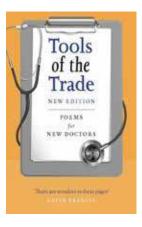
## **Book Reviews**

## Jack Coulehan, MD, MPH, and Raymond Barfield, MD, PhD, Book Review Editors



## Tools of the Trade: Poems for New Doctors (New edition)

Lesley Morrison, John Gillies, Ali Newell, Noy Basu, Rachel Millar, Samuel Tongue (editors) Polygon, 2022; 98 pages

Reviewed by CPT Justin C. Cordova, MDP (AΩA, University of Texas Medical Branch, 2021)

"Many of the poems in this slim volume will take you into the world of your patients—a realm of suffering, worry and confusion, with a need for a cure but perhaps an even greater need for kindness."<sup>pxi</sup>

*Tools of the Trade* is a thoughtfully curated selection **I** of poems pertaining to the art and practice of medicine. The pocket-sized volume is specifically designed for graduating medical students and residents who are early in their careers, though the messages it contains are applicable to physicians at every stage of their practice. It is given out each year to graduates of medical schools across Scotland through a partnership overseen by the Scottish Poetry Library, and is also available for commercial purchase. The program began in 2014, and distributes more than 1,000 copies each year. This new edition, which was published in 2022, has been updated to reflect some of the challenges of providing health care in the era of a global pandemic, while also adding a final chapter with a focus toward the future of healthcare and the role that poetry can play to help physicians thrive within it.

"Tell me about despair, yours, and I will tell you mine." <sup>p14</sup>

-from "Wild Geese," by Mary Oliver

The book is a treasure trove of touching pieces related to death, grief, illness, burnout, and a multitude of other themes that are immediately pertinent to a young physician's daily practice. It provides the perfect outlet for snatching a few minutes of thoughtful contemplation between the drudgeries of a long clinic day, the struggles of a rigorous night shift, and the myriad difficulties with which physicians must contend. Some pieces strike a somber tone, while others are refreshingly upbeat, and still others carry complex layers of meaning that yield ever more insight with each subsequent reading.

The size and scope of this collection make it the ideal title to help a young physician reflect on their new journey, to motivate a resident through a tough time in their first year, or to encourage a junior attending who is faced with an unexpected complication. The creators of this program recognize the restorative power of verse while simultaneously acknowledging the inherent difficulties of medicine. They recommend poetry as a tangible method for reducing the impact of those difficulties and for helping to reinforce the human aspects of medical care.

"Believe that a farther shore / Is reachable from here. / Believe in miracles / And cures and healing wells." P<sup>77</sup> — "The Cure at Troy," by Seamus Heaney

Though the volume spans just shy of 60 poems, it is an impactful collection and boasts an impressive array of celebrated writers. In addition to Heaney, the recipient of the Nobel Prize for Literature in 1995, the selection includes the work of three Pulitzer Prize winning poets—Mary Oliver, Sylvia Plath, and Lisel Mueller. It also provides a unique perspective among poetry volumes in that two of the works are printed in their original Gaelic alongside an English translation.

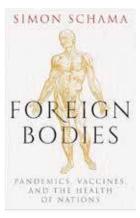
In addition to featuring several of Scotland's poets, the collection contains works written throughout the world, from Heaney's Ireland to Rilke's Germany, and from Leonard Cohen's Canada to William Blake's England. It also highlights the work of several physician poets, like Rafael Campo, Glenn Colquhoun, and Martin MacIntyre, continuing the tradition of writer-physicians set forth by William Carlos Williams, Anton Chekov, W. Somerset Maugham, and so many others.

*Tools of the Trade* is a perfectly sized collection of verse that would make a great addition to the contents of many white coats, physician bags, and personal libraries. It is worth adding to the armamentarium of all physicians, both young and old, across a range of specialties and fields of expertise. It doesn't have the scope or scale of other medical humanities collections like *On Doctoring* (Reynolds & Stone, 2010), or *Poetry in Medicine* 

(Salcman, 2015), but it doesn't attempt to. Its aim is to be a portable collection that doctors can turn to in their times of need, reaching into their pocket for consolation, guidance, and encouragement.

In providing this compilation of memorable poems, the editors were able to effectively reconnect the clinical with the personal, and give young physicians another tool to help them succeed.

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## Foreign Bodies: Pandemics, Vaccines, and the Health of Nations

Simon Schama Ecco Press, New York, 2023, 465 pages

Reviewed by Jack Coulehan, MD, MPH (A $\Omega$ A, University of Pittsburgh, 1969)

During the COVID-19 pandemic, the eminent historian Simon Schama was inspired to take his first foray into the history of pandemics. He was specifically interested in the professional and public reaction to public health measures during pandemics of the past, as a result of experiencing the "false consciousness," <sup>pxii</sup> which led millions of people in contemporary America to believe that public health measures were an elite conspiracy and that scientists were "in cahoots against homespun wisdom." <sup>pxii</sup> *Foreign Bodies* is the result of this project. The "bodies" are microorganisms; the subjects are the multiple smallpox, cholera, and bubonic plague pandemics of the 19th century. The book describes the work of physicians, scientists, and epidemiologists to combat and prevent these diseases, highlighting the serious resistance they encountered.

The disease Schama considers first is smallpox. Edward Jenner initiated the modern history of vaccination in 1798 when he inoculated healthy subjects with material from cowpox lesions to immunize them against this disease. However, in China, India, and the Ottoman Empire, people had for centuries practiced variolation, which involved exposing healthy people to pus from smallpox pustules by scratching it into their skin or placing it in their noses. This practice generally resulted in a minor illness, rather than the serious, often fatal, form of the disease.

