
Erin Hartman

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Academic Positions

Assistant Professor, Split in Statistics and Political Science, UCLA. *July 2016 - present*

UCLA Affiliations: Center for Social Statistics. California Center for Population Research.

Harrington Faculty Fellow, McCombs School of Business, UT-Austin. *July 2020 - June 2021*

Post-Doctoral Fellow, Dept. of Politics, Princeton University. *July 2015 - June 2016*

Education

Ph.D. University of California at Berkeley. Political Science. *Dec 2013*

Thesis: *Validating Causal Effects in Experimental and Observational Designs.*

Committee: Jasjeet Sekhon (chair), Eric Schickler, Sandrine Dudoit

M.A. University of California at Berkeley. Statistics. *May 2013*

M.A. University of California at Berkeley. Political Science. *May 2008*

B.S. California Institute of Technology. Economics and Political Science. *June 2007*

Professional Experience *Details in "Related Work Experience"*

Co-founder. *BlueLabs, Washington, DC.* *March 2013 - November 2014*

Head of Analytics Polling, Analytics Department. *Obama For America, Chicago, IL.*
Sept 2011 - Nov 2012

Peer-Reviewed Publications

Hartman, Erin. "Equivalence Testing for Regression Discontinuity Designs." *Conditional Accept, Political Analysis.*

Caughey, Devin, Berinsky, Adam J., Chatfield, Sara, **Hartman, Erin**, Schickler, Eric and Sekhon, Jasjeet S. *Target Estimation and Adjustment Weighting for Survey Nonresponse and Sampling Bias.* Cambridge University Press, **2020.**

Hartman, Erin and Hidalgo, F. Daniel. "An Equivalence Approach to Balance and Placebo Tests" *American Journal of Political Science.* **2018.** doi: 10.1111/ajps.12387

Dinas, Elias, **Hartman, Erin**, and van Spanje, Joost "Dead Man Walking: The Affective Roots of Issue Proximity Between Voters and Parties". *Political Behavior.* **2016.** doi: 10.1007/s11109-016-9331-2

Hartman, Erin, Grieve, Richard, Ramsahai, Roland, and Sekhon, Jasjeet S. "From SATE to PATT: combining experimental with observational studies to estimate population treatment effects". *Journal of the Royal Statistical Society: Series A (Statistics in Society).* **2015.** doi: 10.1111/rssa.12094

Edited Volumes

Hartman, Erin. "Generalizing Experimental Results". *Advances in Experimental Political Science.* Druckman, James N. and Green, Donald P. Cambridge University Press. *Forthcoming.*

Hartman, Erin and Levin, Ines "Accounting for Complex Survey Designs: Strategies for Post-stratification and Weighting of Internet Surveys". *Oxford Handbook of Electoral Persuasion*. Suhay, Elizabeth, Grofman, Bernard, and Trechsel, Alexander. Oxford: Oxford University Press, **2019**. doi:10.1093/oxfordhb/9780190860806.013.29

Alvarez, R. Michael, Katz, Jonathan, Hill, Sarah, and **Hartman, Erin**. "Machines Versus Humans: The Counting and Recounting of Paper Ballots in LA County". *Confirming Elections: Creating Confidence and Integrity through Election Auditing (Elections, Voting, Technology)* Alvarez, R. Michael, Atkeson, Lonna Rae and Hall, Thad E. New York: Palgrave MacMillan, **2012**. 73-88.

Hartman, Erin and Hosek, Adrienne "ANOVA". *International Encyclopedia of Political Science*. Badie, Bertrand, Dirk Berg-Schlosser, and Leonardo Morlino, eds. Vol. 1. Sage, **2011**.

Working Papers

Elements of External Validity: Framework, Design, and Analysis (with Naoki Egami)

Covariate Selection for Generalizing Experimental Results: Application to Large-Scale Development Program in Uganda. (with Naoki Egami) *Under Review*.

A kernel balancing approach for reducing specification assumptions in survey weighting (with Chad Hazlett and Ciara Sterbenz)

Grants

Hartman, Erin. "Kernel Population Weighting for Survey Nonresponse". Facebook Statistics for Improving Insights and Decisions. (\$50,000) (2019).

Hartman, Erin and F. Daniel Hidalgo - EGAP Standards Grant - R Package for "An Equivalence Approach to Balance and Placebo Tests" (\$5,000). (2018).

