# Kosuke Imai

### Curriculum Vitae

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## Contact Information

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## Education

Ph.D. in Political Science, Harvard University (1999 – 2003)

A.M. in Statistics, Harvard University (2000 – 2002)

B.A. in Liberal Arts, The University of Tokyo (1994 – 1998)

## Positions

Professor, Department of Government and Department of Statistics, Harvard University (2018 – present)

Academic Visitor, Nuffield College, University of Oxford (2024 – 2025)

Professor, Department of Politics and Center for Statistics and Machine Learning, Princeton University (2013 – 2018)

Founding Director, Program in Statistics and Machine Learning (2013 – 2017)

Professor of Visiting Status, Graduate Schools of Law and Politics, The University of Tokyo (2016 – 2023)

Associate Professor, Department of Politics, Princeton University (2012 – 2013)

Assistant Professor, Department of Politics, Princeton University (2004 – 2012)

Visiting Researcher, Faculty of Economics, The University of Tokyo (August, 2006)

Instructor, Department of Politics, Princeton University (2003 – 2004)

### Honors and Awards

- 26. Guggenheim Fellowship (2024).
- 25. Highly Cited Researcher for "production of multiple highly cited papers that rank in the top 1% by citations for field and year in Web of Science," awarded by Clarivate Analytics (cross-field, 2018, 2019, 2020, 2021; social sciences 2022, 2023, 2024).
- 24. Graduate Student Association Faculty Mentorship Award for outstanding graduate student mentorship, awarded by the Graduate Student Association, Department of Government, Harvard University (2023).
- 23. Statistical Software Award for developing statistical software that makes a significant research contribution, for "redist: Simulation Methods for Legislative Redistricting," awarded by the Society for Political Methodology (2022).
- 22. Honarable Mention, Best Conference Paper Award, for "A Statistical Model of Bipartite Networks: Application to Cosponsorship in the United States Senate," awarded by Political Network Section, American Political Science Association (2022).
- 21. James Francis Hannan Lectureship. Department of Statistics and Probability, Michigan State University (2022; declined).
- 20. Invited to read "Experimental Evaluation of Computer-Assisted Human Decision-Making: Application to Pretrial Risk Assessment Instrument." before the Royal Statistical Society Research Section, London (2022).
- 19. Excellence in Mentoring Award, awarded by the Society for Political Methodology (2021).
- 18. Statistical Software Award for developing statistical software that makes a significant research contribution, for "fastLink: Fast Probabilistic Record Linkage," awarded by the Society for Political Methodology (2021).
- 17. President, The Society for Political Methodology (2017–2019). Vice President and President-elect (2015–2017).
- 16. Elected Fellow, The Society for Political Methodology (2017).
- 15. The Nils Petter Gleditsch Article of the Year Award (2017), awarded by Journal of Peace Research.
- 14. Statistical Software Award for developing statistical software that makes a significant research contribution, for "mediation: R Package for Causal Mediation Analysis," awarded by the Society for Political Methodology (2015).
- 13. Outstanding Reviewer Award for Journal of Educational and Behavioral Statistics, given by the American Educational Research Association (2014).
- 12. The Stanley Kelley, Jr. Teaching Award, given by the Department of Politics, Princeton University (2013).
- 11. Pi Sigma Alpha Award for the best paper presented at the 2012 Midwest Political Science Association annual meeting, for "Explaining Support for Combatants during Wartime: A Survey Experiment in Afghanistan," awarded by the Midwest Political Science Association (2013).

