



## American Statistical Association Mid-Michigan Chapter



In celebration of the 2013 International Year of Statistics, the Mid-Michigan Chapter is pleased to announce its 2013 fall meeting. Our guest speaker is Professor Mei-Ling Ting Lee of University of Maryland, College Park, MD.

Mei-Ling Ting Lee is currently Professor of Epidemiology & Biostatistics and Director of the Biostatistics & Risk Assessment Center at the University of Maryland. Previously she was a faculty member at Boston University, Harvard University, and was professor and chair of the Department of Biostatistics at the Ohio State University. She earned her PhD degree from the Department of Mathematics at University of Pittsburgh in 1980. Dr. Lee is a biostatistician with a wide range of research interests in statistical modeling, methods, and applications, including survival and time-to-event studies, latent disease progression, nonparametric methods for clustered data, and genomic data analysis. Her areas of medical application include cancer, occupational risk, the environment, epidemiology, microbiology, pharmacokinetics and genomics. Lee was among the first to demonstrate the importance of replication in microarray studies and developed sample size and power calculations for these kinds of studies. Dr. Lee is the founding editor and editor-in-chief of the international journal *Lifetime Data Analysis*, the only international statistical journal that is specialized in modeling time-to-event data. The journal is currently publishing its 19<sup>th</sup> volume by Springer.



**Tuesday, October 15, 2013, 7:00 – 8:30 pm**

Chapter business meeting and presentation

Social hour & meeting: 7:00 – 7:30 pm

Presentation: **7:30 – 8:30 pm**

Location: **Michigan State University, C405 Wells Hall**

Title of presentation: **First-hitting-time Based Threshold Regression and Connections with PH Models**

**Abstract:** Cox regression methods are well-known. It has, however, a strong proportional hazards assumption. In many medical contexts, a disease progresses until a failure event (such as death) is triggered when the health level first reaches a failure threshold. I'll present a model for the health process that requires few assumptions and, hence, is quite general in its potential application. Several examples, including lung cancer, cure-rate, and bone fractures, will be discussed. The methodology provides medical researchers and biostatisticians with new and robust statistical tools for estimating treatment effects and assessing a survivor's remaining life.

[This is a joint work with G.A. Whitmore of McGill University.]

**Chapter web address:** <http://asa.mth.cmich.edu/>