THE UNIVERSITY OF GEORGIA
DEPARTMENT OF STATISTICS
AND
THE STATISTICS CLUB
jointly present

The Bradley Lecture

Friday, April 20, 2018
Special Collections Library | Room 285

Dr. Larry Wasserman
Department of Statistics
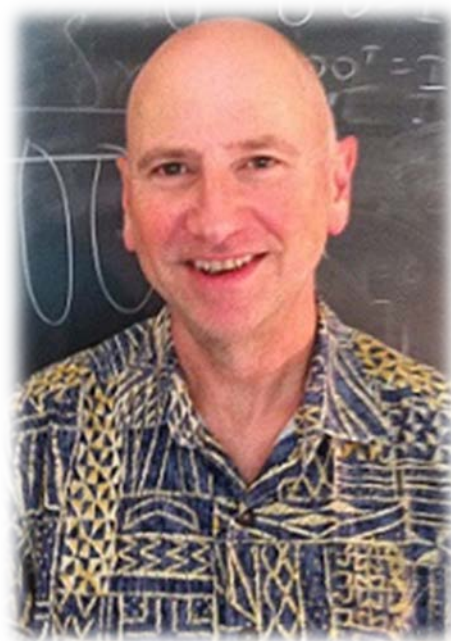Carnegie Mellon University

Local Minimax Testing

Dr. Wasserman will discuss a fundamental problem in Statistics: testing if a sample was drawn from a given distribution. Despite the long history of this problem, much is still not known especially when we allow for high dimensions and low smoothness. In this setting, we find the local minimax testing rates and we give some tests that optimal. We show that these tests have much higher power than standard tests. These results give interesting insights about the intrinsic difficulty of various statistical problems. This is joint work with Sivaraman Balakrishnan.

▪ *About the Speaker* ▪

Dr. Larry Wasserman is a UPMC professor of Statistics and Data Science in the Department of Statistics and Data Science and in the Machine Learning Department at Carnegie Mellon University. He received his PhD from the University of Toronto in 1988. In 1999 he received the COPSS Presidents' Award and the CRM-SSC Prize in 2002. He was elected a fellow of the American Statistical Association in 1996, the Institute of Mathematical Statistics in 2004, and the American Association for the Advancement of Science in 2011. He was elected to National Academy of Sciences in May, 2016.

Dr. Wasserman has written many research papers about nonparametric inference, asymptotic theory, causality, and applications of statistics to astrophysics, bioinformatics, and genetics. He has also written two advanced statistics textbooks, *All of Statistics* and *All of Nonparametric Statistics*.

In 2016, Dr. Wasserman became a member of the National Academy of Sciences in recognition of his distinguished and continuing achievement in original research.

▪ *History of the Bradley Lecture* ▪

The University of Georgia Department of Statistics and the Statistics Club are proud to host the 23rd Annual Bradley Lecture. The event honors former faculty member Dr. Ralph A. Bradley, who was born on November 28, 1923 in Smith Falls, Ontario, Canada, and who grew up in the village of Wellington. After graduating from Queen's University in 1944 with an honors degree in mathematics and physics, he served in the Canadian Army from 1944 to 1945, and afterwards earned his Masters of Arts degree in 1946. He received his PhD in 1949 at the University of North Carolina Chapel Hill, and went on to a very distinguished career. He was founder of the Department of Statistics at Florida State University and served as its chair from 1959 to 1978. He joined UGA in 1982.

Dr. Ralph Bradley made many contributions to the field of statistics as a researcher in design of experiments, nonparametric statistics, sequential analysis and multivariate analysis. He also had an exemplary record of service to the profession of statistics as a member of ASA, IMS, ISI, as well as by serving as a president of ASA in 1981.

The Bradley Lecture provides an opportunity for UGA graduate students to interact with the speaker, who is normally an eminent statistician of their choice. After the seminar in the afternoon, the speaker gives an after-dinner presentation and often stays for the next day's spring picnic to mingle with faculty and students.

We hope you'll join us for what should be an informative and exciting event!

▪ *Schedule of Events* ▪

Friday, April 20, 2018

3:30pm – 4:00pm
Arrival
Special Collections Library Room 285

4:00pm – 5:00pm
Lecture
Dr. Larry Wasserman
Special Collections Library Room 285

5:00pm – 6:00pm
Happy Hour
(Cash Bar & Light Refreshments Will Be Served)
Special Collections Library Room 285

6:00pm – 8:00pm
Dinner and After-Dinner Talk
Dr. Larry Wasserman
Special Collections Library Room 285

Saturday, April 21, 2018

11:00am – 3:00pm
Bradley Spring Picnic
Sandy Creek Park | Pavilion #1

▪ *After-Dinner Talk* ▪
Dr. Larry Wasserman
Speical Collections Library Room 285

Should Statistics Be More like Computer Science?

Statistics inherited its culture and tradition from the field of Mathematics. This served us well for many years. But now, Computer Scientists are leading the world in Data Science. Statistics is in danger of being left behind. I'll discuss the cultural differences between Statistics and Computer Science. Then I'll make some concrete suggestions for our field.

▪ *Bradley Spring Picnic* ▪

Sandy Creek Park | Pavilion #1
Saturday, April 21, 2018 | 11:00am – 3:00pm

Enjoy a relaxing afternoon full of food, fun and fellowship! Mingle with the guest speaker, faculty members, and graduate students while watching the students show off their outdoor grilling skills.