Zichun Xu

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Research interests	High-dimensional statistics, selective inference, and their application in genomics

Education

University of Washington	Seattle, WA
PhD in Biostatistics	September 2023 – Present
Yale University	New Haven, CT
MS in Biostatistics	September 2021 – May 2023
Fudan University	Shanghai, China
BS in Biotechnology	2017 September – June 2021

Publications

Cell-type-specific co-expression inference from single cell RNA-sequencing data.
Chang Su, **Zichun Xu**, Xinning Shan, Biao Cai, Jingfei Zhang, and Hongyu Zhao.
Nature Communications 14.1 (2023): 4846.

Probability-of-Decision interval 3+3 (PoD-i3+3) Design for Phase I Dose Finding Trials with Late-onset Toxicity.
Zichun Xu and Xiaolei Lin.
Statistical Methods in Medical Research, 31.3 (2022): 534-548.

Research experience

University of Washington
Independent Research (Advisor: Daniela Witten, Ali Shojaie) February 2024 – Present
Semi-supervised learning; prediction-powered inference.

University of Washington
Research Assistant (Advisor: Daniela Witten)   October 2023 – Present
Selective inference with randomized response

Fred Hutchinson Cancer Research Center
Research Assistant (Advisor: Jing Ma)   September 2023 – Present
Differential graphical model for microbiome data.

Yale University

Research Assistant (Advisor: Hongyu Zhao, Jingfei Zhang)   January 2022 –
May 2023
Estimation and inference of gene co-expression network for single-cell RNA-
sequencing data; high-dimensional covariance regression with sparsity.

Fudan University
Research Assistant (Advisor: Xiaolei Lin)   September 2020 – June 2021
Statistical methods for phase I clinical trials with missing data.

Honors and   Dr. Colin White Memorial Scholarship (Yale School of Public Health)   2023
scholarships   Xinze Life Science Scholarship (Fudan University)   2018 & 2020
Outstanding Student Scholarship (Fudan University)   2019

Skills   **Programming**
Proficient in: R (& R Shiny), Python, LaTeX.
Familiar with: MATLAB, SQL, Linux.