

## The vanishing physician-scientist?: *The culture and politics of health care work*

Arthur Gutierrez-Hartmann

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### Book Review

Ever since James Wyngaarden sounded the initial alarm in 1979 that the physician-scientist was becoming an “endangered species,” there has been a crescendo of publications, initiatives, task forces, summits, and consensus conferences, revealing the very public hand-wringing by luminaries in academic medicine over this critical issue. Not surprisingly, physician leaders, as individuals and groups, have carefully considered and proposed numerous prescriptions to treat the insidious maladies that continue to threaten the very survival of the physician-scientist. The recent alarms have sounded increasingly desperate and the recommendations have become more specific, as the outcomes data have improved, revealing that extinction of physician-scientists may be more severe than originally perceived. Andrew I. Schafer, as editor of the book “The Vanishing Physician-Scientist?,” has gathered a strong group of coauthors together to provide a complete treatise, addressing the unique role of the physician-scientist in the medical enterprise and the worsening problem of attrition. The key strengths of this book are that it brings together in one place a comprehensive summary of the previous reports and initiatives spanning the past 31 years; it provides a scholarly analysis of the key hurdles that interfere with the timely career progression of the young physician-scientist; it includes chapters addressing issues not previously emphasized (such as generational differences, the increasing role of women in academic medicine, and the anti-science [...])

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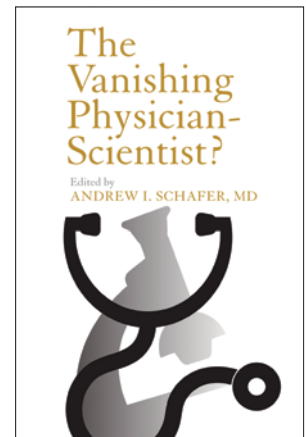
# The vanishing physician-scientist?

*The culture and politics of health care work*

Edited by Andrew I. Schafer  
Cornell University Press. Ithaca, New York, USA. 2009.  
304 pp. \$39.95. ISBN: 978-0-801-44845-4 (hardcover).

*Reviewed by Arthur Gutierrez-Hartmann*

University of Colorado Denver, Aurora, Colorado, USA.  
E-mail: a.gutierrez-hartmann@ucdenver.edu



Ever since James Wyngaarden sounded the initial alarm in 1979 that the physician-scientist was becoming an “endangered species,” there has been a crescendo of publications, initiatives, task forces, summits, and consensus conferences, revealing the very public hand-wringing by luminaries in academic medicine over this critical issue. Not surprisingly, physician leaders, as individuals and groups, have carefully considered and proposed numerous prescriptions to treat the insidious maladies that continue to threaten the very survival of the physician-scientist.

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Schafer is chair of the Department of Medicine at Weill Cornell Medical Col-

lege and the 2010–2011 President of the APM. In 2007, Schafer chaired an APM-sponsored consensus conference, “Revitalizing the Nation’s Physician-Scientist Workforce,” which served as the impetus for this book.

The main thesis of this book is that “physicians have played a vital role in advancing medical knowledge throughout history, and that their participation in the medical research enterprise in the future will be if anything more vital.” Thus, the book addresses the key historical, economical, institutional, and generational issues affecting pipeline, commitment, persistence, funding, and mentoring in the development of a successful physician-scientist. The data-driven chapters indicate that fewer physicians are entering and successfully persisting in research careers. These data are just the beginning; more complete and rigorous outcomes studies for MD-only, MD/PhD, and PhD trainees should be pursued to more precisely identify pivotal issues. The changing demographics in medical schools reveal that more women are pursuing careers as physician-scientists, particularly in MD/PhD programs. A future when more women will be in leadership positions, even in previously male-dominated schools and medical specialties, is near and will have a large impact in all medical institutions. Unfortunately, the increased recruitment of minority students to medical schools and MD/PhD programs, their specific needs, and their eventual impact in academic medicine were not discussed. Chapters providing examples of successful training pathways for physician-scientists established at Stanford, Washington University, and UCSD are important, since they provide a framework for other

institutions. The critical role of mentoring at every career stage and the development of formal mentoring programs are thoroughly discussed. Of note, surveys of junior faculty and fellows presented in the book rated salary and position security as key to expanding the physician-scientist workforce. It would have been interesting to assess whether application of the basic science culture of clearly defined, protected time; generous start-up packages, including hard-money salary support; and fewer regulatory demands on physician-scientists in clinical departments would reduce their attrition. Also, given the 80% success rate of MD/PhD programs and their success in diversifying the physician-scientist workforce, it is surprising that the basis for this success was not discussed as a separate chapter. Finally, the last chapters include recommendations from the 2005 AAMC Clinical Research Task Force II and 2007 APM Physician-Scientist Initiative Consensus Conference, which address the key pipeline and attrition issues. Although challenging, these are key prescriptions that will mitigate the problem of the vanishing physician-scientist and should be vigorously pursued.

In *The Vanishing Physician-Scientist?*, Schafer includes a question mark in the title, which likely represents cautious optimism. As such, it is a rallying call to arms, which, by virtue of being a book with an audience that will likely extend beyond academia, brings added focus and publicity to this critical problem. Thus, I hope that this book will gain the attention of the general public, politicians, the NIH, and foundations in order to actively stem the brain drain of our youngest, most diverse, and best and brightest in academic medicine.