Samuel David Pimentel

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EMPLOYMENT:

Assistant Professor, Department of Statistics, University of California, Berkeley, July 2017 - present.

EDUCATION:

Ph.D., Statistics, Wharton School, University of Pennsylvania, May 2017.

- Dissertation: Balancing multiple goals in observational study design.
- Dissertation Committee: Dr. Paul R. Rosenbaum (chair), Dr. Dylan S. Small, Dr. Abba M. Krieger, Dr. Jeffrey H. Silber.

B.S., Mathematical & Computational Science, Stanford University, June 2012 (with Departmental Honors and University Distinction).

SELECTED AWARDS AND FELLOWSHIPS:

- National Science Foundation CAREER award, 2022.
- Hellman Family Fellowship, 2021.
- IMS New Researcher Travel Award, Institute of Mathematical Statistics, 2018.
- J. Parker Bursk Memorial Prize for Excellence in Research, Department of Statistics, The Wharton School, University of Pennsylvania, 2016.
- Thomas R. Ten Have Award, Atlantic Causal Inference Conference, 2016 (for "exceptionally creative or skillful research in causal inference by a junior researcher").
- National Defense Science & Engineering Graduate (NDSEG) Fellowship, 2013-2016.

RESEARCH PUBLICATIONS:

Statistical Methodology

Shen, A., Visoki, E., Barzilay, R., and **Pimentel, S.D.** (2025). "A calibrated sensitivity analysis for weighted causal decompositions." *Statistics in Medicine* 44(5), e70010.

Huang, M., and **Pimentel, S.D.** (2025+). "Variance-based sensitivity analysis for weighting estimators results in more informative bounds." *Biometrika* (in press). Won **2023 Best Theory Poster Award** from the Society for Political Methodology.

Pimentel, S.D. and Huang, Y. (2024). "Covariate-adaptive randomization inference in matched designs." *Journal of the Royal Statistical Society - Series B (Statistical Methodology)* 86(5), 1312-1338.

Liao, L.D., Zhu, Y., Ngo, A.L., Chehab, R.F., and **Pimentel, S.D.** (2024). "Prioritizing variables for observational study design using the joint variable importance plot." *The American Statistician* 78(3), 318–326.

Soriano, D., Ben-Michael, E., Bickel, P.J., Feller, A., and **Pimentel, S.D.** (2023). "Interpretable sensitivity analysis for balancing weights." *Journal of the Royal Statistical Society - Series A (Statistics in Society)* 186(4), 707-721.

Glazer, A.K., and **Pimentel, S.D.** (2023). "Robust inference for matching under rolling enrollment." *Journal of Causal Inference* 11(1), 2022-0055.

Howard, S.R., and **Pimentel, S.D.** (2021). "The uniform general signed rank test and its design sensitivity." *Biometrika* 108, 381-396.

Pimentel, S.D., and Kelz, R.R. (2020). "Optimal tradeoffs in matched designs comparing US-trained and internationally-trained surgeons." *Journal of the American Statistical Association* 115 (532), 1675-1688.

Pimentel, S.D., Forrow, L.V., Gellar, J., and Li, J (2020). "Optimal matching approaches in health policy evaluations under rolling enrolment." *Journal of the Royal Statistical Society - Series A (Statistics in Society)* 183 (4), 1411-1435.

Keele, L., Harris, S., **Pimentel, S. D.**, & Grieve, R. (2020). "Stronger instruments and refined covariate balance in an observational study of the effectiveness of prompt admission to intensive care units." *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 183 (4), 1501-1521.

Keele, L., and **Pimentel, S.D.** (2019). "Matching with attention to effect modification in a data challenge." *Observational Studies* 5, 83-92.

Pimentel, S.D., Page, L., Lenard, M., and Keele, L. (2018). "Optimal multilevel matching using network flows: an application to a summer reading intervention." *Annals of Applied Statistics* 12 (3), 1479 -1505.

Pimentel, S.D., Small, D.S., and Rosenbaum. P.R. (2017). "An exact test of fit for the Gaussian linear model using optimal nonbipartite matching." *Technometrics*, 59 (3), 330-337.

Pimentel, S.D., Small, D.S., and Rosenbaum. P.R. (2016). "Constructed second control groups and attenuation of unmeasured biases." *Journal of the American Statistical Association*, 111 (515), 1157-1167, doi: 10.1080/01621459.2015.1076342.

