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Academic Appointments

Yale University

Associate Professor (with tenure), Department of Statistics and Data Science	2023 –
Associate Professor (with tenure), Department of Political Science	2019 –
Associate Professor (with tenure), Department of Economics (by courtesy)	2022 –
Associate Professor (with tenure), Department of Biostatistics (by courtesy)	2019 –
Resident Faculty Fellow, Institution for Social and Policy Studies	2013 –
Member, Institute for the Foundations of Data Science	2022 –
Faculty Affiliate, Operations Research Doctoral Program	2015 –
Faculty Affiliate, Institute for Network Science	2014 –
Faculty Affiliate, Center for the Study of American Politics	2013 –
Associate Professor (with tenure), Department of Statistics and Data Science (by courtesy)	2019 – 2023
Associate Professor (on term), Department of Political Science	2017 – 2019
Associate Professor (on term), Department of Biostatistics (by courtesy)	2017 – 2019
Associate Professor (on term), Department of Statistics and Data Science (by courtesy)	2018 – 2019
Assistant Professor, Department of Political Science	2014 – 2017
Assistant Professor, Department of Biostatistics (by courtesy)	2015 – 2017
Lecturer Convertible, Department of Political Science	2013 – 2013

Columbia University

Predocutorial Staff Associate, Department of Political Science	2012 – 2013
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Industry Experience

Advisor, X, the moonshot factory (formerly Google X)	2022 – 2022
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Education

Yale University

Ph.D. in Political Science, with departmental distinction, received December 2013
M.A. in Political Science, received May 2013
M.Phil. in Political Science, received December 2012

The Cooper Union for the Advancement of Science and Art

B.Eng. in Mechanical Engineering, *summa cum laude*, received May 2008

Books

PMA and Benjamin T. Miller. 2019. *Foundations of Agnostic Statistics*. Cambridge University Press.

Work under Review

Haoge Chang, Joel Middleton and PMA. Exact Bias Correction for Linear Adjustment of Randomized Controlled Trials.

Ye Wang, Cyrus Samii, Haoge Chang, and PMA. Design-Based Inference for Spatial Experiments with Interference.

Serena Wang, PMA, Stephen Bates, and Michael I. Jordan. Operationalizing Counterfactual Metrics: Incentives, Ranking, and Information Asymmetry.

Articles (Theory and Methodology)

PMA, Haoge Chang, and Patrick Lopatto. 2023. Fast Computation of Exact Confidence Intervals for Randomized Experiments with Binary Outcomes. Accepted at EC 2023.

J. Sophia Wang and PMA. 2022. Listwise Deletion in High Dimensions. *Political Analysis*. Published online 02 March 2022.

Cyrus Samii, Ye Wang, Jonathan Sullivan, and PMA. 2022. Spatial Experiments with Interference using the SpatialEffect Package. *Journal of Agricultural, Biological, and Environmental Statistics* (2022) 1-19.

Fredrik Sävje, PMA, and Michael G. Hudgens. 2021. Average Treatment Effects in the Presence of Unknown Interference. *Annals of Statistics*. 49(2), 673–701.

PMA, Jonathon Baron and Lauren Pinson. 2019. A Note on Dropping Experimental Subjects who Fail a Manipulation Check. *Political Analysis*. 27(4): 572–589.

PMA, Forrest W. Crawford and José R. Zubizarreta. 2018. Confidence Intervals for Linear Unbiased Estimators under Constrained Dependence. *Electronic Journal of Statistics*. 12(2): 2238–2252.

Forrest W. Crawford, PMA, Li Zeng and Jianghong Li. 2018. Identification of Homophily and Preferential Recruitment in Respondent-driven Sampling. *American Journal of Epidemiology*. 187(1): 153–160.

PMA and Cyrus Samii. 2017. Estimating Average Causal Effects under General Interference, with Application to a Social Network Experiment. *Annals of Applied Statistics*. 11(4): 1912–1947. [Selected by *AoAS* for invited plenary session with discussion at the Atlantic Causal Inference Conference, May 2018.]

PMA, Nicole E. Basta and M. Elizabeth Halloran. 2017. The Regression Discontinuity Design under Interference: A Local Randomization-Based Approach. *Observational Studies*. 2: 129 – 133.

