Centennial Distinguished Speakers Series
An (un)Holy Union: Causal Inference, Semiparametric Statistics and Machine Learning in the Age of Data Science
February 3, 2022 at 5:00 p.m. | Register Here

Speaker Bios

**Eric J. Tchetgen Tchetgen, PhD**
*(Keynote Speaker)*

_Luddy Family President's Distinguished Professor*

_Professor of Statistics and Data Science*

_The Wharton School of the University of Pennsylvania_

**Biography:** Eric J. Tchetgen Tchetgen is the Luddy Family President’s Distinguished Professor at the Wharton School of the University of Pennsylvania.

Professor Tchetgen Tchetgen comes to the University of Pennsylvania from Harvard University, where he has served since 2008 as Professor of Biostatistics and Epidemiologic Methods with joint appointments in the departments of Biostatistics and Epidemiology at the T.H. Chan School of Public Health.

He researches infectious diseases, including HIV/AIDS, and the role of genetic and social factors in the patterns, causes, and effects of public health. Professor Tchetgen Tchetgen has received grants from the National Institutes of Health and the Centers for Disease Control.

He completed his Ph.D. in Biostatistics at Harvard University in 2006 under the supervision of Professor James M. Robins. He received his B.S. in Electrical Engineering from Yale University in 1999.
Kiros Berhane, PhD (Moderator)

Cynthia and Robert Citron-Roslyn and Leslie Goldstein Professor Chair, Biostatistics
Columbia Mailman School of Public Health

Biography: Dr. Kiros Berhane is Cynthia and Robert Citron-Roslyn and Leslie Goldstein Professor and Chairman of the Department of Biostatistics at the Mailman School of Public Health, Columbia University. He received his BSc in Statistics from Addis Ababa University (Ethiopia), MS in Statistics from University of Guelph (Canada), PhD in Biostatistics from University of Toronto (Canada), and completed postdoctoral fellowship at Johns Hopkins University (USA).

He is a widely published international expert on development of statistical methods for complex and correlated data structures, and their application into a wide range of public health topics with focus on environmental health. Prior to joining Columbia in January 2020, Dr. Berhane was Professor and Director of Graduate Programs in Biostatistics and Epidemiology at the University of Southern California. He served on several national and international advisory and review panels, including committees of the Institute of Medicine (US National Academies) and as a member of the US-EPA Science Advisory Board. He currently serves as a member of the Review Committee and the Global Health Oversight Committees of the Health Effects Institute (HEI).

He recently joined the Science magazine’s Board of Reviewing Editors. He was a Fulbright Scholar in 2016-2017. He will be serving as a member of the newly formed committee of the National Academy of Science, Engineering and Medicine (NASEM) on Assessing Causality from a Multidisciplinary Evidence Base for National Ambient Air Quality Standards. He is an elected fellow of the American Statistical Association.
Centennial Distinguished Speakers Series
An (un)Holy Union: Causal Inference, Semiparametric Statistics and Machine Learning in the Age of Data Science
February 3, 2022 at 5:00 p.m. | Register Here
Speaker Bios

Daniel Malinsky, PhD (Panelist)
Assistant Professor, Biostatistics
Columbia Mailman School of Public Health

Biography: I'm an Assistant Professor of Biostatistics in the Mailman School of Public Health at Columbia University. Currently, I'm a visitor at UC Berkeley's Simons Institute.

My research focuses mostly on causal inference: developing statistical methods and machine learning tools to support inference about treatment effects, interventions, and policies. Current research topics include structure learning (a.k.a. causal discovery or causal model selection), semiparametric inference, time series analysis, and missing data. I also work on algorithmic fairness: understanding and counteracting the biases introduced by data science tools deployed in socially-impactful settings. Finally, I have interests in the philosophy of science and the foundations of statistics.

Previously, I was a Postdoctoral Fellow at Johns Hopkins University. I completed my PhD at Carnegie Mellon University in 2017 and earned my BA from Columbia University in 2011.

Caleb Miles, PhD (Panelist)
Assistant Professor, Biostatistics
Columbia Mailman School of Public Health

Biography: Dr. Caleb Miles works on developing semiparametric methods for causal inference and applying them to problems in public health. His applied work has largely been in HIV/AIDS, and he has more recently begun to work on psychiatric applications. Dr. Miles' current methodological research interests include causal inference, its intersection with machine learning, mediation analysis, interference, and measurement error.
Kara Rudolph, PhD, MHS, MPH (Panelist)
Assistant Professor, Epidemiology
Columbia Mailman School of Public Health

Biography: Kara Rudolph is an epidemiologist with research interests in developing and applying causal inference methods to understand social and contextual influences on mental health, substance use, and violence in disadvantaged, urban areas of the United States. Her current work focuses on developing methods for transportability and mediation, and subsequently applying those methods to understand how aspects of the school and peer environments mediate relationships between neighborhood factors and adolescent drug use across populations. More generally, her work on generalizing/transporting findings from study samples to target populations and identifying subpopulations most likely to benefit from interventions contributes to efforts to optimally target available policy and program resources. She completed a PhD in Epidemiology and an MHS in Biostatistics from the Johns Hopkins Bloomberg School of Public Health and was a Robert Wood Johnson Foundation Health and Society Scholar.

Linda Valeri, PhD (Panelist)
Assistant Professor, Biostatistics
Columbia Mailman School of Public Health

Biography: Linda Valeri is an assistant professor in Biostatistics at the Columbia University Mailman School of Public Health. Dr. Valeri joined the Department of Biostatistics at Columbia University in 2018 after 3 years as faculty at the Laboratory of Psychiatric Biostatistics of McLean Hospital and the Department of Psychiatry at Harvard Medical School. Dr. Valeri received her PhD in Biostatistics from Harvard University in 2013, where her dissertation focused on statistical methods for causal mediation analysis. Dr. Valeri is an expert in causal inference with a focus on statistical methods for causal mediation analysis, measurement error, and missing data. She is interested in translating statistical methods in public health to improve our understanding of mental health, environmental determinants of health, and health disparities.