Pimentel, S.D., Kelz, R.R., Silber, J.H., and Rosenbaum, P.R. (2015). "Large, sparse optimal matching with refined covariate balance in an observational study of the health outcomes produced by new surgeons." *Journal of the American Statistical Association*, 110 (510), 515-527, doi: 10.1080/01621459.2014.997879.

Pimentel, S.D., Yoon, F., and Keele, L (2015). "Variable-ratio matching with fine balance in a study of the Peer Health Exchange." *Statistics in Medicine*, 34 (30) 4070-4082, doi: 10.1002/sim.6593.

Statistical Applications

Breithaupt, A., Mohan, S., Thombley, R., **Pimentel, S. D.**, ad Douglas, V. C. (2025). "Education research: exploring the impact of standardized, condition-specific note templates on quality metrics and efficiency in multiple resident clinics." *Neurology Education*, 4(1), e200200.

Feinstein, M., Ing, C., Knapp, A., Li, G., and **Pimentel, S. D.** (2025). "Research methods and approaches for studies in pediatric anesthesia safety." *Journal of Neurosurgical Anesthesiology*, 37(1), 100-102.

Merlino, B., Pimentel, D., **Pimentel S.D.**, Ugurgieri, L., Waters, A. (2024+). "You're gonna need a bigger boat': assessing the relationship between economic performance and ethnonationalism in Bosnia and Herzegovina (2002-2022)." *Contemporary Southeastern Europe* (in press).

Kuzniewicz, M.W., Campbell, C.I., Li, S., Walsh, E.M., Croen, L.A., Comer, S.D., **Pimentel, S.D.**, Hedderson, M. and Sun, L.S., (2022). "Accuracy of diagnostic codes for prenatal opioid exposure and neonatal opioid withdrawal syndrome." *Journal of Perinatology*, 43, 293-299.

Silber, J.H., Rosenbaum, P.R., **Pimentel, S.D.**, Calhoun, S., Wang, W., Sharpe, J.E., Reiter, J.G., Shah, S.A., Hochman, L.A., and Even-Shoshan, O. (2019). "Comparing resource use in medical admissions of children with complex chronic conditions." *Medical Care*, 57 (8), 615-624.

Zaheer, S., **Pimentel, S.D.**, Simmons, K.D., Kuo, L.E.Y., Datta, J., Williams, N., Fraker, D.L., and Kelz, R.R. (2016). "Comparing international and United States undergraduate medical education and surgical outcomes using a refined balance methodology." *Annals of Surgery* 265 (5), 916-922.

Grossman, G., Gazal-Ayal, O., **Pimentel, S.D.**, and Weinstein, J.M. (2016). "Descriptive representation and judicial outcomes in multi-ethnic societies." *American Journal of Political Science* 60 (1), 44-69, doi: 10.1111/ajps.12187.

Software for Statistics and Data Visualization

Han, S., and **Pimentel, S.D.** (2024). "MultiObjMatch: matching with optimal tradeoffs between multiple objectives in R." *Observational Studies* 10(2), 1-32.

Liao, L.D., and **Pimentel, S.D.** (2024). "jointVIP: Prioritizing variables in observational study design with joint variable importance plot in R." *Journal of Open Source Software*, 9(103), 6093.

Liao, L.D. and **Pimentel, S.D.** (2023). R package JointVIP: prioritize variables with joint variable importance plot in observational study design. Published on *The Comprehensive R Archive Network* (https://cran.rstudio.com).

Han, S. and **Pimentel**, **S.D.** (2022). R package MultiObjMatch: multi-objective matching algorithm. Published on *The Comprehensive R Archive Network* (<u>https://cran.rstudio.com</u>).

Gellar, J., Hansen, B.B., Fredrickson, M., Glazer, A.K., Forrow, L.V., and **Pimentel, S.D.** (2021). R package GroupMatch: optimal matching under rolling enrollment. Available on Github (<u>https://github.com/jgellar/GroupMatch</u>).

Pimentel, S.D. (2016). "Large, sparse optimal matching with R package rcbalance." *Observational Studies* 2, 4-23.

Pimentel, S.D., and Keele, L. (2016). R package matchMulti: optimal multilevel matching using a network algorithm. Published on *The Comprehensive R Archive Network* (<u>https://cran.rstudio.com</u>).

