

# The 2023 Thomas R. Ten Have Symposium on Statistics in Mental Health

## CONFERENCE HISTORY AND OVERVIEW



The 10th Annual Thomas R. Ten Have Symposium on Statistics continues the annual Columbia-Cornell-NYU-Penn-Yale Symposium and is jointly sponsored by the five universities and the Mental Health Statistics Section of the American Statistical Association. The idea for a forum on statistics in psychiatry arose in 1998 from informal discussions among Eva Petkova, Ray Carroll, and Tom Ten Have, when Eva visited Ray Carroll at the University of Pennsylvania, where he was a visiting faculty member. The first forum took place in 1999 at the New York State Psychiatric Institute as an informal joint forum with participating statisticians from Columbia University and University of Pennsylvania. Between 1999 and 2003 the forum location rotated between Columbia University and University of Pennsylvania, with each forum consisting of two one-hour presentations on statistics in psychiatry by a member from each school and then ample time for informal discussions before happy hour. In 2004, Yale University joined as the third participating institution. In 2007 New York University became the fourth participating site and the "forum" was renamed to "symposium" in acknowledgement of the growing size and outreach of the event. The symposium continued to expand with adding Cornell University as another participating institution.

In 2011, Thomas Ten Have passed away. To honor his founding role in the symposium and his many contributions to the field of statistics in psychiatry and the broader statistics profession, the symposium was renamed to "Tom R. Ten Have Symposium on Statistics in Psychiatry" (TTH Symposium). The 2012 symposium was the first renamed TTH symposium, took place at the University of Pennsylvania and culminated in the Ten Have Memorial Lecture given by Professor C. Hendricks Brown. In 2013, the Statistics in Mental Health Section (MHS) of the American Statistical Association and the TTH organizers from the participating universities agreed to jointly sponsor the 2014 event that took place at Yale University on May 29th and May 30th, 2014. Since 2014, the MHS of the ASA has jointly sponsored the TTH symposium, including the Northwestern University Feinberg School of Medicine serving as an additional hosting site in 2018.

## AGENDA

The 2023 Thomas R. Ten Have Symposium on Statistics in Mental Health is scheduled for June 8th and June 9th, 2023 at the Joseph B. Martin Conference Center in Boston, MA. It is hosted by the Mental Health Statistics Section of the American Statistical Association, McLean Hospital, and Harvard Medical School.

### Day 1 (June 8, 2023)

Time	Activity
11:30-12:30	Registration, Welcome, and Opening Lunch
12:30-1:25	Doug Gunzler, Case Western Reserve University Using Structural Equation Modeling to Examine the Intersection of Mental Health and Chronic Disease
1:30-2:25	Hanga Galfalvy, Columbia University Medical Center Data-Driven Long-Term Suicidal Ideation Profiles in Late-Life Depression
2:30-3:25	Jin Jin, University of Pennsylvania Perelman School of Medicine Genetic Propensity for Risky Behavior and Depression and Risk of Lifetime Suicide Attempt Among Urban African Americans in Adolescence And Young Adulthood
3:25-3:40	Coffee Break
3:45-4:40	Chris Schmid, Brown University N-Of-1 Trials for Personalized Healthcare
4:40-5:30	Susan Murphy, Harvard University Keynote Presentation
5:30-6:30	Poster Session - Second Floor Lounge
7:00-9:00	Dinner And Drinks – Yard House (126 Brookline Ave, Boston, MA) Location is approximately 0.5 miles walking from the Martin Conference Center and directly accessible by the #8 and #19 MBTA buses that stop directly outside the Conference Center

**Day 2 (June 9,2023)**

Time	Activity
8:30-9:00	Continental Breakfast and Social
9:00-9:55	Wenna Xi, Weill Cornell Medicine Analysis of Big Data in Mental Health Research: Opportunities and Challenges
10:00-10:55	Xin Zhou, Yale School of Public Health Improving Regression Calibration to Correct for Bias from Mis-Measured Exposure, with Application in the Association Between PM2.5 and Cognitive Decline
10:55-11:05	Coffee Break
11:05-12:00	Hyung Park, New York University Grossman School of Medicine Bayesian Estimation of Covariate Assisted Principal Component Regression for Brain Functional Connectivity
12:05-1:00	Justin Baker, Harvard Medical School Sensing Psychosis: Deep Phenotyping of Neuropsychiatric Disorders
1:00	Closing

## POSTER SESSION PRESENTATIONS

Name	Poster
Margaret Gacheru, Columbia University Medical Center	Quantifying Cognitive Reserve Through a Formative Framework
Jung Wun Lee, University of Connecticut	A Cluster Disagreement Problem Between Training and Testing Data
Soohyun Kim, Columbia University Medical Center	Temporal Generative Models for Learning Heterogeneous Group Dynamics of Ecological Momentary Data
Charlotte Fowler, Columbia University Medical Center	Testing Unit Root Non-Stationarity in the Presence of Missing Data in Univariate Time Series of Mobile Health Studies
Danni Wu, New York University Grossman School of Medicine	Developing A Bayesian Hierarchical Model for a Prospective Individual Patient Data Meta-Analysis with Continuous Monitoring
Hanchao Zhang, New York University Grossman School of Medicine	Clustering Positive Semi-Definite Matrices
Leonard Mushunje, Columbia University	Quantification of Crowd Size with Social Media: Relevance to Tracking the Influence of Behavioral Events on Mental Health in South Africa
Minji Hwang and Myung Ki, Korea University	Suicide Inequalities Over 25 Years in Korea: Decreasing Trend but with Increasing Social Inequalities
Baoyi Shi, Columbia University Medical Center	Network-Assisted Mediation Analysis