



**Mariel Lavieri, PhD**

**Joshua D. Stein, MD, MS**

## Operations Research in Healthcare

Monday, December 5, 2011 4:10-6PM

FXB 1012



**Mariel Lavieri, PhD**, is an Assistant Professor in the Industrial and Operations Engineering department of the College of Engineering at the University of Michigan. She has bachelor's degrees in Industrial and Systems Engineering as well as Statistics and a minor in String Bass Performance from the University of Florida. She also holds a Masters and PhD in Management Science from the University of British Columbia. In her work, she applies operations research to health care. Her most recent research focuses on medical decision making, in particular on determining optimal screening, monitoring and treatment protocols by explicitly modeling stochastic disease progression. She has also developed models for health workforce planning, which take into account training requirements, workforce attrition, capacity planning, promotion rules and learning. Mariel is the recipient of the Bonder Scholarship (for her potential in making a significant contribution to the field of applied operations research in health care services), the Pierskalla Award (awarded for the best paper presented in a Health Applications Society sponsored session at INFORMS) and a honorary mention in the George B. Dantzig Dissertation Award (for the best dissertation in any area of operations research and the management sciences that is innovative and relevant to practice). Mariel currently serves in the Editorial Board of the Operations Research for Health Care journal and is a council member of the INFORMS Health Applications Society.



**Joshua D. Stein, MD, MS**, is an Assistant Professor of Ophthalmology and Visual Sciences on the Cataract and Glaucoma Service at the University of Michigan Kellogg Eye Center. Dr. Stein cares for patients with different forms of glaucoma with a special interest in the surgical treatment of patients with glaucoma, including glaucoma filtering surgery and glaucoma drainage implant surgery. As a health services researcher, his research interests include studying utilization patterns and outcomes of patients with ocular diseases. Dr. Stein graduated from Wesleyan University with a BA and earned a MS in Evaluative Clinical Sciences from Dartmouth Medical School. He then attended Thomas Jefferson University for medical school, completed an internship at Abington Memorial Hospital, a residency in ophthalmology at New York University, followed by a research and clinical fellowship in glaucoma at Duke University. He is a Diplomate of the American Board of Ophthalmology.

The seminar series "Providing Better Healthcare through Systems Engineering" is presented by the U-M Center for Healthcare Engineering and Patient Safety: Our mission is to improve the safety and quality of healthcare delivery through a multi-disciplinary, systems-engineering approach.

Associated papers related to our speakers' presentations can be accessed at:  
<http://sitemaker.umich.edu/safety/home>.

For additional information and to be added to the weekly e-mail for the series, please contact [genekim@umich.edu](mailto:genekim@umich.edu).