Pimentel, S.D. (2016). R package rcbsubset: optimal subset matching with refined covariate balance. Published on *The Comprehensive R Archive Network* (<u>https://cran.rstudio.com</u>).

Pimentel, S.D. (2014). R package rcbalance: large, sparse optimal matching with refined covariate balance. Published on *The Comprehensive R Archive Network* (<u>https://cran.rstudio.com</u>).

Pimentel, S.D. (2014). "Choosing a clustering: an a posteriori method for social networks." *Journal of Social Structure* 15 (1), 1-21.

Pimentel, S., Walbot, V., and Fernandes, J. (2011). "GRFT – genetic records family tree web applet." *Frontiers in Genetics* 2, 14, doi:10.3389/fgene.2011.00014.

Invited Chapters

Pimentel, S.D. (2023). "Fine balance and its variations in modern optimal matching." In *Handbook of Matching and Weighting Adjustments for Causal Inference*, eds. Zubizarreta, J.R., Stuart, E. A., Small, D.S., and Rosenbaum, P.R. CRC Press: Boca Raton, FL.

Keele, L., and **Pimentel, S.D.** (2023). "Matching with multilevel data." In *Handbook of Matching and Weighting Adjustments for Causal Inference*, eds. Zubizarreta, J.R., Stuart, E. A., Small, D.S., and Rosenbaum, P.R. CRC Press: Boca Raton, FL.

Working Papers

Huang, M., Soriano, D., and **Pimentel, S.D.** (2025+). "Design sensitivity and its implications for weighted observational studies." <u>arxiv:2307:00093</u>.

Pimentel, S.D., and Yu, R. (2025+). "Re-evaluating the impact of hormone replacement therapy on heart disease using match-adaptive randomization inference." <u>arxiv:2403.01330</u>.

Pimentel, S.D., Sun, L.S., Campbell, C.I., Li, S., Walsh, E.M., Croen, L.A., Comer, S.D., Hedderson, M. and Kuzniewicz, M.W. (2025+) "Neurodevelopmental and behavioral outcomes of children with prenatal opioid exposure."

SELECTED FUNDING:

- Food and Drug Administration, "Health and Neurodevelopmental Outcomes in Infants at Risk for Neonatal Opioid Withdrawal Syndromes (NOWS): Effects of Timing and Duration of Prenatal Opioid Exposure (POE) & Postnatal Management with Eat-Sleep-Console (ESC)" (75F40123C00211), 2023-2025. Co-Investigator and lead statistican (PIs: Kuzniewicz and Sun).
- National Science Foundation, "CAREER: Integrating Optimal Design and Inference for Modern Observational Studies" (SES-2142146), 2022-2027. Principal Investigator.
- Hellman Fellows Program, "Joint treatment-outcome variable importance in observational study design," 2021-2022. Principal Investigator.

Food and Drug Administration, "Neurodevelopmental Outcomes in Infants Receiving Opioid-Replacement Pharmacotherapy for Neonatal Opioid Withdrawal Syndrome" (75F40119C10101), 2019-2024. Co-Investigator and lead statistican (PIs: Kuzniewicz and Sun).

National Science Foundation, "RTG: Advancing Machine Learning - Causality and Interpretability," (DMS-1745640), 2018-2024. Co-Principal Investigator from July 2021 (PI: Ding).

RESEARCH PRESENTATIONS:

"Design sensitivity and its implications for weighted observational studies."
International Conference on Statistics and Data Science, Nice, France, December 2024
Department of Biostatistics, University of Washington, October 2024
Center for Causal Inference, University of Pennsylvania, Philadelphia, PA, March 2024
Center for Practice and Research at the Intersection of Information, Society, and Methodology (PRIISM), New York University, New York, NY March 2024.
Department of Statistics, Rutgers University, New Brunswick, NJ October 2023.
Department of Statistics, University of Wisconsin-Madison, Madison, WI September 2023.
Royal Statistical Society Conference, Harrogate, UK, September 2023.
Joint Statistical Meetings, Toronto, Canada, August 2023 (invited poster).
Society for Political Methodology Annual Meeting, Stanford, CA, July 2023.
Joint Statistical Meetings, Washington, DC, August 2022.