- 10. Invited to read "Experimental Designs for Identifying Causal Mechanisms" before the Royal Statistical Society Research Section, London (2012).
- 9. Inaugural recipient of the *Emerging Scholar Award* for a young scholar making exceptional contributions to political methodology who is within ten years of their terminal degree, awarded by the Society for Political Methodology (2011).
- 8. Political Analysis Editors' Choice Award for an article providing an especially significant contribution to political methodology, for "Estimation of Heterogeneous Treatment Effects from Randomized Experiments, with Application to the Optimal Planning of the Get-out-the-vote Campaign," awarded by the Society for Political Methodology and Oxford University Press (2011).
- 7. Tom Ten Have Memorial Award for the best poster presented at the 2011 Atlantic Causal Inference Conference, for "Identifying Treatment Effect Heterogeneity through Optimal Classification and Variable Selection," awarded by the Departments of Biostatistics and Statistics, University of Michigan (2011).
- 6. New Hot Paper, for the most-cited paper in the field of Economics & Business in the last two months among papers published in the last year, for "Misunderstandings among Experimentalists and Observationalists about Causal Inference," named by Thomson Reuters' ScienceWatch (2009).
- 5. Warren Miller Prize for the best article published in Political Analysis, for "Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference," awarded by the Society for Political Methodology and Oxford University Press (2008).
- 4. Fast Breaking Paper for the article with the largest percentage increase in citations among those in the top 1% of total citations across the social sciences in the last two years, for "Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference," named by Thomson Reuters' ScienceWatch (2008).
- 3. Pharmacoepidemiology and Drug Safety Outstanding Reviewer Recognition (2008).
- 2. Miyake Award for the best political science article published in 2005, for "Do Get-Out-The-Vote Calls Reduce Turnout? The Importance of Statistical Methods for Field Experiments," awarded by the Japanese Political Science Association (2006).
- 1. Toppan Prize for the best dissertation in political science, for Essays on Political Methodology, awarded by Harvard University (2004).

## **Publications**

## **Books**

- 2. Llaudet, Elena, and Kosuke Imai. (2022). Data Analysis for Social Science: A Friendly and Practical Introduction. Princeton University Press. Translated into Japanese (2025).
- 1. Imai, Kosuke. (2017). Quantitative Social Science: An Introduction. Princeton University Press. Translated into Japanese (2018), Chinese (2020), and Korean (2021).

Stata version (2021) with Lori D. Bougher.

Tidyverse version (2022) with Nora Webb Williams

#### Refereed Journal Articles

- 96. Ben-Michael, Eli, D. James Greiner, Kosuke Imai, and Zhichao Jiang. "Safe Policy Learning through Extrapolation: Application to Pre-trial Risk Assessment." *Journal of the American Statistical Association*, Forthcoming.
- 95. Blackwell, Matthew, Jacob R. Brown, Sophie Hill, Kosuke Imai, and Teppei Yamamoto. "Priming bias versus post-treatment bias in experimental designs." *Political Analysis*, Forthcoming.
- 94. Goplerud, Max, Kosuke Imai, Nicole E. Pashley. "Estimating Heterogeneous Causal Effects of High-Dimensional Treatments: Application to Conjoint Analysis." *Annals of Applied Statistics*, Forthcoming.
- 93. Tarr, Alexander and Kosuke Imai. (2025). "Estimating Average Treatment Effects with Support Vector Machines." *Statistics in Medicine*, Vol. 44, No. 5, e70006.
- 92. Imai, Kosuke and Michael Lingzhi Li. (2025). "Statistical Inference for Heterogeneous Treatment Effects Discovered by Generic Machine Learning in Randomized Experiments." Journal of Business & Economic Statistics, Vol. 43, No. 1, pp. 256–268.
- Johnson, Rebecca A., Tyler Simko, and Kosuke Imai. (2024). "A Summer Bridge Program for First-Generation Low-Income Students Stretches Academic Ambitions with No Adverse Impacts on GPA." Proceedings of the National Academy of Sciences, Vol. 121, No. 50, e2404924121.
- 90. Ben-Michael, Eli, Kosuke Imai, and Zhichao Jiang. (2024). "Policy Learning with Counterfactual Asymmetric Utilities." *Journal of the American Statistical Association*, Vol. 119, No. 548, pp. 3045–3058.
- 89. McCartan, Cory, Jacob Brown, and Kosuke Imai. (2024). "Measuring and Modeling Neighborhoods." *American Political Science Review*, Vol. 118, No. 4 (November), pp. 1966–1985.
- 88. Ham, Dae Woong, Kosuke Imai, and Lucas Janson. (2024). "Using Machine Learning to Test Causal Hypotheses in Conjoint Analysis." *Political Analysis*, Vol. 32, No. 3 (July), pp. 329-344.
- 87. Eshima, Shusei, Kosuke Imai, and Tomoya Sasaki. (2024). "Keyword-Assisted Topic Models." American Journal of Political Science, Vol. 68, No. 2 (April), pp. 730–750.
- 86. Li, Michael Lingzhi and Kosuke Imai. (2024). "Neyman Meets Causal Machine Learning: Experimental Evaluation of Individualized Treatment Rules." *Journal of Causal Inference*, Vol 12, No. 1, pp. 1–20. Special Issue on Neyman (1923) and its influences on causal inference.
- 85. McCartan, Cory, Tyler Simko, and Kosuke Imai. (2024). "Rejoinder: We Can Improve the Usability of the Census Noisy Measurements File." *Harvard Data Science Review*, Vol. 6, No. 2 (Spring).

