

Jacob Sussman

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Education

The University of Utah, Salt Lake City, UT 2021-2025
B.S., Applied Math
H.B.S., Physics, *Honors Thesis*: "Spatio-temporal Models of Valley Fever Incidence Using INLA and Stochastic PDE'S"

Research Experience

Evo-Epi Lab, The University of Utah 2023–
Research Assistant
Mentor: Dr. Katharine Walter
Carried out applied epidemiology research, focused on TB transmission as it relates to environmental factors in high incidence settings. Tasks have involved cleaning data, analyzing data, performing spatial analysis, generating maps/figures, and communicating work through writing and presentation. Currently working on spatial models of Valley fever incidence in the Western U.S. using Bayesian hierarchical models implemented with integrated nested Laplace approximation.

Colorado Summer Institute in Biostatistics 2024
Mentor: Dr. Brandie Wagner
As part of the NIH-funded Summer Institute in Biostatistics at the University of Colorado Anschutz, worked with other students to create [a partial latent class model](#) built on clinical markers as a computational approach to determine the etiology of an individual's pneumonia infection.

Honors/Awards

Student Research Lightning Talk Competition, 1st place, Wilkes Climate Summit 2025
Wilkes Scholar, The Wilkes Center for Climate Science & Policy 2024
Global Health Case Competition, 1st place, The University of Utah School of Medicine 2024
UROP Scholar, University of Utah Office of Undergraduate Research 2023
Dean's List (all semesters), The University of Utah College of Science 2021-2025

Papers

* indicates co-first authorship.

- [1] Medina, A*; **Sussman, J***; Sosa, N; Valdez, M; Andrews, JR; Croda, J; Sanabria, GE; Sequera, G; Aguirre, S; Walter, KS. "The concentration of tuberculosis within Paraguay's incarcerated and Indigenous populations, 2018-2022" (Preprint [medRxiv](#), accepted to the Lancet Regional Health - Americas)

Presentations

Wilkes Climate Summit, The Wilkes Center for Climate Science & Policy, Salt Lake City, UT. “Modeling Valley Fever Endemicity with INLA and Mammal Distributions” (poster, “lighting” talk)	2024
Bay Area Tuberculosis Science Symposium, UCSF Mission Bay, San Francisco, CA. “Tuberculosis in Paraguay is Concentrated in Vulnerable Populations” (poster)	2024
CoSIBS Project Symposium, CU Anschutz, Denver, CO. “PPEARL - Pediatric Pneumonia Etiology Analysis applying an R Latent model” (poster)	2024
Immunology, Inflammation, and Infectious Disease (3i) Symposium, The University of Utah, Salt Lake City, UT. “The Spatial Concentration of Tuberculosis in Paraguay’s Marginalized Populations” (poster)	2024
Undergraduate Research Symposium, The University of Utah, Salt Lake City, UT. “The Spatial Concentration of Tuberculosis in Paraguay’s Marginalized Populations” (poster)	2024

Teaching/Mentoring

Teaching Assistant , Honors 2951: Global Health, The University of Utah Honors College	2023
Peer Mentor , Honors first-year learning community, The University of Utah Honors College	2022-2025

Service

Bennion Center , The University of Utah Participated in “Mass Incarceration and Abolition” week-long service break in Oakland, CA. Volunteered with Legal Services for Prisoners with Children, Flying Over Walls, Root and Rebound, and the San Francisco Public Library.	2024
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Last updated: June 6, 2025