- "Modification of opioid effects on ADHD by opioid replacement therapy in a matched cohort." Pediatric Academic Societies Meeting, Toronto, Canada, May 2024.
- "Match-adaptive randomization inference for optimal propensity score matching." Berkeley Statistics Annual Research Symposium, University of California, Berkeley, Berkeley, CA April 2024.
- "Fine-grained balance for observational studies via cardinality matching." Eighth PANDA Symposium on Anesthesia/Analgesia/Sedation & Brain Health in Children, Columbia University, New York, NY, March 2024.
- "Match-adaptive quasi-randomization inference for optimal propensity score matching." Workshop on Permutation and Causal Inference: Connections and Applications, Institute for Mathematical and Statistical Innovation, Chicago, IL, August 2023.
- "Causal inference conditional on optimal propensity score matching." Joint Statistical Meetings, Toronto, Canada, August 2023.
- "Covariate-adaptive randomization inference in matched designs."
 6th International Conference on Econometrics and Statistics, hybrid meeting, August 2023. International Indian Statistical Association Conference, Golden, CO, June 2023. Statistics Department, University of California, Davis, Davis, CA, May 2023. Institute of Mathematical Statistics Annual Meeting, London, UK, June 2022. Eastern North American Region of the International Biometrics Society Spring Meeting, Houston, TX, March 2022.

- "Impact of perinatal opioid exposure on ADHD in a matched cohort analysis." Pediatric Academic Societies Meeting, Washington, DC, April 2023.
- "Prioritizing variables in observational study design using joint variable importance plots." Royal Statistical Society Conference, Aberdeen, UK, September 2022.
- Discussant for session "Matching and design-based approaches" (Peter Cohen, Kevin Guo, Ben Hansen). American Causal Inference Conference, Berkeley, CA, May 2022.
- "Examining developmental delay following perinatal opioid exposure: a matched cohort analysis." Pediatric Academic Societies Meeting, Denver, CO, April 2022.
- "Optimal tradeoffs in matched designs comparing US-trained and internationally-trained surgeons." Department of Statistics & Applied Probability, University of California, Santa Barbara, Santa Barbara, CA, March 2022.
 Statistics Department, Michigan State University, Lansing, MI, November 2021.
 Statistics Department, University of California, Berkeley, Berkeley, CA, September 2021.
 Online Causal Inference Seminar, June 2021.
 Biostatistics Department, University of Minnesota, Minneapolis, MN, March 2021.
 Statistics Department, University of Wisconsin-Madison, Madison, WI, November 2020.
 Berkeley-Columbia Meeting in Engineering and Statistics, Berkeley, CA, February 2020.
- "Reassessing Uniform Randomization Inference after Matching." Joint Statistical Meetings (held virtually), August 2021.
- Discussant for "Hospital Quality Risk Standardization via Approximate Balancing Weights" (Luke Keele).

Online Causal Inference Seminar, March 2021.

- "The uniform general signed rank test and its design sensitivity." Penn-Berkeley Statistics Joint Colloquium, Berkeley, CA, September 2020. Joint Statistical Meetings (held virtually), August 2020.
- "Optimal matching approaches in matched designs comparing US-trained and internationally-trained surgeons." International Conference on Health Policy Statistics, San Diego, CA, January 2020.
- "Causal inference using multilevel matching."

Summer Institute in Computational Social Science, University of California, Los Angeles, Los Angeles, CA, June 2019.

"Optimal tradeoffs in matched study designs."

2nd International Conference on Econometrics and Statistics, Hong Kong, June 2018. Eastern North American Region of the International Biometrics Society Spring Meeting, Atlanta, GA, March 2018.

INSEAD-Wharton Doctoral Consortium, Singapore, December 2016.

"Effect modification within matched pair designs."

Workshop for Empirical Investigation of Methods for Heterogeneity, May 2018, Pittsburgh, PA. Co-presented with Luke Keele (Georgetown University).

"Optimal multilevel matching using network flows: an application to a summer reading intervention." International Chinese Statistical Association Applied Statistics Symposium, Chicago, IL, June 2017.

"Large, sparse optimal matching in an observational study of surgical outcomes."

Operations Research Center, Massachusetts Institute of Technology, October 2017. Department of Applied Statistics, Social Science, and Humanities, NYU Steinhardt, February 2017. Department of Statistical Science, Fox School of Puciness, Temple University, February 2017.

Department of Statistical Science, Fox School of Business, Temple University, February 2017. Department of Epidemiology and Biostatistics, Dornsife School of Public Health, Drexel University, February 2017.

Department of Statistics, University of California, Berkeley, February 2017.

