QI QI

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EDUCATION

University of Connecticut   2017 - 2020
Ph.D. Statistics, Department of Statistics
Thesis: *Statistical Methods for Longitudinal Data with Applications to Dementia and Human Microbiome Projects.*
Committee: Dr. Lynn Kuo (Main advisor), Dr. Ming-hui Chen and Dr. Xiaojing Wang

University of Connecticut   2015 - 2017
M.S. Statistics, Department of Statistics

Renmin University of China   2011 - 2015
B.S. Statistics, School of Statistics

WORK EXPERIENCE

Statistical Scientist: Genentech   Aug 2020 - present

- Work on the Phase III trial of Fenebrutinib for Multiple Sclerosis.
- Conduct QT study for Fenebrutinib.

Research Fellow: Boehringer - Ingelheim   Dec 2019 - Jul 2020

- Conducted research for potential type I error inflation if using Chronic slope to assess treatment effect. Promoted random change point model regarding preserved type I error rate.
- Conducted research for exposure-response analysis and construct segmented sigmoid Emax model for Phase II dose finding study.

Internship: Boehringer - Ingelheim   May 2019 - Aug 2019

- Established change point detection model based on stochastic process and applied to Chronic Kidney Disease (CKD) data.

Research Assistant: Albert Einstein College of Medicine   Aug 2017 - Dec 2019

- Conducted analyses to evaluate a new memory impairment classification system and investigated the prediction performance on Alzheimer's Disease.

Statistical Consultant: University of Connecticut   Aug 2017 - May 2019

- Presented workshops: *Variable Selection with Demos in R* and *Survival Study Design and Analysis*.
- Conducted R shiny apps to visualize the occupancy of classrooms at University of Connecticut. Built a web-page for registrar office to describe the difficulties of classroom schedule and analyze the compliance of standard meeting pattern.
- Completed several full projects, provided walk-in and online service.

RESEARCH INTERESTS

Longitudinal Data Analysis, Survival Analysis, Joint Modeling, Multi-stage Analysis, Stochastic Models, Data Visualization, Bayesian Methods, Machine Learning, Statistical Computing.

TECHNICAL SKILLS

R (mainly using packages *nimble, ggplot2, shiny, dplyr, R2jags, vegan, phyloseq, etc.*), SAS, SQL, Python, BUGS, JAGS, SPSS, AMOS, Matlab, Stata, LaTeX, Github, Mathematica

LEADERSHIP AND SCIENTIFIC ACTIVITIES

- **Committee Member**: Conference on Bayesian Modeling, Computation and Applications   2018
- **Session Chair**:
  - Joint Statistical Meeting   2019

WORKING PAPERS

- Qi Qi, Lynn Kuo, Susan Resnick, Ellen Grober. A Bayesian Joint Model of Longitudinal Ordinal Outcomes and Time-to-Event Data.
- Qi Qi, Lynn Kuo, Ming-Hui Chen, Yanjiao Zhou. A Bayesian Multistage Model for Joint Transitional Data.
- Qi Qi, Lynn Kuo, Yanjiao Zhou. A Bayesian Transitional Model for High Dimensional Data with Application to Human Microbiome Project.
- Yaoshi Wu, Wansuk Choi, Qi Qi, Zhichao Sun, Qiqi Deng, Brian Jin. A Random Change Point Model Using Stopping Time of Poisson Process for Estimating Two Intersecting Lines.
- Yaoshi Wu, Qi Qi. A Random Two-change-point Model Using Stopping Time of Poisson Process and Estimation Function for Estimating Three Intersecting Lines.
- Yaoshi Wu, Qi Qi. Segmented Emax model of exposure-response relationship for clinical trials.
- Ellen Grober, Qi Qi, Lynn Kuo, Jason Hassenstab, Richard J. Perrin, Richard B. Lipton. Stages of Objective Memory Impairment Predict Alzheimer's Disease Neuropathology.
- Ellen Grober, Qi Qi, Lynn Kuo, Jason Hassenstab, Richard J. Perrin, Richard B. Lipton. The Free and Cued Selective Reminding Test Predicts Braak Stage.

WORK IN PROGRESS

- Qi Qi, Lynn Kuo, Susan Resnick, Ellen Grober. A Multi-stage Stochastic Transitional Model with Application to Baltimore Longitudinal Study of Aging.

PRESENTATIONS

Interactive Visualization of Housing Condition Changes in NYC   2019
Speed presentation and e-poster for data challenge competition: *Joint Statistical Meeting (JSM)*

Predicting Alzheimer's Disease Using a New Classification System Based on Objective Memory Impairment Assessment   2019
Poster session for student paper competition: *the 33rd New England Statistics Symposium (NESS)*

A Multi-Stage Stochastic Model in the Analysis of Longitudinal Data   2018
Invited presentation: *Conference on Bayesian Modeling, Computation and Applications*

TEACHING EXPERIENCE

- Instructor, Introduction to Mathematical Statistics II (STAT 3345)
  - Spring 2019, Teaching Evaluation: 4.0 out of 5, Class Size: 41
- Instructor, Discussion Section of Introduction to Statistics (STAT 1000Q) and Elementary Concepts of Statistics (STAT 1100Q)
  - Fall 2018, Spring 2018, Fall 2017, Spring 2017, Class Size: 12
- Teaching Assistant, Advanced Probability (STAT 6325)
  - Fall 2018