path a doctor in the 1800s would have taken to arrive in the profession, compared to our current experience. Despite the stark contrast of the day-to-day details of what a physician's life looked like then compared to now, it is impressive how much of Dr Drake's advice is still applicable today.
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Roads to Meaning and Resilience With Cancer

Morhaf Al Achkar

San Bernardino, CA, self-published, 2019, 221 pp., \$14.99, paperback



Family physician, teacher, and researcher Morhaf Al Achkar, MD, PhD, describes this book as part of his mission to express as much of his experiences as a patient as he can to help others also dealing with a diagnosis of stage 4 lung cancer. Moreover, he reports

writing the book as one answer to his existential struggle and to open a space for others to advance conversation around their own existential inquiries. This book includes insights from interviews with 40 individuals, including the author, who have advanced or metastatic non-small cell lung cancer with an oncogenic alteration (ALK, EGFR, ROSI) living in the United States. The author explains that those with this mutation are living for years due to recent advancements in medical treatment, which is different from the previous life expectancy of only a few months. The interviews aim to identify how these individuals make meaning, build resilience, and deal with the struggle of living with a metastatic cancer that is nevertheless a chronic condition.

In cancer literature, resilience has been described as a practice that occurs through constant recalibration through which individuals move on a resilience—distress continuum.¹ Dr Al Achkar's work parallels these findings. Interviewees describe building resilience and strength in several ways, such as learning more about the disease, as well as building a network of family and friends. Others report allowing themselves to be weak at times and accept that doing so is ok.

The coping strategies described in this book are varied and complex. This is consistent with previous work that highlights the need for contextualized and holistic approaches in the care of people with advanced lung cancer.² Moreover, interviewees describe ways in which they have and have not changed in several health actions, such as diet and exercise. Dr Al Achkar offers no judgments of the opinions offered by those interviewed, though he does caution

that alternative medicines should be pursued with caution and may be unwise to use as the only form of treatment. His nonjudgmental stance allows this book to be read by people with differing stances on many topics (eg, religion, support groups, holistic medicine) without feeling criticized.

The book addresses its goal to summarize 40 interviews of people with advanced lung cancer. This information is well condensed, though minimally synthesized for the reader beyond short summative and transitional statements. Additionally, the text could be enhanced with a table of contents and an index to help readers more easily find subsections. Going beyond typical qualitative work, the author reflects on his own answers to the questions he poses to the other interviewees. These portions are compelling and provide patients with a glimpse into how a physician grapples with the disease. This includes his reported struggle to accept being a patient and being vulnerable. Given Dr Al Achkar's insight and the seeming congruence of these interviews with overall literature on resilience and coping in individuals with cancer, the book would be further improved by a conceptual model/framework for physicians to utilize when treating such patients. Nevertheless, Dr Al Achkar states his mission is to help others also dealing with a diagnosis of stage 4 lung cancer, and this text does that by providing many nonjudgmental perspectives on finding meaning, building resilience, and dealing with the disease.

Though not the target audience, medical providers, their patients, and their loved ones could benefit from the salient message of the book to avoid stereotyping, blaming, or making assumptions about individuals with lung cancer. This is emphasized as none of the individuals with stage 4 lung cancer interviewed ever reported smoking tobacco and many reported that although they may appear healthy, they could be very sick. Dr Al Achkar describes how people with lung cancer are misunderstood and the stigma with lung cancer's relationship to smoking. He encourages that providers and the general public should not blame individuals for a disease that they did not create and how it is critical we do not withhold empathy for these individuals.

In a Final Remarks section, Dr Al Achkar provides a brief summary of the areas mentioned in the book. He reports that these interviews helped him learn to better listen to his patients with an open and curious mind. A moving sentiment is best encapsulated in his

own words, "I am a person, and I have cancer. Now I can stand in solidarity with people in ways that were not attainable to me before." doi: 10.22454/FamMed.2020.835870

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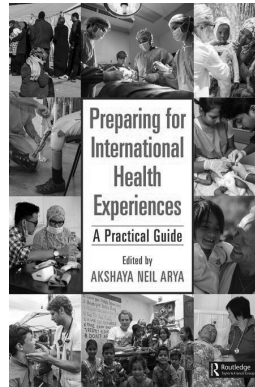
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Preparing for International Health Experiences: A Practical Guide

Akshaya Neil Arya, editor

New York, Routledge, Taylor and Francis Group, 2017, 250 pp., \$45.95, paperback



Dr Akshaya Arya, the editor of this book, is a Canadian family physician, who from his medical school days has been involved in internal health experiences (IHEs) in various regions of the world, including East Africa, Central America, Palestine, and in his

parents' country, India.

The book has 32 contributing authors from various health care fields including dentistry, medicine, midwifery, nursing, occupational therapy, public health, social work, physical therapy, surgery, and global health research. The book was written by contributors "who are not merely academics, but people just like you, who learned in training and in the field, through the school of hard knocks" (p 7).

This is a comprehensive guidebook, particularly useful for qualified health care professionals, health science students and trainees embarking on an IHE, and for faculty and administrative staff who oversee global health electives (GHEs). Faculty, mentors, and administrative staff who prepare students and trainees for a GHE will find very useful information to help facilitate predeparture and return orientation sessions.

How does one know if one has the right motives, the right organization to work with, and adequate preparation for an IHE? Anyone considering an IHE would be advised to read the “Putting Global Health Electives in Context” section thoroughly, before any concrete plans are made. At the end of this section, the student, trainee, or qualified health care professional should be able to decide if they have the right motives, attitudes, risk aversion, right organization to work with, and mentors at home and abroad to successfully engage in an IHE. For those who determine after reading this book that an IHE is not what they are cut out for, the book also provides suggestions for finding rewarding local health care experiences in one’s own community.

An experienced, qualified health care professional, student, or trainee with the right motives, resources, and skills might be tempted to embark on an IHE with a ticket in hand, some travel vaccines and a little knowledge of the host country. This book explains how critical predeparture preparation is. The authors explore topics on effective communication in a cross-cultural context, personal safety, travel health, cultural competence and ethical aspects of an IHE. The Ethics chapter provides additional book recommendations and online media links for students and faculty.

The authors also address practical needs of specific health care disciplines, covering emergency medicine, pediatrics, obstetrics and gynecology, midwifery, nursing, disability and rehabilitation, social work, dentistry, eye care, surgery, and global public health.

Finally, how does one reintegrate into one’s own community after an IHE? The final section of this book addresses postreturn management: debriefing, reentry and preparation for future global health electives or careers.

The book is laid out well; information is easy to find as each chapter has a table of contents. It is not necessary to read the whole book to benefit from it. Sections I, II, and IV cover topics that are useful for every health care professional. Students may then focus on their specific profession in Section III. The information is written by experts from various disciplines who have been personally involved in, or supervised students engaged in global health electives. The information is practical and authentic, and there is no detectable religious or political bias in the text. I was glad to see the writers tackle difficult subjects around the ethics of global health, avoiding harm and most importantly, using objective tests to determine if one is ready to take the risks involved in a GHE. This book does not sugar coat international health experiences, and gives a practical analysis of pros and cons, possible benefits and harm both to the student and the host country and sponsors that could result from the elective. I have read a few other books on GHE but this is the first one that I found was explicit in warning students from the Global North about the possible harm they may leave behind as well as the personal harm they may encounter. For the many reasons discussed above, this book would be a useful resource for health science students and trainees, faculty, administrative staff, and qualified health care professionals who are involved in, mentor, or supervise students and trainees who participate in global health electives. As a family physician, I will definitely use this book to guide me as I develop a GHE program at my institution.

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