PMA and Cyrus Samii. 2016. Does Regression Produce Representative Estimates of Causal Effects? *American Journal of Political Science*. 60(1): 250 – 267. [See erratum re: pp. 258, 260. *American Journal of Political Science*.]

Jake Bowers, Mark Fredrickson and PMA. 2016. Research Note: A More Powerful Test Statistic for Reasoning about Interference between Units. *Political Analysis*. 24(3): 395 – 403.

PMA. 2016. Data-adaptive Causal Effects and Superefficiency. *Journal of Causal Inference*. 4(2).

PMA, Cyrus Samii and Valentina A. Assenova. 2015. Cluster-Robust Variance Estimation for Dyadic Data. *Political Analysis*. 23(4): 564 – 577.

PMA, Alexander Coppock, Forrest W. Crawford and Donald P. Green. 2015. Combining List Experiment and Direct Question Estimates of Sensitive Behavior Prevalence. *Journal of Survey Statistics and Methodology*. 3: 43 – 66.

Joel A. Middleton and PMA. 2015. Unbiased Estimation of the Average Treatment Effect in Cluster-Randomized Experiments. *Statistics, Politics and Policy*. 6(1 – 2): 39 – 75.

PMA and Forrest W. Crawford. 2015. Nonparametric Identification for Respondent-Driven Sampling. *Statistics and Probability Letters*. 106: 100 – 102.

PMA, Donald P. Green and Donald K.K. Lee. 2014. Sharp Bounds on the Variance in Randomized Experiments. *Annals of Statistics*. 42(3) 850 – 871.

PMA, David R. Mayhew and Winston Lin. 2014. A Note on Close Elections and Regression Analysis of the Party Incumbency Advantage. *Statistics, Politics and Policy*. 5(1 – 2): 1 – 11.

Donald P. Green, Brian R. Calfano and PMA. 2014. Field Experimental Designs for the Study of Media Effects. *Political Communication*. 31(1): 168 – 180.

PMA and Donald K. K. Lee. 2013. Interval Estimation of Population Means under Unknown but Bounded Probabilities of Sample Selection. *Biometrika*. 100(1): 235 – 240.

PMA and Joel A. Middleton. 2013. A Class of Unbiased Estimators of the Average Treatment Effect in Randomized Experiments. *Journal of Causal Inference*. 1(1): 135 – 144.

PMA and Cyrus Samii. 2013. Conservative Variance Estimation for Sampling Designs with Zero Pair-wise Inclusion Probabilities. *Survey Methodology*. 39(1): 231 – 241. [French translation: Estimation prudente de la variance pour des plans d'échantillonnage avec probabilités d'inclusion par paire nulles. *Techniques d'enquête*. 39(1): 257 – 267.]

PMA and Donald P. Green. 2013. Sharp Bounds for Average Complier Potential Outcomes in Experiments with Noncompliance and Incomplete Reporting. *Statistics and Probability Letters*. 83(3): 677 – 679.

PMA and Allison Carnegie. 2013. Beyond LATE: Estimation of the Average Treatment Effect with an Instrumental Variable. *Political Analysis*. 21(4): 492 – 506. [Reprinted in *Advances in Political Methodology*, 2017, Ed. Robert J. Franzese Jr. Elgar Research Collections.]

PMA. 2012. A General Method for Detecting Interference Between Units in Randomized Experiments. *Sociological Methods and Research* 41(1): 3 – 16.

Cyrus Samii and PMA. 2012. On Equivalencies Between Design-Based and Regression-Based Variance Estimators for Randomized Experiments. *Statistics and Probability Letters*. 82(2): 365 – 370.

Articles (Empirics)

Jacob Carlson, Trevor Incerti, and PMA. In press. Dyadic Clustering in International Relations. *Political Analysis*.

Drew Stommes, PMA, and Fredrik Sävje. 2023. On the Reliability of Published Findings using the Regression Discontinuity Design in Political Science. *Research and Politics*. [I4R Discussion Paper Series No. 22.]

John Ternovski, Joshua Kalla and PMA. 2022. The Negative Consequences of Informing Voters about Deepfakes: Evidence from Two Survey Experiments. *Journal of Online Trust and Safety*. 1(2).

