ABSTRACT:

In this talk, I will use several real datasets to show why semiparametric models, particularly partial linear additive and generalized partial linear additive models, are helpful and valuable in economics and biomedical studies. I will emphasize that the numbers of nonlinear and linear covariates may diverge with the sample size.

BIO: Hua Liang is a Professor of statistics and biostatistics in the Department of Statistics at George Washington University. Dr. Liang received his Ph.D. in Mathematical Statistics from the Institute of Systems Science, Chinese Academy of Sciences, in 1992 and his Ph.D. in Statistics from Texas A&M University under the direction of Professor Raymond J. Carroll in 2001. He was Assistant Professor (2002-2005) at St. Jude Children’s Research Hospital, Associate Professor (2005-2009), and Professor (2009-2013) at the University of Rochester Medical Center before joining the GWU.

Dr. Liang has worked on semi-parametric regression, mixed-effects models for longitudinal data, measurement error models, high-dimensional data analysis, functional data analysis, and HIV dynamic models. He has been awarded two RO1, one T32, and five NSF grants. He is a Fellow of ASA, IMS, Royal Statistical Society, and a member of the International Statistical Institute. Dr. Liang has served as an Associate Editor for Biostatistics, Electronic Journal of Statistics, and JASA. He has published over 180 articles. Additionally, he was awarded the H.O. Hartley award in 2012.