Jieru Shi

Ph.D. candidate,
Biostatistics, School of Public Health,
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Education

University of Michigan

Ann Arbor, MI, USA

Ph.D. candidate, Biostatistics

Defended. The degree will be conferred: Aug 2023

University of Michigan

Sichuan University

Ann Arbor, MI, USA

Master of Science, Biostatistics

Apr 2020 Chengdu, Sichuan, China

Bachelor of Science, Statistics

Jun 2018

City University of Hong Kong, Exchange student, Statistics

Jan-May 2016

Publication

Method

- 1. **Shi, J.**, Wu, Z., & Dempsey, W. (2022). Assessing Time-Varying Causal Effect Moderation in the Presence of Cluster-Level Treatment Effect Heterogeneity. *Biometrika*.
- 2. **Shi, J.**, Wu, Z., & Dempsey, W. (2022). Estimating Time-Varying Direct and Indirect Causal Excursion Effects for Binary Outcomes. arXiv.
- 3. **Shi, J.**, Wu, Z., & Dempsey, W. (2023). Incorporating auxiliary variables to improve the efficiency of time-varying treatment effect estimation. arXiv.
- 4. **Shi, J.**, Dempsey, W. (2023). A meta-learning method for estimation of causal excursion effects to assess time-varying moderation. arXiv.

Applied

- 5. Golbus, J. R., Gupta, K., Luff, E., **Shi, J.**, Dempsey, W., ... & Nallamothu, B. K. (2023+). A Randomized Controlled Trial of a Remotely Delivered Mobile Health Intervention to Augment Cardiac Rehabilitation: The Virtual AppLication-supported ENvironment To INcrease Exercise (VALENTINE) Study. (**Accepted** for publication in *npj Digital Medicine*)
- 6. **Shi, J.**, Golbus, J. R., Gupta, K., Luff, E., Dempsey, W., Boyden, T., ... & Nallamothu, B. K. (2023+). Text Messages to Promote Physical Activity in Patients with Cardiovascular Disease: A Micro-Randomized Trial of a Just-In-Time Adaptive Intervention. (**In progress**)

Honors and Awards

Honorable Mention of the oral presentation session, 2023 Michigan Student Symposium for Interdisciplinary Statistical Sciences (MSSISS) at Ann Arbor, MI.

Student Travel Award Recipient, 2023 the 14th International Conference on Health Policy Statistics (ICHPS) at Scottsdale, AZ.

Junior Researcher Travel Grant, 2022 American Causal Inference Conference (ACIC) at Berkeley, CA.

Rackham Travel Grant, 2022 Joint Statistics Meeting (JSM) at Washington, D.C.

Rackham Travel Grant, 2021 Joint Statistics Meeting (JSM) virtual.

Presentations and Talks

Time-Varying Causal Effect Estimation in Mobile Health Studies

• Invited lecture in BIOS 653, November 2022.

Assessing Time-Varying Causal Effect Moderation in the Presence of Cluster-Level Treatment Effect Heterogeneity

- JSM (contributed talk), August 2021 & August 2022.
- American Causal Inference Conference (ACIC) (poster), May 2022.

A Meta-Learning Method for Estimation of Causal Excursion Effects to Assess Time-Varying Moderation

- Michigan Student Symposium for Interdisciplinary Statistical Sciences (MSSISS), March 2023.
- American Causal Inference Conference (ACIC) (poster), May 2023.

Estimating Time-Varying Direct and Indirect Causal Excursion Effects for Binary Outcomes

• ENAR 2023 Spring Meeting (contributed talk), March 2023.

Professional Service

International Chinese Statistical Association (ICSA) 2023 Applied Statistics Symposium, Organizing committee.

Graduate Student Working Group in the Biostatistics Department, University of Michigan, 2022-2023, Organizer.

Causal Inference Challenges in Sequential Decision Making at NeurIPS 2021, Program committee member.

Machine Learning for Mobile Health at NeurIPS 2020, Co-organizer.