Hartman, Erin and Vavreck, Lynn. "Leveraging Highly Granular Data in Sampling and Analysis of Political Surveys". UCLA Transdisciplinary Seed Grant, Office of Vice Chancellor of Research (\$39,550). (2017).

Co-investigator. Gang Reduction Youth Development Analysis Program. Subcontract of California State University Los Angeles, Prime Contract from The City of Los Angeles. (2017-2019).

Selected Invited Talks

Northwestern. STEPP Center and Women in Statistics. May 2020. *Cancelled due to Covid-19*.

Harvard. Institute for Quantitative Social Science Seminar. April 2020.

UCLA. Epidemiology Seminar Series. April 2020. *Cancelled due to Covid-19*.

UCLA. Summer Institute in Computational Social Science. June 2019.

Stanford University. Political Science Methods Seminar Series. May 2019.

Princeton University. Quantitative Social Science Seminar Series. April 2019.

University of Pennsylvania. Political Science Seminar Series and the PORES Speaker Series. April 2019.

UC-Merced. Political Science Seminar Series. March 2019.

UCLA. Epidemiology Seminar Series. February 2019.

UCLA. CCPR Seminar Series. October 2018.

Yale. Quantitative Research Methods Workshop. April 2018.

International Methods Colloquium. March 2018.

UT-Austin. Statistics and Data Science Seminar. February 2018.

UCLA Physical Sciences Faculty Lunch Seminar. December 2017.
Caltech Y Social Activism Series - "What went wrong with polling in 2016?". November 2017.
UCLA Biostatistics Seminar. April 2017.
Stanford American Politics Workshop. April 2017.
Washington University in St. Louis American Politics Seminar. February 2017.
Pacific Coast American Politics Conference, Univ. of Arizona. January 2017.
SLAMM! 2016, American University, April 2016.
The Inaugural Ross Royall Symposium: From Individuals to Populations, Johns Hopkins University, February 2016.
Georgetown American Politics Seminar Series, February 2016.
Princeton Methodology Colloquia, November 2015.
Causal Inference Seminar, Johns Hopkins University, Department of Biostatistics, January 2015.
"From SATE to PATT"
SCELS Conference on Experimental Methods, University of Southern California, December 2014.
2014 Women Opening Doors for Women - STEM Speaker, Washington, DC, June 2014.
"Design Based Approaches for Unit Non-Response." Northeast Political Methodology Meeting, New York, NY, May 2014.
"Call Me Maybe: Adjusting for non-response in sampling designs". Analyst Group Meeting, Washington, DC, May 2014.
"Optimal Stratification for Randomized Controlled Experiments." Analyst Institute Skillbuilder Series, Washington, DC, Nov 2013.
UCDC Center Forum Series, Washington, DC, Sept 2013.
"Design Based Approaches to Unit Non-Response". West Coast Analyst Group Meeting, April 2013, San Francisco, CA.
"Statistics Beyond the Classroom: Getting the President Re-Elected". Statistics Beyond the Classroom, April 2013, Harvard University, Cambridge, MA.
"Employing Matching to Alleviate Bias in Survey Data". Paper presented at the 2009 New Faces in Political Methodology Conference, Penn State University, State College, PA.

Additional Conference Presentations

American Causal Inference Conference. 2020. *Cancelled due to Covid-19.*
Texas Polmeth. 2020. *Cancelled due to Covid-19.*
Latin American Political Methodology Meeting. 2018.
Joint Statistical Meeting. 2018.
Southern California Methods Meeting: 2018, 2017, 2016.
Polmeth 2020, 2017.
Polmeth (Posters): 2018, 2011, 2010, 2009, 2008.
MPSA: 2019, 2018, 2016, 2015, 2013, 2011, 2010, 2009.
APSA: 2020, 2010.
2013 Causality in Political Networks, Chicago, IL.

Teaching Experience

Graduate Classes

PS 200B: **Regression Analysis for Social Science**, UCLA. Winter 2018. Winter 2019.

Stats 206: **Modern Survey Methods**, UCLA. Fall 2017.

Stats 201A: **Research Design, Sampling, and Analysis**, UCLA. Fall 2016. Fall 2017. Fall 2018.

Undergraduate Classes

PS 6: **Introduction to Data Analysis**, UCLA. Fall 2016. Winter 2017. Fall 2018.

Academic Affiliations

Evidence in Governance and Politics (EGAP). 2016 - present.