Department of Information, Risk, and Operations Management, McCombs School of Business, University of Texas at Austin, January 2017.

Department of Data Sciences and Operations, USC Marshall School of Business, January 2017. Department of Operations Research, Naval Postgraduate School, January 2017.

Department of Statistics, University of Michigan, January 2017.

Geneva School of Economics and Management, University of Geneva, December 2016.

Decision Sciences Department, San Francisco State University, December 2016.

Department of Biostatistics & Medical Informatics, University of Wisconsin-Madison, December 2016.

Department of Biostatistics, University of Washington, December 2016.

Department of Population Health Sciences, University of Utah School of Medicine, November 2016.

Department of Statistics, Brigham Young University, October 2016.

"Constructed second control groups and attenuation of unmeasured biases."

Department of Statistics, Columbia University, February 2017. Department of Statistics, Stanford University, January 2017. Department of Statistics, University of California, Davis, January 2017. School of Mathematical & Statistical Sciences, Arizona State University, January 2017. Joint Statistical Meetings, Chicago, IL, August 2016.

"Large, sparse optimal matching with refined covariate balance." Institute for Quantitative Theory and Methods, Emory University, January 2017.

- "An exact test of fit for the Gaussian linear model using optimal nonbipartite matching." Eastern North American Region of the International Biometrics Society Spring Meeting, Austin, TX, March 2016.
- "Variable-ratio matching with fine balance in a study of peer health exchange." Joint Statistical Meetings, Seattle, WA, August 2015.
- "Descriptive representation and judicial outcomes in multi-ethnic societies." American Law and Economics Association annual meeting, New York, NY, May 2015.

TEACHING EXPERIENCE:

Statistics Courses

Instructor, Statistics 230A: Linear Models, University of California, Berkeley, Spring 2023, Spring 2025

• Graduate course of 50 students primarily from Statistics' Master's program.

• Ordinary least squares, finite-sample exact and asymptotic inference, heteroskedastic and clustered errors, model checking and model selection, generalized linear models.

Instructor, Statistics 135: Concepts of Statistics, Fall 2024.

- Undergraduate course of 130-140 students, primarily Statistics and Data Science majors.
- Mathematical statistics using the tools of probability theory, including estimation, hypothesis testing, maximum likelihood, contingency tables, Bayesian statistics, and linear regression.

Instructor, Statistics 20: Introduction to Probability and Statistics, University of California, Berkeley, Spring 2024

- Introductory undergraduate course of 90-100 students.
- Data visualization, probability, inference, linear regression, prediction, causal claims.
- Created new course content on evaluating causal claims without randomized experiments.
- Open source course notes available at <u>https://www.stat20.org</u>, source code accessible at <u>https://github.com/stat20/course-materials</u>.

Instructor, Statistics 158: The Design and Analysis of Experiments, University of California, Berkeley, Spring 2019, Spring 2021, Fall 2023

- Upper-division undergraduate course of 30-70 students.
- Oversaw student-led projects to design, conduct, and analyze multi-factor experiments.
- Redesigned curriculum to incorporate potential outcomes, noncompliance, and interference.

Instructor, Statistics 232: Experimental Design, University of California, Berkeley, Spring 2018, Spring 2022.

- Graduate- course of 5-25 students from doctoral, masters', and undergraduate programs.
- Redesigned syllabus to incorporate modern topics such as noncompliance, interference, and online digital experimentation.

Instructor, Statistics 151A: Linear Modeling: Theory and Applications, University of California, Berkeley, Spring 2020, Fall 2020, Fall 2021.

- Upper-division undergraduate course of 70-100 students.
- Simple and multiple linear regression, model selection including shrinkage methods, generalized linear models, model comparison and iniference, the bootstrap, splines.

Instructor, Statistics 260: Observational Study Design and Causal Inference, University of California, Berkeley, Spring 2018.

- Graduate seminar of 14 doctoral students.
- Designed syllabus focused on modern research in observational studies (new course).

Co-Organizer, Berkeley Methods Workshop, University of California, Berkeley, Spring 2023 - present.

- Weekly multidisciplinary seminar focused on training graduate students in methodology for social science, co-organized with faculty in the Political Science department.
- Coordinated involvement of Statistics and Biostatistics graduate students, helped select speakers.

Co-Instructor, Causal Inference Reading Group, University of California, Berkeley, Fall 2017 - Fall 2022.