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- 84. Kenny, Christopher, Shiro Kuriwaki, Cory McCartan, Tyler Simko, and Kosuke Imai. (2024). "Evaluating Bias and Noise Induced by the U.S. Census Bureau's Privacy Protection Methods." *Science Advances*, Vol 10, No. 18 (May), pp. 1–13.
- 83. Kenny, Christopher, Cory McCartan, Tyler Simko, and Kosuke Imai. (2024). "Census officials must constructively engage with independent evaluations." *Proceedings of the National Academy of Sciences* (Letter), Vol. 121, No. 11, e2321196121.
- 82. McCartan, Cory, Tyler Simko, and Kosuke Imai. (2023). "Making Differential Privacy Work for Census Data Users." *Harvard Data Science Review*, Vol. 5, No. 4 (Fall).
- 81. McCartan, Cory and Kosuke Imai. (2023). "Sequential Monte Carlo for Sampling Balanced and Compact Redistricting Plans." *Annals of Applied Statistics*, Vol. 17, No. 4 (December), pp. 3300–3323.
- 80. Tarr, Alexander, June Hwang, and Kosuke Imai. (2023). "Automated Coding of Political Campaign Advertisement Videos: An Empirical Validation Study." *Political Analysis*, Vol. 31, No. 4 (October), pp. 554–574.
- Jiang, Zhichao, Kosuke Imai, and Anup Malani. (2023). "Statistical Inference and Power Analysis for Direct and Spillover Effects in Two-Stage Randomized Experiments." Biometrics, Vol. 79, No. 3 (September), pp. 2370-2381.
- 78. Imai, Kosuke, In Song Kim, and Erik Wang. (2023). "Matching Methods for Causal Inference with Time-Series Cross-Sectional Data." *American Journal of Political Science*, Vol. 67, No. 3 (July), pp. 587–605.
- 77. Kenny, Christopher T., Cory McCartan, Tyler Simko, Shiro Kuriwaki, and Kosuke Imai. (2023). "Widespread Partisan Gerrymandering Mostly Cancels Nationally, but Reduces Electoral Competition." *Proceedings of the National Academy of Sciences*, Vol. 120, No. 25, e2217322120.
- 76. Imai, Kosuke and Zhichao Jiang. (2023). "Principal Fairness for Human and Algorithmic Decision-Making." *Statistical Science*, Vol. 38, No. 2 (July), pp317-328.
- 75. McCartan, Cory, Tyler Simko, and Kosuke Imai. (2023). "Researchers need better access to US Census data." *Science*, Vol. 380, No. 6648 pp. 902–903.
- 74. Imai, Kosuke, Zhichao Jiang, D. James Greiner, Ryan Halen, and Sooahn Shin. (2023). "Experimental Evaluation of Computer-Assisted Human Decision-Making: Application to Pretrial Risk Assessment Instrument." (with discussion) *Journal of the Royal Statistical Society, Series A (Statistics in Society)*, Vol. 186, No. 2 (April), pp. 167-189. Read before the Royal Statistical Society.
- 73. Rosenman, Evan T.R., Santiago Olivella, and Kosuke Imai. (2023). "Race and ethnicity data for first, middle, and last names." *Scientific Data*, Vol. 10, No. 299, pp. 1–11.
- 72. Imai, Kosuke and Michael Lingzhi Li. (2023). "Experimental Evaluation of Individualized Treatment Rules." *Journal of the American Statistical Association*, Vol. 118, No. 541, pp. 242—256.

