DANIEL J. EPSTEIN DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING

EPSTEIN INSTITUTE SEMINAR • ISE 651 SEMINAR

Operations Research and Public Health

Margaret L. Brandeau

**Coleman F. Fung Professor of Engineering
and Professor of Medicine
Stanford University**

ABSTRACT

What is the most cost-effective way to use limited HIV prevention and treatment resources? How should the Centers for Disease Control and Prevention revise national immunization recommendations so that gaps in vaccination coverage will be filled in a cost-effective manner? To what extent should local communities stockpile antibiotics for response to a potential bioterror attack? This talk will describe examples from past and ongoing model-based analyses of public health policy questions. We will describe OR-based analyses can inform public health decision making. We also provide perspectives on key elements of a successful policy analysis and discuss ways in which such analysis can influence policy.

**TUESDAY, OCTOBER 11, 2011
ELECTRICAL ENGINEERING BLDG ROOM 248
4:00 – 5:20 PM**

About the Speaker

Margaret Brandeau is Coleman F. Fung Professor of Engineering and Professor of Medicine (by Courtesy) at Stanford University. Her research focuses on the development of applied mathematical and economic models to support health policy decisions. Her recent work has focused on HIV prevention and treatment programs, programs to control the spread of Hepatitis B virus, and evaluating preparedness plans for bioterror response. She is a Fellow of the Institute for Operations Research and Management Science (INFORMS), and has received the President's Award from INFORMS (recognizing important contributions to the welfare of society), the Pierskalla Prize from INFORMS (for research excellence in health care management science), and a Presidential Young Investigator Award from the National Science Foundation, among other awards. Professor Brandeau earned a BS in Mathematics and an MS in Operations Research from MIT, and a PhD in Engineering-Economic Systems from Stanford University.