- Weekly reading group with semester-long topical focus selected jointly by several co-instructors.
- Constructed reading lists for topics "Optimal Study Design in Causal Inference," "Foundations of Causal Inference," "Applying Causal Inference to the Social and Biomedical Sciences," "Semiparametric Approaches in Causal Inference," and "Causal Inference and Time" in cooperation with co-instructors.

Lectures and Short Courses

- Guest lecture, "Descriptive Representation and Judicial Outcomes in Multi-Ethnic Societies," for Statistical Models: Theory and Application (Statistics 215A) University of California, Berkeley, Berkeley, CA, October 2021.
- Guest lecture, "Sensitivity analysis for unobserved confounding," for Computational Social Science (Sociology 273M), University of California, Berkeley, Berkeley, CA, April 2021.
- Guest lecture, "Counterfactual approaches to fairness," Summer Cluster on Algorithmic Fairness, Simons Institute for the Theory of Computing, Berkeley, CA, July 2018.
- Short course, "Observational Studies with Multilevel Data," co-taught with Luke Keele, Atlantic Causal Inference Conference, Pittsburgh, PA, May 2018.

Guest lecture for Causal Inference (B9124), Columbia University, New York, NY, November 2016.

- Guest lecture, Center for Surgery and Health Economics, University of Pennsylvania, Philadelphia, PA, September 2016.
- Short course, "Causal inference for observational studies with multilevel data," co-taught with Luke Keele, Atlantic Causal Inference Conference, New York, NY, May 2016.
- Short course, "Matching with Multilevel Data," co-taught with Luke Keele and Lindsay Page, Society for Research on Educational Effectiveness, Washington, D.C., March 2016.
- Guest lecture for Observational Studies (Statistics 921), University of Pennsylvania, Philadelphia, PA, November 2015.

ADVISING:

Doctoral dissertation committees (at University of California, Berkeley): Yaxuan Huang, Department of Statistics, May 2024 - present. Andy Shen, Department of Statistics, March 2024 - present (co-chair). Sizhu Lu, Department of Statistics, January 2024 - present. Abhineet Agarwal, Department of Statistics, August 2023 - present. Lauren Liao, Graduate Division of Biostatistics, November 2022 – June 2024 (co-chair). Kevin Benac, Graduate Division of Biostatistics, August 2022 - present. Fangzhou Su, Department of Statistics, August 2022 – August 2024. Benjamin Lu, Department of Statistics, March 2022 - present. Briton Park, Department of Statistics, February-May 2022. Daniel Soriano, Department of Statistics, January 2022 - August 2023 (co-chair). Melody Huang, Department of Statistics, January 2022 - April 2023. Miyabi Ishihara, Department of Statistics, August 2021 - December 2023 (co-chair). Amanda Glazer, Department of Statistics, April 2021 - May 2024. Jacob Spertus, Department of Statistics, April 2021 - May 2024. Maruf Ahmed, Department of Electrical Engineering and Computer Sciences, March 2021-August 2023. Nicholas Altieri, Department of Statistics, August-October 2020. Yu Wang, Department of Statistics, June 2018-August 2020.

Doctoral qualifying exam committees (at University of California, Berkeley): Yaxuan Huang, Department of Statistics, April 2024. Andy Shen, Department of Statistics, February-March 2024. Sizhu Lu, Department of Statistics, November 2023. Abhineet Agarwal, Department of Statistics, July 2023. Lauren Liao, Graduate Division of Biostatistics, September-November 2022. Kevin Benac, Graduate Division of Biostatistics, June-July 2022. Fangzhou Su, Department of Statistics, June-July 2022. Benjamin Lu, Department of Statistics, November-December 2021 (chair). Melody Huang, Department of Statistics, October -November 2021 (chair). Daniel Soriano, Department of Statistics, May-June 2021. Miyabi Ishihara, Department of Statistics, February-May 2021. Amanda Glazer, Department of Statistics, February-April 2021. Maruf Ahmed, Department of Electrical Engineering and Computer Sciences, Dec 2020-Mar 2021. Jacob Spertus, Department of Statistics, November 2020-April 2021. Briton Park, Department of Statistics, November 2019-Jan 2020 (chair). Sang Min Han, Department of Electrical Engineering and Computer Sciences, May-June 2019. Nicholas Altieri, Department of Statistics, February 2019 (chair). Jason Wu, Department of Statistics, May-July 2018. Yu Wang, Department of Statistics, February-April 2018. William Murdoch, Department of Statistics, February 2018.

