

The 7th Stat4Onc Annual Symposium

SHORT COURSES

Dose Finding in Clinical Development

8:30 am-5:00 pm, May 8, 2024

Instructor: Dr. Naitee Ting is a Fellow of American Statistical Association (ASA). He is currently a Director in the Department of Biostatistics and Data Sciences at Boehringer-Ingelheim Pharmaceuticals Inc. (BI). Dr. Qiqi Deng is a Senior Director in Clinical Biostatistics at Moderna. She leads a group of biostatisticians for translational, emerging programs and public vaccine in the therapeutic area of infectious disease. Dr. Lili Zhu is currently a Director at Moderna. She is a lead clinical biostatistician working in Oncology clinical trials.

Outline: Part I: Proof of Concept in a Phase II Trial Combined with Dose Ranging (By Naitee Ting) Traditional Phase II clinical development of new drugs treating chronic diseases separates one study for proof of concept (PoC), and other studies for dose ranging purposes. Part II: Dose Finding in oncology (by Qiqi Deng and Lili Zhu) Historically, dose determination in oncology has followed divergent paths from other non-oncology therapeutic areas due to the unique characteristics and requirements in Oncology.



Dr. Naitee Ting



Dr. Qiqi Deng



Dr. Lili Zhu

Bayesian Designs of Clinical Trials Using Historical Data: From Theory to Practice

8:30 am-5:00 pm, May 8, 2024

Instructor: Dr. Ming-Hui Chen is a Board of Trustees Distinguished Professor and Head of Department of Statistics at University of Connecticut (UConn). He obtained his PhD in Statistics from Purdue University in 1993. He was elected to Fellow of International Society for Bayesian Analysis in 2016, Fellow of Institute of Mathematical Statistics in 2007, and Fellow of American Statistical Association in 2005.

Outline: This short course starts with a brief review of early development of Bayesian SSD. Then, a comprehensive review of Bayesian methods for borrowing historical information and proper use of these methods in Bayesian clinical trial designs will follow. The short course will also cover the computational algorithms and recent available software on Bayesian SSD. The short course will also highlight several important applications in designing clinical trials to demonstrate the superiority of Bayesian SSD.



Dr. Ming-Hui Chen

AI for Clinical Trials: Emulation, Design, Matching, and Q&A Tools

1:30 pm-5:00 pm, May 8, 2024

Instructor: Dr. Ruishan Liu is an Assistant Professor of Computer Science at USC. She received her PhD in Electrical Engineering at Stanford University in 2022 and was a Postdoctoral Fellow in Biomedical Data Science at Stanford University from 2022 to 2023.

Outline: This course will provide a practical guide to leveraging artificial intelligence (AI) in clinical trials. It is structured to guide participants through the development and application of AI frameworks and tools, with a focus on enhancing the efficiency, accuracy, and accessibility of clinical trials.



Dr. Ruishan Liu