PMA, Dean Karlan and Lauren E. Pinson. 2018. The Effect of Images of Michelle Obama’s Face on Trick-or-Treaters’ Dietary Choices: A Randomized Controlled Trial. *PLOS ONE*. 13(1): e0189693.

PMA, Lauren Pinson, Molly Offer-Westort and Ana Cristina Perez-Gea. 2017. Information and Access to United Nations Diplomatic Missions: Results from a Randomized Field Experiment. *Applied Economics Letters*. 24(9): 594 – 597.

Elizabeth Levy Paluck, Hana Shepherd and PMA. 2016. Changing Climates of Conflict: A Social Network Experiment in 56 Schools. *PNAS*. 113(3): 566 – 571. [See Correction for Paluck et al., Changing Climates of Conflict: A Social Network Experiment in 56 Schools. *PNAS*. 115(15): E3598.]

Fan Zhang and PMA. 2016. “Driving Fatalities on US Presidential Election Days”: A Reanalysis. *BMC Research Notes*. 9: 341.

Martin Cohen, Mary C. McGrath, Peter Aronow and John Zaller. 2016. Ideologically Extreme Candidates in U.S. Presidential Elections, 1948 – 2012. *Annals of the American Academy of Political and Social Science*. 667(1): 126 – 142.

Mary C. McGrath, PMA and Vivien Shotwell. 2016. Chocolate Scents and Product Sales: A Randomized Controlled Trial in a Canadian Bookstore and Café. *SpringerPlus*. 5:670.

Joshua L. Kalla and PMA. 2015. Editorial Bias in Crowd-Sourced Political Information. *PLOS ONE*. 10(9): e0136327.

Donald P. Green, Mary C. McGrath and PMA. 2013. Field Experiments and the Study of Voter Turnout. *Journal of Elections, Public Opinion and Parties*. 23(1): 27 – 48.

Donald P. Green, PMA, Daniel E. Bergan, Pamela Greene, Celia Paris and Beth I. Weinberger. 2011. Does Knowledge of Constitutional Principles Increase Support for Civil Liberties? Results from a Randomized Field Experiment. *Journal of Politics* 73(2): 463 – 476.

Book Chapters

PMA, Dean Eckles, Cyrus Samii, and Stephanie Zonszein. 2021. Spillover Effects in Experimental Data. *Advances in Experimental Political Science*. J. N. Druckman and D. P. Green, eds. Cambridge University Press. 289–311.

Essays, Book Reviews, Commentary, and Technical Reports

PMA, James M. Robins, Theo Saarinen, Fredrik Sävje, and Jasjeet Sekhon. In press. Nonparametric Identification Is Not Enough, but Randomized Controlled Trials Are. [Contributed talk, Neglected Assumptions in Causal Inference workshop at ICML 2021. To appear as lead article in special issue, with discussion, in *Observational Studies*.]

PMA and Fredrik Sävje. 2020. Review: The Book of Why. *Journal of the American Statistical Association*. 115(529), 482– 485.

PMA, Joshua Kalla, Lilla Orr, and John Ternovski. 2020. Evidence of Rising Rates of Inattentiveness on Lucid in 2020. Technical report.

PMA and Donald K. K. Lee. 2017. A Note on Breaking Ties among Sample Medians. Technical report.

PMA and Molly R. Offer-Westort. 2017. Understanding Ding’s Apparent Paradox. *Statistical Science*. 32(3): 346 – 348.

PMA and Benjamin T. Miller. 2016. Policy Misperceptions and Support for Gun Control Legislation. *The Lancet* 387(10015): 223. [Letter; featured in editorial, Gun Violence in America: A National Crisis. *The Lancet* 387(10015): 200.]

PMA. 2016. A Note on “How Robust Standard Errors Expose Methodological Problems They Do Not Fix, and What to Do About It.” Technical report.

David Broockman, Joshua Kalla and PMA. 2015. Irregularities in LaCour (2014). Technical report.

Will Portman, PMA and Allison Carnegie. 2014. Adaptively Deploying and Evaluating Aid: An Integrated Approach. [Winner of the 2014 *Next Horizons Essay Contest*, held by the Global Development Network and the Bill and Melinda Gates Foundation.]

Statistical Software

PMA, Forrest W. Crawford and José R. Zubizarreta. 2017. `depinf`: “Confidence Intervals for Linear Unbiased Estimators under Constrained Dependence”. R package. Available at <https://github.com/jrzubizarreta/depinf>.