Masters' thesis committees (at University of California, Berkeley): Tyler Mansfield, Division of Biostatistics, January-June 2023. Emily Flanagan, Department of Statistics, December 2022. Benjamin Lu, Department of Statistics, April-June 2020. Olivia Angiuli, Department of Statistics, April-May 2020. Da Xu, Graduate Division of Biostatistics, April-May 2018.

Undergraduate honors thesis supervision (at University of California, Berkeley): Shichao Han, Department of Statistics, September-December 2020.

PROFESSIONAL SERVICE:

Associate Editor, Journal of Causal Inference, June 2019 - present.

- Statistical Consultant, Clinical & Translation Science Institute, University of California, San Francisco, January 2020 present.
- Assistant Head Graduate Advisor, Department of Statistics, University of California, Berkeley, July 2024 present.
- Search Committee, Cluster Hire in Artificial Intelligence, Inequality, and Society, Department of Statistics, University of California, Berkeley, July 2024 present.
- Masters' Program Committee, Department of Statistics, University of California, Berkeley, July 2024 present.
- PhD Admissions Co-Chair, Department of Statistics, University of California, Berkeley, July 2022 June 2024.

- Organized invited session, "Planning observational studies with unobserved confounding in mind," Joint Statistical Meetings, Toronto, Canada, August 2023.
- Search Committee, Department of Computational Precision Health, University of California, Berkeley and University of California, San Francisco, July 2022 June 2023.
- PhD Admissions Committee, Department of Statistics, University of California, Berkeley, August 2020 June 2022.
- Program Committee, Foundations of Data Science Conference 2020, January-July 2020.
- Organizing Committee, American Causal Inference Conference 2022, August 2019 May 2022.
- Equity Advisor, Department of Statistics, University of California, Berkeley, August 2019 June 2021.
- Academic Personnel Committee, Department of Statistics, University of California, Berkeley, August 2019 May 2020.
- Search Committee, Data Science Health Innovation Fellowship Program, University of California, Berkeley and University of California, San Francisco, July 2019 September 2019.
- Organizing Committee, American Causal Inference Conference 2022, Berkeley, CA. November 2018 May 2022.
- Organizer of the Neyman Seminar, Department of Statistics, University of California, Berkeley, September 2017- May 2019.
- NSF Research Training Grant Postdoctoral Scholar search committee, University of California, Berkeley, January-February 2019, January-March 2020, and December-March 2021.
- Masters Program Admissions Committee, Department of Statistics, University of California, Berkeley, January-February 2019.
- Community Task Force on improving student support during PhD program, Department of Statistics, University of California, Berkeley, March 2018 December 2018.
- Statistical Consultant on proposal for evaluation of the Bundled Payments for Care Improvement (BCPI) initiative, Booz Allen Hamilton, June-September 2018.
- Organized topic-contributed session, "New Matching Designs to Get the Most from Observational Data," Joint Statistical Meetings, Chicago, IL, July 2016.
- Student Panelist, Wharton Doctoral Programs Maternity/Paternity workshop, University of Pennsylvania, February 2016.
- Student Panelist, Wharton Doctoral Programs Recruitment Webinar, , University of Pennsylvania, October 2016.
- Organizing committee member, 2015 Atlantic Causal Inference Conference at the University of Pennsylvania.
- Member of Wharton Doctoral Programs Executive Committee, University of Pennsylvania, September 2013 May 2014.
- Panelist and ad hoc reviewer for National Science Foundation program in Measurement Methodology, and Statistics (Directorate for Social, Behavioral, and Economic Sciences).
- Reviewer for Journal of the American Statistical Association; Journal of the Royal Statistical Society Series B; Biometrika; Proceedings of the National Academy of Science; JAMA Surgery; The Lancet Neurology; Biometrics; Annals of Applied Statistics; Journal of the Royal Statistical Society – Series A; Operations Research; Journal of the Royal Statistical Society – Series C;

Statistics in Medicine; Journal of Causal Inference; Biostatistics; Observational Studies; Journal of Machine Learning Research; Journal of Research on Educational Effectiveness; Journal of Computational and Graphical Statistics; Statistics and Public Policy; Journal of Statistical Planning and Inference; The R Journal; Computational Statistics and Data Analysis; TEST; GMS Medical Informatics, Biometry and Epidemiology; and Journal of Social Structure.