Five Questions

with

Dr Scott Harris Podolsky, MD

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by

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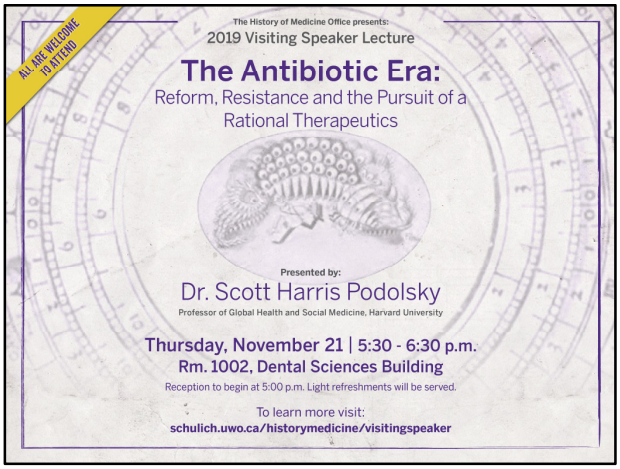

Dr. Podolsky is a professor of Global Health and Social Medicine in the Department of Global Health and Social Medicine at Harvard Medical School.

His work focuses on the history of 19th- and 20th-century therapeutics and medical evolution, with a focus on the history of antibiotics, the evolving authority of the controlled clinical trial, and relationships among physicians, medical journals, the pharmaceutical industry, and governmental agencies. Dr. Podolsky has written several books, including *The Antibiotic Era: Reform, Resistance, and the Pursuit of a Rational Therapeutics* (2015).

Dr. Podolsky was kind enough to sit down for an interview with us:

1. **Can you tell us about the work you will present in your lecture for this year's Visiting Speaker Series in the History of Medicine, Schulich School of Medicine and Dentistry**? Today, especially in the context of antibiotic resistance, we hear about "irrational" antibiotic use and the forces that shape such usage. But there is a much longer and richer history behind all of this, from the 1940s onward, and involving patients, clinicians, the pharmaceutical industry, governmental regulators, and academic therapeutic reformers alike. I'll be tracing 70 years of antibiotic reform efforts, and especially the limitations to such reform efforts, as a means of framing our present engagement with antibiotic usage and antibiotic resistance.

2. **How did you first become interested in this topic?** As a practicing primary care physician who frequently prescribes (and who is frequently asked by patients to prescribe) antibiotics, I've been forced to consider the "rational" usage of antibiotics (and other therapies) in the clinic for over two decades. More immediately, the antibiotic book

was in some ways a non-requested "sequel" to my previous book on the treatment of pneumonia with antiserum in the first decades of the 20th century (which was initially stimulated by my interest in the tempo and mode of therapeutic change, itself a result of observing such change as a medical resident in the late 1990s). Once you start in on a topic, it's easy to take it in a whole array of directions, and the pneumonia book led to parallel interests in the history of clinical trials, as well as the forces shaping prescribing behavior, each of which I got to explore more deeply in the antibiotic book.

3. **Was there anything that surprised you about this project once you got deeper into your research? Or rather, made a discovery in your work that made you say "wow!"?** I did have such a moment early in the research when it became apparent that the debate over the promotion and usage of fixed-dose combination antibiotics played such a central role in shaping the FDA and in establishing the role of the randomized controlled trial during a crucial decade from the end of the 1950s through the end of the 1960s. Max Finland, a legendary Harvard infectious disease specialist whose career spanned from the 1920s through the 1970s, played the chief role in this history, and his amazing manuscript collection is housed at our Center for the History of Medicine at the Countway. There's a letter between his former trainee (and eventual infectious disease legend in his own right) Harry Dowling and him from November of 1956 that basically shows them starting to plan this movement to rationalize antibiotic usage, a movement that would have an indelible long-term impact on drug regulation more generally. It's my favorite item in our entire Center, and we have one of Osler's copies of *De Humani Corporis Fabrica*, alchemical manuscripts by Isaac Newton, and the skull of Phineas Gage!

4. **As a practicing physician, I'm curious--How did you originally become interested in the history of medicine?** Stephen Jay Gould was one of my idols growing up, and I was a history of science "concentrator" as an undergraduate, working on the history of biology. I went to HMS hoping to keep my feet in both history and medicine. There, I was exposed to teachers like Allan Brandt and Rob Martensen (David Jones and I were two of the three students in Rob's first-year course on the social history of medicine). I ended up co-writing a book with Fred Tauber during medical school on the intersection of recombinant DNA technology, the solution of antibody diversification, and evolving notions of immune selfhood. Once in residency, Allan asked David Jones (who was in the midst of getting his PhD) and me if we could co-teach the HMS social history of medicine course that David and I had previously taken; and over the next several years I got to teach alongside, at various times, Allan, David, and Jeremy Greene (who was a few years behind David and me). What an amazing education! Marshall Wolf, the internal medicine residency director at the Brigham, allowed me to use large chunks of the last year of residency to get working on my next book (the pneumonia book), and by that time I had shifted my focus from the history of more fundamental science to the history of clinical medicine. I've been very, very fortunate.

5. **Do you think the history of medicine is important for medical students today? How might knowing the history of your long profession impact a practicing physician?** I do, and I think the paper written by David Jones, Jeremy Greene, Jackie Duffin, and John Harley

Warner on "Making the Case for History in Medical Education" should be read by every medical student (and every medical school dean). Historical inquiry forces us to consider the contexts in which our institutions, our disease concepts, our therapies (and their evaluations), our patients, and our profession have co-evolved. Moreover, the same considerations of contingency that Stephen Jay Gould applied to evolution apply to our profession, and David Jones and I get to ask our students at HMS questions like: Why is dental insurance separate from medical insurance (well, at least in the U.S.)? Why does most medical education take place in the hospital? Why doesn't the U.S. have health insurance? This historical appreciation of contingency, as opposed to an assumption that present structures are in any sense inevitable, enables us to entertain alternative paths moving forward. And finally, and personally, I must admit that my research into the history of therapeutics makes me a bit of a therapeutic skeptic regarding novel claims (especially by industry), though I try to steer clear of overt cynicism.

Thank-you very much for your time! We look forward to your presentation in November!