2021 Myles Hollander Distinguished Lecture
Sept. 24, 2021

Welcome
Dr. Sam Huckaba
Dean, College of Arts and Sciences
Florida State University

In Appreciation
Dr. Myles Hollander
Statistics Professor Emeritus and Robert O. Lawton Distinguished Professor
Florida State University

Speaker Introduction
Dr. Elizabeth H. Slate
Distinguished Research Professor
Duncan McLean and Pearl Levine Fairweather Professor of Statistics
Florida State University

Dr. Susan Murphy
2021 Hollander Distinguished Lecturer
Mallinckrodt Professor of Statistics and of Computer Science,
Radcliffe Alumnae Professor at the Radcliffe Institute, Harvard University

"We Used a Bandit Algorithm to Personalize But Did It Work?"
Reinforcement Learning Algorithms provide an attractive suite of online learning methods for personalizing interventions in digital health. However, after a reinforcement learning algorithm has been run in a clinical study, how do we assess whether personalization occurred? We might find users for whom it appears that the algorithm has indeed learned in which contexts the user is more responsive to a particular intervention. But could this have happened completely by chance? We discuss some first approaches to addressing these questions.

About the Lecturer
Susan Murphy is Mallinckrodt Professor of Statistics and of Computer Science and Radcliffe Alumnae Professor at the Radcliffe Institute, Harvard University. Her lab works on clinical trial designs and online learning algorithms in sequential decision-making, in particular in the area of digital health. Murphy developed the micro-randomized trial for use in constructing mobile health interventions, which is presently in use across a broad range of health related areas. Murphy is a 2013 MacArthur Fellow and a member of both the National Academy of Sciences and the National Academy of Medicine. She is a past president of the Institute of Mathematical Statistics and the Bernoulli Society and is a former editor of the Annals of Statistics. She is a prior recipient of the R.A. Fisher Award from the Committee of Presidents of Statistical Societies and the Guy Medal in Silver from the Royal Statistical Society.

About the Lectureship
The annual Myles Hollander Distinguished Lectureship recognizes an internationally renowned leader and pioneering researcher in statistics who has made a sustained impact on the field, and the lectures feature topics spanning the breadth of statistics.

About Myles Hollander
Myles Hollander joined the FSU Department of Statistics in 1965 upon completion of his M.S. and Ph.D. in Statistics at Stanford University after earning his B.S. in Mathematics from Carnegie Institute of Technology. He is Fellow of the American Statistical Association, Fellow of the Institute of Mathematical Statistics, and an Elected Member of the International Statistical Institute. He served as editor of the Journal of the American Statistical Association, Theory and Methods (1994-1996) after being editor-elect (1993-1994). In 2003, the American Statistical Association recognized him with the Gottfried E. Noether Senior Scholar Award for his excellence in theory, methodology, and applications in nonparametric statistics. At FSU, Hollander served as statistics chair for nine years (1978-1981, 1999-2005), and he retired in 2007.

The 2021 Myles Hollander Distinguished Lectureship is sponsored by:

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