P. M. Aronow 115 Prospect Street	E-mail: pmaronow	@gmail.com
New Haven, CT	Web: pmaronow.github.io	
Academic Appointments		
Yale University		
Associate Professor (with tenure), Department of Political Science		2019 –
Associate Professor (with tenure), Department of Biostatistics (by courte	sy)	2019 –
Associate Professor (with tenure), Department of Statistics and Data Scientific Scientific Statistics and Data Scientific	ence (by courtesy)	2019 –
Associate Professor (with tenure), Department of Economics (by courtes	y)	2022 –
Resident Faculty Fellow, Institution for Social and Policy Studies		2013 –
Faculty Affiliate, Center for the Study of American Politics		2013 –
Faculty Affiliate, Institute for Network Science		2014 –
Faculty Affiliate, Operations Research Doctoral Program		2015 –
Member, Institute for the Foundations of Data Science		2022 –
Previous Academic Appointments		
Yale University		
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		
Predoctoral Staff Associate, Department of Political Science		2012 - 2013
Industry Experience		
Advisor, X, the moonshot factory		2022 –

### 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.

# Articles (Theory and Methodology)

J. Sophia Wang and PMA. Forthcoming. Listwise Deletion in High Dimensions. *Political Analysis*.

Cyrus Samii, Ye Wang, Jonathan Sullivan, and PMA. Forthcoming. Spatial Experiments with Interference using the SpatialEffect Package. *Journal of Agricultural, Biological, and Environmental Statistics*.

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

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 Pairwise 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)

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

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.

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.]

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 and Technical Reports

PMA, James M. Robins, Theo Saarinen, Fredrik Sävje, and Jasjeet Sekhon. 2021. Nonparametric Identification Is Not Enough, but Randomized Controlled Trials Are. [Selected for contributed talk, Neglected Assumptions in Causal Inference workshop at ICML 2021.]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Spring 2017. PLSC 503 01. Quantitative Methods.

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

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

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.

Spring 2015. PLSC 503 01. Quantitative Methods.

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.

Spring 2014. PLSC 503 01. Quantitative Methods.

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.

Fall 2011. PLSC 504 01. Advanced Quantitative Methods. As Teaching Fellow.

### 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**

Cleo O'Brien-Udry, Yale GSAS. Ph. D. Candidate, Political Science (Current; Dissertation Chair).

Benjamin Miller, Yale GSAS. Ph. D. Candidate, Political Science (Current; Dissertation Chair).

Haoge Chang, Yale GSAS. Ph. D. Candidate, Economics (Current; Dissertation Committee).

Jinghao Sun, YSPH. Ph. D. Candidate, Biostatistics (Current; Dissertation Committee).

Angele Delevoye, Yale GSAS. Ph. D. Candidate, Political Science (Current; Dissertation Committee).

Amy Basu, Yale GSAS. Ph. D. Candidate, Political Science (Current; Dissertation Committee).

Trevor Incerti, Yale GSAS. Ph. D. Candidate, Political Science (Current; Dissertation Committee).

Drew Stommes, Yale GSAS. Ph. D. Candidate, Political Science (Current; Dissertation Committee).

Shikhar Singh, Yale GSAS. Ph. D. Candidate, Political Science (Current; Dissertation Committee).

John Ternovski, Yale GSAS. Ph. D., Political Science (2021; Dissertation Chair).

Lilla Orr, Yale GSAS. Ph. D., Political Science (2021; Dissertation Co-chair).

Xiaoxuan Cai, YSPH. Ph. D., Biostatistics (2020; Doctoral Applied Area Committee Member, Dissertation Committee). M.S., Biostatistics (2015; Thesis Advisor).

Jonathon Baron, Yale GSAS. Ph. D., Political Science (2020; Dissertation Chair).

Molly Offer-Westort, Yale GSAS. Ph. D., Political Science and Statistics and Data Science (2019; Dissertation Chair).

Arjun Sondhi, University of Washington. Ph. D., Biostatistics (2019; Dissertation Committee).

Consuelo Amat, Yale GSAS. Ph. D., Political Science (2018; Dissertation Committee).

Daniel Masterson, Yale GSAS. Ph. D., Political Science (2018; Dissertation Committee).

Tiara Willie, YSPH. Ph. D, Chronic Disease Epidemiology (2018; Dissertation Committee).

Alex Bazazi, YSPH. Ph. D., Epidemiology of Microbial Diseases. (2016; Dissertation Committee, Qualifying Exam Committee).

Fan Zhang, YSPH. M.P.H., Biostatistics (2015; Masters Thesis Advisor). [Recipient of the 2015 Dean's Prize for Outstanding Thesis.]

#### Service

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

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

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.

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 – 2021). Chair, Quantitative Methods General Exam Committee (2014 – 2015, 2016 – 2018, 2019 – 2021). Member, Graduate Admissions Committee (2014 – 2015, 2019 – 2020). Member, Open Rank Methodology Search Committee (2015 – 2016). Member, Faculty Activity Committee (Spring 2020). Quantitative Methods Subfield Organizer (2018 – 2021). Member, Junior American Institutions and Behavior Search Committee (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).

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