European physicians first took notice of variolation in the early 1700s. In 1714, Emanuele Timoni, an Italian physician, published the first scientific account of the practice, which influenced a number of physicians throughout Europe to investigate and subsequently promote variolation. Lady Mary Montagu, the wife of an English diplomat in Constantinople, was so impressed with its results that she had her children variolated, beginning with her firstborn in 1718. The English later discovered that a form of the "kindly pock" had long been practiced close to home in rural areas of Wales and Highland Scotland.

Initially, there was strong professional and public opposition to the counterintuitive concept of exposing healthy people to material from smallpox lesions, despite increasing evidence that variolation, and especially Jenner's vaccination, reduced mortality. Resistance continued for decades, and many English physicians who did adopt one of these procedures presented it as part of a smallpox prevention "package" that included purging and bleeding. After all, these were scientific procedures, they said, while variolation and vaccination were only "homespun wisdom." <sup>p.xii</sup>

Schama next considers cholera, the cause of repeated pandemics in Europe, Asia, and the Americas throughout the 19th century. Though in 1854 John Snow had demonstrated that cholera was caused by an infectious agent, his conclusion was widely rejected for decades until Louis Pasteur and Robert Koch provided direct proof of the germ theory of disease. Koch isolated *Vibrio cholerae* in 1884.

Dr. Adrien Proust (1834-1902), father of the novelist Marcel Proust, was a major advocate of germ theory, and a co-founder of the International Conference on Sanitation, the first European effort to collaborate in preventing epidemic disease. However, the major character in this section and through the rest of the book is Dr. Waldemar Haffkine (1860-1930), a relatively unsung hero in the history of public health.

Haffkine, a Russian-Jewish physician and microbiologist, developed the first effective cholera vaccine in 1892, using an attenuated strain of *Vibrio*. His results on animals were greeted with skepticism, even following his demonstration of the vaccine's safety by public self-administration. After considerable resistance and controversy, he was given the opportunity to test the vaccine successfully in 40,000 people during a cholera

pandemic in Calcutta (1893-1894). In one study among 433 prisoners in an Indian prison, unvaccinated men were five times more likely to contract cholera than their vaccinated peers.<sup>p205</sup>

In a series of chapters entitled "Power and Pestilence," Schama discusses several pioneering public health physicians who worked to ameliorate outbreaks of bubonic plague in China, Hong Kong, and India during the late 19th century. After his success with cholera, Haffkine remained in India, where the Plague Research Committee gave him a laboratory to pursue the development of an anti-plague vaccine, which he accomplished in 1897. The vaccine was employed in a massive campaign throughout North India during the plague pandemic of the late 1890s. In one 1898 study of Bombay residents, of 3,854 people who received the vaccine, only three died of plague; of 955 who declined inoculation, 77 died.<sup>p300</sup>

Haffkine was lauded as a public health hero, until his reputation suffered a major blow when 19 people in one village who received the plague vaccine died of tetanus. Haffkine, who was both a foreigner and a Jew, was an easy target. Considered responsible for the tetanus contamination, he was vilified and dismissed from his positions. Subsequently, investigations revealed that the disaster resulted from errors in handling by the team administering the vaccine, and not in its production.

While Haffkine's reputation partially recovered, "among the broad public," his case "had become akin to a medical Dreyfus case. Not least because faced with conclusive evidence of a gross miscarriage of justice, the authorities resisted any outright admission of wrongdoing." <sup>p352</sup>

In the book's final section, Schama discusses opposition to vaccination and other public health measures during the COVID-19 pandemic, the phenomenon that served as his motivation for writing *Foreign Bodies*. The message, of course, is that opposition to preventive medicine, especially inoculation or vaccination, has a long history. Its current incarnation was driven by populist politics with deep skepticism about mandatory public health measures.

Schama focuses on the widespread and virulent attacks against Dr. Anthony Fauci (A $\Omega$ A, Weill Cornell Medical College 1965), who served as the public face of preventive medicine during the pandemic. Although I enjoyed reading the author's heated vindication of Dr. Fauci, in it he clearly stepped aside from objective history to voice outrage over the personal attacks, conspiracy theories, and death threats Fauci received.

In my opinion, this extremely vocal public opposition to masking and vaccination distinguishes the COVID-19 pandemic from the historical pandemics Schama discusses. In those cases, opposition arose largely from conservative physicians, scientists, bureaucrats, or governmental bodies, rather than the general public. There are other differences as well. In the 19th century, vaccination was a dramatically new and unproven method of disease prevention. During much of the period Schama discusses, the germ theory of disease was not widely accepted. Today's "anti-vax" movement occurs at a time when widespread vaccination over the last 100 years has almost completely suppressed numerous serious communicable diseases. Opposition to vaccines in principle seems irrational, rather than conservative. It must be said, however, that 19th century advocates only inoculated volunteers during their vaccination campaigns, although it's questionable whether some populations involved were aware that they could decline. During the COVID-19 pandemic, coercion was the source of much vocal resistance.

The stories *Foreign Bodies* tells of pioneering efforts to prevent or ameliorate smallpox, cholera, and plague prevention in the 19th century are complex, and it requires careful reading to avoid getting lost among detailed incidents and the large cast of characters. Nonetheless, this deep dive into 19th century public health history is richly rewarding.

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