

Mark D. Neuman, M.D., M.Sc., Recipient of the 2015 Presidential Scholar Award

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THERE are multiple paths to a successful research career. In anesthesiology, there was a traditional focus on basic research, epidemiology, and clinical trials. More recently, there has been a growing interest in health service and health policy research within the anesthesia community, especially within the context of healthcare reform and need to demonstrate value to the patients, public, and payers. It is against this background that Mark D. Neuman, M.D., M.Sc., has been selected as the 2015 American Society of Anesthesiologists (ASA) Presidential Scholar. He exemplifies the value of formal training and mentorship from multiple disciplines, and an ability to interact with decision-makers will help ensure that the questions addressed by the next generation of investigators will be used to address policy issues.

Dr. Neuman graduated from Yale University and completed his medical degree at the University of California, San Francisco (UCSF), California, where he received the UCSF Medical Alumni Association Academic Achievement Award. While still a medical student, Dr. Neuman became involved in research on tobacco control policy. Working with colleagues at UCSF, Dr. Neuman led innovative work using previously confidential industry documents to uncover tobacco companies' efforts to undermine public health legislation, academic publishing, and clinical practice guideline development. This work led to his first interaction with policy makers through invited talks at a major World Health Organization Ministerial Conference in Warsaw in 2002 and at the 12th World Conference on Tobacco or Health in Helsinki in 2003.

After completing his residency in anesthesiology at Brigham and Women's Hospital, Dr. Neuman came to the University of Pennsylvania to undertake formal training in health policy and outcomes research through the Robert Wood Johnson Foundation Clinical Scholars Program, a competitive 2-yr career development program for young physicians, which led to a Master's of Science degree. During this program, he was able to interact with faculty from not only the School of Medicine but also from the Wharton School of Business, Annenberg School of Communications, the School of Social Policy and Practice as well as other Clinical Scholars and Faculty from multiple specialties both locally and nationally. He also was able to visit with policy makers in Washington and the Centers for Medicare and Medicaid Services. It is with this robust formal training and network of mentors and collaborators that Dr. Neuman



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joined our department in 2010 as a Tenure-Track Assistant Professor with joint appointments as an Assistant Professor of Medicine (Geriatrics) and Senior Fellow in Penn's Leonard Davis Institute of Health Economics.

Dr. Neuman initially received grant support in the form of a Mentored Research Training Grant from the Foundation for Anesthesia Education and Research, followed shortly thereafter with a K08 award from the National Institute on Aging. He has been incredibly prolific during the Clinical Scholars Program, which has led to the publication of multiple peer-reviewed original research articles in high-impact medical journals. Between June 2014 and January 2015 alone, Dr. Neuman published research articles in the *Journal of the American Medical Association* and *JAMA Internal Medicine*. These articles included works of substantial methodologic and public health importance, including a major study comparing the effectiveness of regional *versus* general anesthesia for preventing mortality and major complications of hip fracture surgery, which itself built on the findings of an earlier major article that Dr. Neuman and colleagues published in 2012 in *ANESTHESIOLOGY*: the first large-scale

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investigation of survival and functional outcomes among elderly nursing home residents hospitalized with hip fractures; a major investigation examining the utility of available measures of nursing home quality in predicting hospital readmissions among older adults discharged to postacute care settings; the first systematic investigation of the durability over time of high-level clinical practice guideline recommendations; and an important article on the presentation of risks and benefits of novel cardiac surgical procedures to the public on hospital Web sites.

This remarkable academic output represents only part of a career so far that has been notable for both the quantity and the quality of research that it has produced. Dr. Neuman has been sole or senior author for three peer-reviewed perspective articles in the *New England Journal of Medicine*, which have raised important questions regarding challenges in surgical decision-making for older adults and outlined new visions for the role of the anesthesiologist in perioperative care. Additional work has appeared in leading journals focused on health policy (*Milbank Quarterly*), health economics (*Journal of Health Economics* and *Health Economics*), statistics (*Journal of the American Statistical Association*), anesthesiology (*ANESTHESIOLOGY* and *Anesthesia and Analgesia*), geriatrics (*Journal of the American Geriatrics Society*), surgery (*Annals of Surgery*, *JAMA Surgery*, and *Journal of the American College of Surgeons*), and quality and safety in health care (*BMJ Quality and Safety*, and *Circulation: Cardiovascular Quality and Outcomes*). What is clear through the diversity of Dr. Neuman's publications is that he is a genuine ambassador to audiences outside of anesthesiology and a representative of the broad scope of inquiry embraced by our field.

Beyond his efforts in research, Dr. Neuman has already been recognized for his unique research qualifications by his appointment as an Associate Editor of *ANESTHESIOLOGY*. He is also very involved with the ASA as the current chair of the Committee on Geriatric Anesthesia, a role that he has leveraged to promote development of new educational efforts focused on the care of older surgical patients and to advocate for greater funding by the National Institute on Aging for research in anesthesiology. He is a past member of the ASA's

Committee on Performance and Outcomes Measurement, the Committee on Academic Anesthesiology, the Accountable Care Organization Task Force, and the Abstract Review Subcommittee on Outcomes and Database Research. He currently serves as a member of the Anesthesia Quality Institute's Data Use Committee.

Since learning of his being awarded the Presidential Scholar, Dr. Neuman was notified that he received \$11.9 million funding for a major, multicenter pragmatic trial of spinal *versus* general anesthesia from the Patient Centered Outcomes Research Institute. This proposal involved engagement with a wide array of patients and stakeholders, including local elder advocacy organizations, the ASA and the Anesthesia Quality Institute, the U.S. Centers for Medicare and Medicaid Services, the Gerontological Society of America, and the American Academy of Orthopedic Surgeons, as well as 37 academic and community hospitals in the United States, Canada, and Australia. It takes both intellect, fortitude, and a strong desire to advance care to submit such a large and complex trial, and the award clearly signifies a major funding organization's confidence that he has "the right stuff" to get it done.

Mark D. Neuman's work to date makes him a truly outstanding recipient for the ASA Presidential Scholar Award. His training and ability to assimilate information and connect people from different specialties and with leaders in organized medicine demonstrate the value of ensuring that our junior faculty receive formal training, mentorship, and connections outside of our specialty. He is among a group of outstanding young investigators in health services and health policy research that we need to nurture and grow. He will clearly be a role model and mentor to that next generation.

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Competing Interests

The author declares no competing interests.