PMA, Dean Eckles and Kyle Peyton. 2015. `icsw`: Inverse Compliance Score Weighting. R package. Version 0.9. Available on CRAN.

PMA and Cyrus Samii. 2012. `ri`: R Package for Performing Randomization-Based Inference for Experiments. R package. Version 0.9. Available on CRAN.

Invited Presentations

Causal Inference Group, Columbia Biostatistics (2020).

UC Berkeley Econometrics Seminar (2019).

Atlantic Causal Inference Conference (Johns Hopkins 2012; Harvard 2013, CMU 2018).

Carnegie Mellon University Statistics Seminar (2017).

NYU Politics Methods Seminar (2017).

Columbia University Causal Inference Conference: Varying Treatment Effects (2017).

University of Wisconsin-Madison Statistics Seminar (2016).

Causal Inference with Highly Dependent Data in Communicable Diseases Research Workshop (Harvard 2016).

University of Washington Biostatistics Seminar (2016).

UC Berkeley Sekhon Group Meeting (2016).

UC Berkeley Biostatistics Seminar (2015, 2016).

Berkeley Initiative for Transparency in the Social Sciences Annual Meeting (2015).

West Coast Experiments Conference (UC Davis 2015).

Kurt Lewin Institute Thematic Workshop (Leiden 2015).

MIT Political Methodology Seminar (2015).

Yale Statistics Seminar (2014).

Yale School of Public Health Biostatistics Seminar (2014).

Columbia American Politics Workshop (2014).

Harvard Applied Statistics Workshop (2013).

Columbia Political Science Methods Workshop (2013).
University of Chicago Program on International Political Economy and Security (2013).
Johns Hopkins School of Public Health Causal Inference Seminar (2012).
The Tools of International Pressure (Yale 2012).

Teaching

Spring 2023. PLSC 503 01. Quantitative Methods II: Theory and Practice of Quantitative Methodology. Graduate seminar.

Spring 2023. PLSC 123 01. Political Economy of Foreign Aid: Research Design and Methodology. Undergraduate seminar.

Spring 2023. PLSC 341/537 01/GLBL 195 01. The Logic of Randomized Experiments in Political Science. Graduate/undergraduate seminar.

Spring 2022. PLSC 503 01. Quantitative Methods II: Theory and Practice of Quantitative Methodology. Graduate seminar.

Fall 2021. PLSC 123 01. Political Economy of Foreign Aid: Research Design and Methodology. Undergraduate seminar.

Fall 2021. PLSC 210/810 01. Political Preferences and American Political Behavior. Graduate/undergraduate seminar.

Spring 2021. PLSC 451/528 01. Design-Based Inference for the Social Sciences. Graduate/undergraduate seminar.

Spring 2021. PLSC 503 01. Quantitative Methods II: Theory and Practice of Quantitative Methodology. Graduate seminar.

Fall 2020. PLSC 123 01. Political Economy of Foreign Aid: Research Design and Methodology. Undergraduate seminar.

Spring 2020. PLSC 503 01. Quantitative Methods II: Theory and Practice of Quantitative Methodology. Graduate seminar.

Fall 2019. PLSC 123 01. Political Economy of Foreign Aid: Research Design and Methodology. Undergraduate seminar.

Fall 2019. PLSC 500 01. Quantitative Methods I: Foundations of Statistical Inference. Graduate seminar.

Spring 2018. PLSC 503 01. Quantitative Methods II: Foundations of Statistical Inference. Graduate seminar.

Spring 2018. PLSC 508 01. Research Design and Causal Inference. Co-instructor: Winston Lin. Graduate seminar.

Spring 2018. AMTH 361 01/S&DS 361 01/S&DS 661 01. Data Analysis. Co-instructor: Winston Lin. Undergraduate/graduate lecture.

Fall 2017. PLSC 123 01. Political Economy of Foreign Aid: Research Design and Methodology. Undergraduate seminar.

Spring 2017. PLSC 503 01. Quantitative Methods. Graduate seminar.

Spring 2017. PLSC 508 01. Research Design and Causal Inference. Graduate seminar.

Fall 2016. PLSC 123 01. Political Economy of Foreign Aid: Research Design and Methodology. Undergraduate seminar.