Center for Social Statistics. 2016 - present.

California Center for Population Research (CCPR). 2016 - present.

Software

Hartman, Erin, Hidalgo, F. Daniel, and Kahmann, Sydney. "An Equivalence Approach to Balance and Placebo Tests." Available on Github.

Fellowships and Awards

Best Faculty Poster Award - PolMeth (2018).

Outstanding Mentor Award - Political Science Graduate Student Association (2018).

UCLA California Center for Population Center - Junior Faculty Course Release Program (Spring 2019).

Analyst Institute Fellow (Project: *Blocking Design for Efficiency Gains in Randomized Trials*), Feb 2013 to June 2013.

Recipient of the Integrative Graduate Education and Research Traineeship Program (IGERT) Fellowship, National Science Foundation, 2008-2010.

Honors and Press

Caltech Alumni Association (2016).

URL: <http://www.techer.caltech.edu/knowning-the-vote>

Pacific Standard's 2015 "Top 30 Thinkers Under 30".

URL: <http://www.psmag.com/books-and-culture/the-30-top-thinkers-under-30-the-survey-leader-for-barack-obamas-campaign-still-helping-progressive-politicians>

Campaigns & Elections 2015 "The Influencers 50".

URL: <http://campaignsandelections.com/campaign-insider/2348/the-influencers-50>

Professional Service

Program Committee, 2020 American Causal Inference Conference. *Cancelled due to Covid-19.*

Methodology Section Program Committee Co-Chair for the 2019 Midwest Political Science Association Annual Conference

Co-Organizer, 2019 Southern California Methods Meeting.

Society for Political Methodology - Corporate Relations Committee (2017, 2019)

Empirical Implications of Theoretical Methods - Instructor (2017)

EGAP: Standards Grants Committee (2017)

Society for Political Methodology: Best Graduate Poster Committee (2015, 2017, 2020).

Journal Referee: *Political Analysis, Journal of the Royal Statistical Society - Series A, American Journal of Political Science, American Political Science Review, Journal of Politics, Epidemiology, Journal of Experimental Political Science, Research & Politics, Journal of Causal Inference, Observational Studies, Political Science Research and Methods, Journal of Research on Educational Effectiveness, National Science Foundation, American Journal of Epidemiology, American Journal of Evaluation, Journal of Applied Econometrics, Statistics in Medicine*

Research Interests

Causal Inference, Generalization of Experimental Findings, Heterogeneous Treatment Effects, Experimental Design, Survey Design, Survey Weighting

Programming Languages

R, Stata, SQL, C++

Related Work Experience

Co-founder. *BlueLabs, Washington, DC.* March 2013 - November 2014.

Co-founded a successful analytics and technology start-up, of over thirty employees, focused on providing analytics infrastructure and consulting to corporations and progressive clients in politics, issue advocacy, healthcare, and education.

Developed a web-based Polling Tool UI for analysts that automates key aspects of the polling process, such as sampling, data management, quality control, and report generation.

Established and co-managed the hiring process for and mentored a team of junior and senior data scientists and predictive modelers.

Created new methodological approaches to message testing and analysis at the intersection of causal inference and predictive modeling that allow organizations to estimate the effectiveness of a contact at an individual level.

Designed large-scale experiments for measuring the impact of organizational contacts with individuals and customers, using optimal block randomization and new sampling designs, to alleviate the impact of non-response bias and increase the external validity of resulting estimates and models of individual level heterogeneity.

Head of Analytics Polling, Analytics Department. *Obama For America, Chicago, IL.* Sept 2011 - Nov 2012.

Served as Chief Methodologist for Obama for America's Analytics Polling operation, which contacted over one million people throughout the campaign (30,000 per week at peak).

Accurately and precisely predicted election outcomes in the campaign's eleven prioritized states with lower final error than any public pollster.

Designed new survey methodologies, including a non-parametric sampling method, implemented and automated in R, to account for survey non-response bias and a new survey weighting method for combining demographic and ancillary information for *post-hoc* adjustment.

Aided election analysts in analysis of television ad buys, mail protocols, and other modeling and experimental tests.

Fellow. *Analyst Institute, Washington, DC.* Feb 2013 - June 2013.

Wrote white paper on the advantages of blocked randomization in increasing the efficiency of experimental designs.

Provided best practices for constructing experimental and survey designs.

Presented original research on optimal survey designs for accurately measuring public opinion.

September 7, 2020