THE UNIVERSITY OF OKLAHOMA HEALTH SCIENCES CENTER

OSCTR Oklahoma Shared Clinical & Translational Resources

**Biostatistics, Epidemiology, and Research Design**
**Key Component Activity**

# *OSCTR Biostatistics, Epidemiology and Research Design Core*

## SEMINAR

# STATISTICAL ANALYSIS OF FAMILY STUDIES WITH KNOWN KINSHIP MATRICES: APPLICATIONS TO THE STRONG HEART FAMILY STUDY

**Daniel Zhao, Ph.D.**
Professor
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The University of Oklahoma Health Sciences

**Wednesday, March 26th, 2025**
**12:00 PM – 1:00 PM**

**Virtual:** Zoom **Meeting ID:** 512 489 2168 **Passcode:** 186201404

**Registration required in advance for this meeting.**

**After registration, you will receive a confirmation email containing the Zoom link and information about the workshop materials.**

**Abstract:**

For epidemiological family studies with known kinship matrices

Aim 1: Compare and evaluate the performance of GEE model with a Bayesian model for continuous outcome variables

Aim 2: Compare and evaluate the performance of GEE model with a Bayesian model for binary outcome variables

Aim 3: Propose and evaluate a Bayesian proportional hazard model for survival outcomes

**END OF WORKSHOP EVALUATION SURVEY:**

- Please complete the survey at the following link: https://bbmc.ouhsc.edu/redcap/surveys/?s=KWMPK4F4AXRJNYJP
- You will also receive the link by email after the workshop.

**REGISTRATION:**

- Registration can be completed at https://osctr.ouhsc.edu/seminars/short-course.

**SPONSOR ACKNOWLEDGEMENT:**

- Sponsored by the Clinical Epidemiology Unit of the Biostatistics and Epidemiology Research Design (BERD) Core of the Oklahoma Shared Clinical and Translational Resources (OSCTR)
- National Institutes of Health, National Institute of General Medical Sciences Grant U54GM104938

**FACULTY BIOGRAPHICAL SUMMARY:**

- Dr. Daniel Zhao is a Presidential Professor of Biostatistics in the Department of Biostatistics and Epidemiology at the University of Oklahoma Health Sciences. He serves as the Associate Dean for Research in the Hudson College of Public Health and the Associate Director of Biostatistics Shared Resources at the Stephenson Cancer Center. Dr. Zhao earned his BS in Mathematics from the Peking University and his PhD in Statistics from Iowa State University. His research areas include design and analysis of clinical trials, nonparametrics, multiple testing, and adaptive design. He has published more than 140 refereed papers and contributed as a co-investigator to over 60 funded grants. He is an Elected Member of the International Statistical Institute. He currently serves an Associate Editor for Pharmaceutical Statistics and a member of the National Cancer Institute Gynecologic Cancers Steering Committee.