

Olivia Bernstein Morgan

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[oliviabern.github.io](https://github.com/oliviabern)

Education

Ph.D. Statistics

Expected: Summer 2022

M.S. Statistics

June 2019

UC Irvine, Irvine, CA

B.S. Applied Math & B.S. Chemistry

Aug 2017

Biola University, La Mirada, CA

Awards

- NSF Graduate Research Fellowship (2019-2022)
- ARCS Foundation Scholar (2019-2021)
- UCI Statistics Department's Outstanding Graduate Teaching Assistant Award (2018)

Submitted and Published Publications

- [“Adjustment for Biased Sampling Using NHANES Derived Propensity Weights”](#) Bernstein, OM; Vegetabile, BG; Salazar, CR; Grill, JD; Gillen, DL. Under revision at *Health Services and Outcomes Research Methodology*.
- [“Anxiety and depressive symptoms and cortical amyloid- \$\beta\$ burden in cognitively unimpaired older adults”](#) Lewis, CK; Bernstein, OM; Grill, JD; Gillen, DL; Sultzer, DL. *The Journal of Prevention of Alzheimer's Disease*. 2022.
- [“Recruitment and retention of participant and study partner dyads in two multinational Alzheimer's disease registration trials”](#) Bernstein, OM; Grill, JD; Gillen, DL. *Alzheimer's Research & Therapy*. 2021.
- [“Education and message framing increase willingness to undergo research lumbar puncture: A randomized controlled trial”](#) Witbracht, MG; Bernstein, OM; Lin, V; Salazar, CR; Sajjadi, SA; Hoang, D; Cox, CG; Gillen, DL; Grill, JD. *Frontiers in Geriatric Medicine*. 2020.
- [“Reinterpreting the infrared spectrum of H + HCN: Methylene amidogen radical and its coproducts”](#) Wiens, AE; Copan, AV; Rossomme, EC; Aroeira, GJR.; Bernstein, OM; Agarwal, J; Schaefer, HF. *The Journal of Chemical Physics*. 2018.
- [“Fluorescent pseudorotaxanes of a quinodicarbocyanine dye with gamma cyclodextrin”](#) Bernstein, OM; McGee, TE; Silzel, LE; Silzel, JW. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*. 2018.

Manuscripts in Preparation

- “Propensity Scores in Biased Samples” Bernstein, OM; Vegetabile, BG; Gillen, DL.

Teaching Experience

- Teaching Assistant, Basic Statistics—UC Irvine Fall 17, Winter 18, Spring 18
 - Won Outstanding Graduate Teaching Assistant Award in 2018

Invited Presentations

- Using Statistics in Neuroscience—Talk at the Center for the Neurobiology of Learning & Memory Brain Camp at UCI Aug 2019
- Study Partner Type in Industry-Sponsored Alzheimer's Disease Registration Clinical Trials—Poster at the Clinical Trial in Alzheimer's Disease Conference Dec 2019
- Estimating Sampling Weights for Convenience Samples Using NHANES—Presentation at the Western North American Region of The International Biometric Society paper competition June 2020
- Estimating Sampling Weights for Convenience Samples Using NHANES—Poster at the Joint Statistical Meetings Aug 2020
- Careers in Statistics and Data Science—Talk at Esperanza High School May 2021
- Education and Message Framing Increase Willingness to Undergo Research Lumbar Puncture—Talk at Biola University's Math Department Nov 2021

Journal Reviewer

- Alzheimer's & Dementia
- Electronic Journal of Statistics

Service

- Outcomes Committee Co-Chair—Center for the Neurobiology of Learning & Memory Ambassador Program at UCI Jan 2019 – June 2021
- Representative—Diverse Educational Community and Doctoral Experience (DECADE) at UCI Feb 2018 – June 2018
- Treasurer—American Chemical Society Club at Biola University Aug 2016 – May 2017
- Student Representative—School of Science, Technology, and Health Strategic Planning and Steering Committee at Biola University Sep 2016 – May 2017
- Senator—Student Government Association at Biola University Apr 2015 – May 2016

Experience

Data Science Intern

May 2021 – August 2021

Facebook, Menlo Park, CA

- Conducted data analyses to explore user behaviors and business insights
- Communicated recommendations for improving products
- Designed and analyzed randomized experiments to compare ranking models

Reporting Data-Analyst Intern

Jan 2017 – Sep 2017

Open Doors USA, Santa Ana, CA

- Automated financial reporting saving 4 days of work each month by moving Excel dashboards to Tableau
- Created plots and presented results to finance and communications teams to identify likely donors
- Researched similar organizations and analyzed industry trends

Summer Undergraduate Research Fellowship

June 2016 – Aug 2016

Center for Computational Quantum Chemistry, University of Georgia, Athens

- Computed chemical properties of methylene amidogen using quantum chemistry methods
- Investigated discrepancies between theoretical and experimental results
- Completed quantum chemistry programming projects in python

Intern and Research Assistant

May 2015 – Jan 2016

Innovative BioDefense, Inc., Lake Forest, CA

- Researched safety, efficacy, and usage data for antiseptic active ingredient, benzethonium chloride
- Compiled and wrote an argument paper to be presented to the FDA
- Discovered and obtained old Bactine antiseptic bottles to prove it contained benzethonium chloride to establish historical use

Programming Languages and Software: R, SQL, Python, Tableau, Matlab, Excel, LaTeX, Bash