

Darren Lin

Email: darresl1@ucla.edu

Education

Doctor of Philosophy in Biostatistics

September 2024 – Present

Department of Biostatistics, University of California, Los Angeles

Master of Science in Biostatistics

August 2022 – May 2024

Department of Biostatistics, Johns Hopkins University

Advisor: Dr. Ni Zhao

Bachelor of Science

August 2018 – May 2022

Johns Hopkins University

- Majors: Applied Mathematics and Statistics, Public Health Studies
- Minor: Psychological and Brain Sciences

Research

Research Assistant

January 2023 – October 2024

Department of Biostatistics, Johns Hopkins University

- Thesis: *Overview of Statistical Methods for T-Cell Receptor Sequencing Analysis*
 - Benchmarked and summarized T-cell receptor analysis tools; evaluated diversity, single-cell analysis, visualizations, compatibility, and runtime
- *Association of Biomarker Data with Diabetes and Cardiovascular Disease Outcomes*
 - Analyzed longitudinal associations between autoantibodies, diabetes medication, and C-peptide measurements; implemented longitudinal and survival models
 - Developed an R Shiny to dynamically predict biomarker trajectories and cardiovascular outcomes

Research Intern

October 2020 – July 2023

CHADIS, Inc.

- Outlined and prepared adolescent-health questionnaires for the telehealth web-based platform CHADIS (Comprehensive Health and Decision Information System)

Summer Research Intern

June 2021 – August 2021

Department of Biostatistics, University of Michigan

- Conducted an NIH-funded project with Dr. Xiaoquan Wen; assessed GWAS replicability across ethnic groups using various meta-analysis methods
- Analyzed vaccine sentiment on Twitter using sentiment analysis and Monocle3 toolkit under Dr. Johann Gagnon-Bartsch as part of the Big Data Summer Institute

Summer Research Intern

June 2020 – August 2020

Jae Hoon Sul Lab, University of California, Los Angeles

- Analyzed whole-genome sequencing by implementing Bayesian framework to identify risk factor genes for congenital heart disease

Research Intern

May 2019 – May 2020

Ryan Vandrey Lab, Behavioral Pharmacological Research Unit, Johns Hopkins University

- Supported marijuana behavioral pharmacology trials, including data entry and participant recruitment

Teaching

Teaching Assistant

Department of Biostatistics, University of California, Los Angeles **September 2024 – Present**

- **BIOSTAT 201A/B: Introduction to Biostatistics**
 - Lead lab sessions and host office hours for 30 graduate students, covering key biostatistical concepts

Department of Biostatistics, Johns Hopkins University

August 2023 – May 2024

- **AS.280.345: Public Health Biostatistics**
 - Directed discussion sections, guiding approximately 50 undergraduate students through topics encompassing epidemiology and statistics; graded assignments, quizzes, and exams
- **PH.140.623/PH.140.624: Statistical Methods in Public Health III/IV**
 - Supported graduate students through office hours; graded quizzes and homework

Abstracts

- Pilla, S. J., Knowler, W. C., Balasubramanyam, A., Hampe, C. S., Pietropaolo, S., **Lin, D.**, Anderson, A. M., Zhao, N., Lernmark, Å., Mathioudakis, N. N., Bancks, M., Clark, J., & Maruthur, N. M. (2024). 1993-LB: Subgroups of Type 2 Diabetes (T2D) by Clinical Features and Islet Autoimmunity. *Diabetes*, 73(Supplement_1), 1993-LB.
<https://doi.org/10.2337/db24-1993-LB>

Presentations

- **Lin, D.**, Forschmiedt, J., Mondal, T., & Woerner J. (2021, July 29). *Improving tweet topic modeling with vaccine acceptance information and sentiment analysis* [Oral presentation]. University of Michigan Big Data Summer Institute Symposium, online. http://bigdatasummerinst.sph.umich.edu/wiki/index.php/Main_Page#Symposium
- **Lin, D.**, & Sul, J.H., (2020, August 14). *Analysis of Risk Factor Genes for Congenital Heart Disease* [Oral presentation]. University of California, Los Angeles Bruins-in-Genomics Summer Research Symposium, online. <https://qcb.ucla.edu/big-summer/big2020/#toggle-id-35>

Skills

Programming: R, SAS, Python, BASH, SQL, MATLAB

Software: SLURM, Markdown, LaTeX, Shiny, Git, GitHub