- Kenny, Christopher T., Shiro Kuriwaki, Cory McCartan, Evan Rosenman, Tyler Simko, and Kosuke Imai. (2023). "Comment: The Essential Role of Policy Evaluation for the 2020 Census Disclosure Avoidance System." Harvard Data Science Review, Special Issue 2: Dierential Privacy for the 2020 U.S. Census (January), pp. 1–16.
- 70. Fan, Jianqing, Kosuke Imai, Inbeom Lee, Han Liu, Yang Ning, and Xiaolin Yang. (2023). "Optimal Covariate Balancing Conditions in Propensity Score Estimation." *Journal of Business & Economic Statistics*, Vol. 41, No. 1, pp. 97–110.
- 69. Imai, Kosuke, Santiago Olivella, and Evan T. Rosenman. (2022). "Addressing Census data problems in race imputation via fully Bayesian Improved Surname Geocoding and name supplements." *Science Advances*, Vol. 8, No. 49 (December), pp. 1-10.
- 68. Papadogeorgou, Georgia, Kosuke Imai, Jason Lyall, and Fan Li. (2022). "Causal Inference with Spatio-temporal Data: Estimating the Effects of Airstrikes on Insurgent Violence in Iraq." *Journal of the Royal Statistical Society, Series B (Statistical Methodology)*, Vol. 84, No. 5 (November), pp. 1969–1999.
- 67. McCartan, Cory, Christopher T. Kenny, Tyler Simko, George Garcia III, Kevin Wang, Melissa Wu, Shiro Kuriwaki, and Kosuke Imai. (2022). "Simulated redistricting plans for the analysis and evaluation of redistricting in the United States." *Scientific Data*, Vol. 9, No. 689, pp. 1–10.
- Olivella, Santiago, Tyler Pratt, and Kosuke Imai. (2022). "Dynamic Stochastic Block-model Regression for Social Networks: Application to International Conflicts." Journal of the American Statistical Association, Vol. 117, No. 539, pp. 1068–1081.
- 65. de la Cuesta, Brandon, Naoki Egami, and Kosuke Imai. (2022). "Experimental Design and Statistical Inference for Conjoint Analysis: The Essential Role of Population Distribution." *Political Analysis*, Vol. 30, No. 1 (January), pp. 19–45.
- 64. Kenny, Christopher T., Shiro Kuriwaki, Cory McCartan, Evan Rosenman, Tyler Simko, and Kosuke Imai. (2021). "The Use of Differential Privacy for Census Data and its Impact on Redistricting: The Case of the 2020 U.S. Census." Science Advances, Vol. 7, No. 7 (October), pp. 1-17.
- 63. Imai, Kosuke and James Lo. (2021). "Robustness of Empirical Evidence for the Democratic Peace: A Nonparametric Sensitivity Analysis." *International Organization*, Vol. 75, No. 3 (Summer), pp. 901–919.
- 62. Imai, Kosuke, Zhichao Jiang, and Anup Malani. (2021). "Causal Inference with Interference and Noncompliance in the Two-Stage Randomized Experiments." *Journal of the American Statistical Association*, Vol. 116, No. 534, pp. 632-644.
- 61. Imai, Kosuke, and In Song Kim. (2021). "On the Use of Two-way Fixed Effects Regression Models for Causal Inference with Panel Data." *Political Analysis*, Vol. 29, No. 3 (July), pp. 405–415.
- 60. Imai, Kosuke and Zhichao Jiang. (2020). "Identification and Sensitivity Analysis of Contagion Effects with Randomized Placebo-Controlled Trials." *Journal of the Royal Statistical Society, Series A (Statistics in Society)*, Vol. 183, No. 4 (October), pp. 1637–1657.