Fall 2016. PLSC 990 02. Directed reading on nonparametric statistics.

Fall 2015. PLSC 990 02. Directed reading on advanced causal inference.

Spring 2015. PLSC 123 01. Political Economy of Foreign Aid: Research Design and Methodology. Undergraduate seminar.

Spring 2015. PLSC 503 01. Quantitative Methods. Graduate seminar.
 Spring 2015. PLSC 990 05. Directed reading on democratic peace theory.
 Fall 2014. PLSC 500 01. Statistics. Graduate seminar.
 Fall 2014. PLSC 990 06. Directed reading on machine learning.
 Fall 2014. PLSC 990 07. Directed reading on advanced causal inference.
 Fall 2014. PLSC 990 08. Directed reading on international institutions and foreign aid.
 Spring 2014. PLSC 123 01. Political Economy of Foreign Aid: Research Design and Methodology. Undergraduate seminar.
 Spring 2014. PLSC 503 01. Quantitative Methods. Graduate seminar.
 Spring 2014. PLSC 990 02. Directed reading on political psychology.
 Fall 2013. PLSC 500 01. Statistics. Graduate seminar.
 Spring 2012. PLSC 226 01. Parties, Elections, & Policy. As Teaching Fellow. Undergraduate lecture.
 Fall 2011. PLSC 504 01. Advanced Quantitative Methods. As Teaching Fellow. Graduate seminar.

Awards, Honors and Fellowships

Gosnell Prize for Excellence in Political Methodology	2018
Yale Junior Faculty Fellowship	2015 – 2016
Leamer-Rosenthal Prize for Open Social Science, Emerging Researcher	2015
GDN Next Horizons Essay Contest Winner	2014
Yale University Fellowship	2009 – 2013
Falk Fellowship	2011 – 2013
Alma Fuhrman Corlett Gainfort Fellowship	2010 – 2011
Yale Institution for Social and Policy Studies Fellowship	2009 – 2011
The Cooper Union Full Tuition Merit Scholarship	2002 – 2008
The Dale Harris Prize for Best Essay in an Art History Course at the Cooper Union	2007
Tau Beta Pi (The Engineering Honor Society) Chapter Scholarship	2005

Graduate Advisory

Jinghao Sun, YSPH. Ph. D. Candidate, Biostatistics (Current; Dissertation Committee).
 Amy Basu, Yale GSAS. Ph. D. Candidate, Political Science (Current; Dissertation Committee).
 Drew Stommes, Yale GSAS. Ph. D. Candidate, Political Science (Current; Dissertation Committee).
 Haoge Chang, Yale GSAS. Ph. D. Economics (2023; Dissertation Committee). Current: Postdoctoral Fellow, Microsoft Research. Assistant Professor, Columbia University (2024).
 Trevor Incerti, Yale GSAS. Ph. D. Political Science (2022; Dissertation Committee). Current: Postdoctoral Fellow, Program on U.S.-Japan Relations, Harvard University.
 Shikhar Singh, Yale GSAS. Ph. D. Political Science (2022; Dissertation Committee). Current: Postdoctoral Research Fellow at the Center for the Advanced Study of India, University of Pennsylvania.
 Angele Delevoye, Yale GSAS. Ph. D. Political Science (2022; Dissertation Committee). Current: Data Scientist for GeoMatch, Stanford University.
 John Ternovski, Yale GSAS. Ph. D., Political Science (2021; Dissertation Chair). Current: Assistant Professor and Analyst, US Air Force Academy.
 Lilla Orr, Yale GSAS. Ph. D., Political Science (2021; Dissertation Co-chair). Current: Assistant Professor of Mathematics and Computer Science, University of Richmond.

Xiaoxuan Cai, YSPH. Ph. D., Biostatistics (2020; Doctoral Applied Area Committee Member, Dissertation Committee). M.S., Biostatistics (2015; Thesis Advisor). Current: Assistant Professor of Statistics, Ohio State University.

Jonathon Baron, Yale GSAS. Ph. D., Political Science (2020; Dissertation Chair). Current: Quantitative Research Scientist, Chan Zuckerberg Initiative.

Molly Offer-Westort, Yale GSAS. Ph. D., Political Science and Statistics and Data Science (2019; Dissertation Chair). Current: Assistant Professor of Political Science, University of Chicago.

