

Kirsten Landsiedel

📍 Berkeley, California, United States [in](https://in/kirstenlandsiedel) in/kirstenlandsiedel tinyurl.com/KirstenLandsiedelGoogleScholar

EDUCATION

Doctor of Philosophy, PhD in Biostatistics (Expected 2026/2027)

University of California, Berkeley • Berkeley, California • GPA 3.90

Master of Arts in Biostatistics

University of California, Berkeley • Berkeley, California • 2023 • GPA 3.90

• Thesis: "Improving the Efficiency of Estimators in Resampling Designs with Undersmoothed Highly Adaptive Lasso"

Bachelor of Science in Statistics & Bachelor of Arts in Economics

University of California, Los Angeles • Westwood, California • 2021 • GPA 3.72

EXPERIENCE

Biostatistics Intern

BeiGene (BeOne Medicines)

June 2025 – August 2025, Remote

• Proposed and implemented targeted machine learning-based estimators for survival analysis in clinical trials with treatment switching and non-compliance, tailored to the complexities of real-world data and small sample size oncology trial settings.

Biostatistics Senior Intern

Alexion, AstraZeneca Rare Disease

May 2024 – August 2024, Boston, MA

• Planned and executed analyses of Phase 3, externally controlled trial on Neuromyelitis Optica Spectrum Disorder (NMOSD) using Targeted Maximum Likelihood Estimation (TMLE) and Super (machine) Learning.
• Developed learning pathways for targeted machine learning and causal inference for statisticians across global Alexion and AstraZeneca offices.

Graduate Student Researcher under Professors Mark van der Laan, PhD and Laura Blazer, PhD

Center for Targeted Machine Learning (CTML) at University of California, Berkeley

May 2022 – Present, Berkeley, California

• Constructed efficient estimators for the survival curve in adaptive resampling designs using targeted machine learning (ongoing work).
• Developed methods to identify and estimate causal counterfactual strata effects in the presence of complex missing data.

Graduate Student Instructor: Targeted Learning (Fall 2025), Longitudinal Data Analysis (Fall 2021/2023)

University of California, Berkeley

August 2021 – current, Berkeley, California

• Received Outstanding Graduate Student Instructor Award and Teaching Effectiveness Award for longitudinal data analysis course pedagogy.

SELECTED PUBLICATIONS & SOFTWARE

"Hazard-Based Targeted Maximum Likelihood Estimation for Survival in Resampling Sampling Designs"

In preparation

"Causal inference with Missing Exposures, Missing Outcomes, and Dependence"

Under Review

"Incident Tuberculosis Infection is Associated with Alcohol use in Adults in Rural Uganda"

Clinical Infectious Disease

"Prevalence and Predictors of Tuberculosis Infection in Children and Adolescents in Rural Uganda: A Cross-sectional Study"

Pediatric Infectious Disease Journal

"As Treated Analysis of Cluster Randomized Trials"

Annals of Applied Statistics

"scqe" R software package for causal inference

Comprehensive R Archive Network (CRAN)

SKILLS

Targeted machine learning, causal inference, survival analysis, nonparametric statistics, R, SQL, Julia, LaTeX, parallel programming, Python
