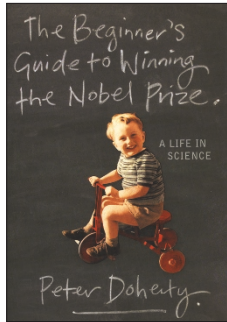


Your Dinner with Peter



The Beginner's Guide to Winning the Nobel Prize

Peter Doherty

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Reviewed by Jonathan W Yewdell

My Dinner with Andre is a classic 1981 movie whose action is limited to a dinner conversation between friends talking for the first time in many years. Over the leisurely course of the meal, the conversation, dominated by Andre, takes many odd twists and turns. Though there are a few dull spots, the movie is riveting.

Peter Doherty (with Rolf Zinkernagel) received the 1996 Nobel Prize for Medicine or Physiology for his insight into the function of the major histocompatibility complex (MHC) in cellular immunity to viruses. Witty, voluble, highly personable, honest to a fault and with a broad life experience, Peter is an entertaining and engrossing dinner companion (Peter has been a mentor and friend since the late 1970s, when I was a PhD student and Peter a faculty member).

Though Peter's travel schedule is brutal, few people will have the opportunity for an extended conversation. But despair not, for Peter has written *The Beginner's Guide to Winning the Nobel Prize*, an entertaining and insightful book that is even better than a single dinner. It's more like listening to Peter while spending a week driving across his native Australia.

The book is conventionally arranged into chapters, but they tend to meander just as the best conversations do. Originally published and distributed in Australia, the book was intended to increase the appreciation of the Australian public for the economic and medical importance, beauty and sheer fun of science, with the ultimate aim of increasing science funding and luring more talented students into science. But inasmuch as the scientific method and its benefits are under assault around the world, Peter's message resonates universally.

Peter does an excellent job describing the culture of biomedical research. Older scientists forget but young scientists who still straddle both worlds know that the general public is basically clueless about virtually every aspect of science. Peter details the long training period, the daily grind of mostly failed experiments, the process of discovery and publication, and the intense competition. While familiar, it was still fun to read, and useful as a reminder of how extraordinary our daily laboratory lives are compared to the more mundane world of commerce. Less familiar are Nobel Prize

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nuggets: the laureate selection process itself, the life-changing early morning phone call from Sweden, dinner and dancing with King and court, and the 'Nobel year' of lectures (in Peter's case double duty, as he was crowned Australian of the Year for 1997).

Scientists live in a cloistered world, mostly by choice, but, for those who care enough to influence public discourse and government decision making, it is exceedingly difficult to be heard. The title of Nobel laureate provides a megaphone to the public ear, particularly in less populous countries like Australia where the prize confers real celebrity. And Peter addresses a number of his passionate causes in this book. Scientists will generally be sympathetic to his concerns about the right wing's willful ignorance of the impending perils of climate change and the left wing's Luddite opposition to genetically modified food. They will be more skeptical of his advice for reconciliation between science and religion, but his thoughts need to be taken seriously as they are the result of his ten-year post-Nobel experience in bridging these worlds.

The book is not without a few shortcomings. The description of Zinkernagel and Doherty's Nobel Prize-winning discoveries is probably too abbreviated and simplified for biomedical researchers and yet too complicated for lay people. Like many Nobel laureates, Peter dwells excessively on the contributions of his fellow winners to science and humanity, as though 99.9999% of advances don't come from non-laureates (I'd bet, however, that the book's editors, with an eye toward sales, insisted on the Nobel-centrism). These are but minor quibbles. My only real disappointment in the book is its failure to address fundamental problems in contemporary scientific funding and training.

Peter is generally positive regarding the career path for young scientists, failing to note that the average age for starting an independent career as a principal investigator is at least ten years more now than it was in 1973. It is useful to recall that then, the year of their lightning-strike insight into MHC restriction, Peter was a fellow and Rolf a graduate student. In today's scientific culture, scientists of such junior standing are considered 'trainees', and it would be remarkable if they were credited solely, or even principally, for their discoveries. While touting the large number of alternative careers paths available for biomedical PhDs, Peter does not disclose the dirty little secret of biomedical research: only 10–20% of PhDs in the USA (and even fewer elsewhere in the world) will ever have the opportunity for an independent career in academic research. Even for these high fliers, biomedical research has become a high-stress career that is intensely and ruthlessly competitive. It is certainly true that no individual can solve all of the world's problems. Improving biomedical research as a career, however, can only come from within the scientific establishment. It is incumbent on the elite scientists with privileged access to the levers of power to restore biomedical research to the list of reasonable careers for talented and ambitious college graduates (particularly those who are unwilling to postpone reproduction until retirement).

Peter closes the book with some excellent advice for young scientists, mostly about the need for passion and curiosity in order to be successful and fulfilled. As a young scientist I had read Peter Medawar's *Advice to a Young Scientist* and found it stiff, arrogant, overbearing and more likely to repel potential scientists than to recruit them. In imbuing the subject with humor, irony and humility, in addition to its obvious passion, *The Beginner's Guide to Winning the Nobel Prize* will have the opposite effect.