Arjun Sondhi, University of Washington. Ph. D., Biostatistics (2019; Dissertation Committee). Current: Quantitative Scientist, Flatiron Health.

Consuelo Amat, Yale GSAS. Ph. D., Political Science (2018; Dissertation Committee). Current: Assistant Professor of Political Science, Johns Hopkins University.

Daniel Masterson, Yale GSAS. Ph. D., Political Science (2018; Dissertation Committee). Current: Assistant Professor of Political Science, University of California, Santa Barbara.

Tiara Willie, YSPH. Ph. D., Chronic Disease Epidemiology (2018; Dissertation Committee). Current: Assistant Professor in Mental Health, Johns Hopkins Bloomberg School of Public Health.

Alex Bazazi, YSPH. Ph. D., Epidemiology of Microbial Diseases. (2016; Dissertation Committee, Qualifying Exam Committee). Current: Assistant Professor of Psychiatry and Behavioral Sciences, University of California, San Francisco.

Fan Zhang, YSPH. M.P.H., Biostatistics (2015; Masters Thesis Advisor). [Recipient of the 2015 Dean's Prize for Outstanding Thesis.] Current: Model Risk Manager, Sumitomo Mitsui Banking Corporation.

Service

Associate Editor: *Journal of Causal Inference* (2015 –). *Observational Studies* (2018 –). *Statistics, Politics and Policy* (2013 – 2016).

Reviewer: *American Journal of Epidemiology*, *American Journal of Political Science*, *American Political Science Review*, *Annals of Statistics*, *Bioinformatics*, *Biometrika*, *British Journal of Sociology*, *Civil Wars*, *Econometrica*, *Economics Letters*, *Electronic Journal of Statistics*, *Epidemiology*, Icelandic Research Fund, IFAU, *Journal of the American Statistical Association* (Applications & Case Studies; Theory & Methods), *Journal of Causal Inference*, *Journal of Econometrics*, *Journal of Educational and Behavioral Statistics*, *Journal of Experimental Political Science*, *Journal of Peace Research*, *Journal of Politics*, *Journal of the Royal Statistical Society* (Series A; Series B), National Science Foundation (Methodology, Measurement and Statistics), *Journal of Retailing and Consumer Services*, *Journal of Survey Statistics and Methodology*, *Perspectives on Politics*, *PLOS ONE*, Polish-U.S. Fulbright Commission, *Political Analysis*, *Political Behavior*, *Political Science Research and Methods*, *Proceedings of the National Academy of Sciences*, *Review of Economic Studies*, *Scandinavian Journal of Statistics*, *Stat*, *Statistica Sinica*, *Statistical Science*, *Statistics and Probability Letters*, *Statistics in Medicine*, *Survey Methodology*, *Quarterly Journal of Political Science*.

Member: Evidence in Governance and Politics (2013 –).

Conference Organization: EGAP 18 (Co-host, Yale University, 2016). “Theory of Agnostic Statistics: A Discussion” (Host, Yale University, 2016).

Department and University Service: Organizer, MacMillan Center-CSAP Workshop on Quantitative Research Methods (2013 – 2015, 2016 – 2018, 2019 –). Chair, Quantitative Methods General Exam Committee, Political Science (2014 – 2015, 2016 – 2018, 2019 – 2022). Member, Quantitative Methods General Exam Committee, Political Science (2022 – 2023). Subfield Coordinator, Quantitative Empirical Methods, Political Science (2018 – 2022). Member, Graduate Admissions Committee, Political Science (2014 – 2015, 2019 – 2020). Member and Diversity Representative, Graduate Admissions Committee, Political Science (2020 – 2021). Member, Open Rank Methodology Search Committee, Political Science (2015 – 2016). Member, Faculty Activity Committee (Spring 2020). Member and Diversity Representative, Junior American Institutions and Behavior Search Committee, Political Science (2016 – 2017). Member, James Gordon Bennett Prize Committee for Best Senior Essay in International Relations (2016 – 2017). First year advisor, Timothy Dwight College (2019 – 2021). Member, Acheson Prize review panel (2023), Yale Review of International Studies.

Disciplinary Service: Member, William Cochran prize award committee, *Observational Studies* (2020).