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- Fifield, Benjamin, Michael Higgins, Kosuke Imai, and Alexander Tarr. (2020). "Automated Redistricting Simulation Using Markov Chain Monte Carlo." Journal of Computational and Graphical Statistics, Vol. 29, No. 4, pp. 715–728.
- 58. Fifield, Benjamin, Kosuke Imai, Jun Kawahara, and Christopher T. Kenny. (2020). "The Essential Role of Empirical Validation in Legislative Redistricting Simulation." *Statistics and Public Policy*, Vol. 7, No 1, pp. 52–68.
- 57. Ning, Yang, Sida Peng, and Kosuke Imai. (2020). "Robust Estimation of Causal Effects via High-Dimensional Covariate Balancing Propensity Score." *Biometrika*, Vol. 107, No. 3 (September), pp. 533—554.
- 56. Chou, Winston, Kosuke Imai, and Bryn Rosenfeld. (2020). "Sensitive Survey Questions with Auxiliary Information." Sociological Methods & Research, Vol. 49, No. 2 (May), pp. 418–454.
- 55. Imai, Kosuke, Gary King, and Carlos Velasco Rivera. (2020). "Do Nonpartisan Programmatic Policies Have Partisan Electoral Effects? Evidence from Two Large Scale Randomized Experiments." *Journal of Politics*, Vol. 82, No. 2 (April), pp. 714–730.
- 54. Zhao, Shandong, David A. van Dyk, and Kosuke Imai. (2020). "Propensity-Score Based Methods for Causal Inference in Observational Studies with Non-Binary Treatments." Statistical Methods in Medical Research, Vol. 29, No. 3 (March), pp. 709–727.
- 53. Lyall, Jason, Yang-Yang Zhou, and Kosuke Imai. (2020). "Can Economic Assistance Shape Combatant Support in Wartime? Experimental Evidence from Afghanistan." *American Political Science Review*, Vol. 114, No. 1 (February), pp. 126–143.
- 52. Kim, In Song, Steven Liao, and Kosuke Imai. (2020). "Measuring Trade Profile with Granular Product-level Trade Data." *American Journal of Political Science*, Vol. 64, No. 1 (January), pp. 102-117.
- 51. Enamorado, Ted and Kosuke Imai. (2019). "Validating Self-reported Turnout by Linking Public Opinion Surveys with Administrative Records." *Public Opinion Quarterly*, Vol. 83, No. 4 (Winter), pp. 723—748.
- 50. Blair, Graeme, Winston Chou, and Kosuke Imai. (2019). "List Experiments with Measurement Error." *Political Analysis*, Vol. 27, No. 4 (October), pp. 455–480.
- 49. Egami, Naoki, and Kosuke Imai. "Causal Interaction in Factorial Experiments: Application to Conjoint Analysis." *Journal of the American Statistical Association*, Vol. 114, No. 526 (June), pp. 529-540.
- 48. Enamorado, Ted, Benjamin Fifield, and Kosuke Imai. (2019). "Using a Probabilistic Model to Assist Merging of Large-scale Administrative Records." *American Political Science Review*, Vol. 113, No. 2 (May), pp. 353–371.
- 47. Imai, Kosuke and In Song Kim. (2019) "When Should We Use Linear Fixed Effects Regression Models for Causal Inference with Longitudinal Data?." *American Journal of Political Science*, Vol. 63, No. 2 (April), pp. 467–490.

- 46. Imai, Kosuke, and Zhichao Jiang. (2018). "A Sensitivity Analysis for Missing Outcomes Due to Truncation-by-Death under the Matched-Pairs Design." Statistics in Medicine, Vol. 37, No. 20 (September), pp. 2907–2922.
- 45. Fong, Christian, Chad Hazlett, and Kosuke Imai. (2018). "Covariate Balancing Propensity Score for a Continuous Treatment: Application to the Efficacy of Political Advertisements." *Annals of Applied Statistics*, Vol. 12, No. 1, pp. 156–177.
- 44. Hirose, Kentaro, Kosuke Imai, and Jason Lyall. (2017). "Can Civilian Attitudes Predict Insurgent Violence?: Ideology and Insurgent Tactical Choice in Civil War" *Journal of Peace Research*, Vol. 51, No. 1 (January), pp. 47–63.
- 43. Imai, Kosuke, James Lo, and Jonathan Olmsted. (2016). "Fast Estimation of Ideal Points with Massive Data." *American Political Science Review*, Vol. 110, No. 4 (December), pp. 631–656.
- 42. Rosenfeld, Bryn, Kosuke Imai, and Jacob Shapiro. (2016). "An Empirical Validation Study of Popular Survey Methodologies for Sensitive Questions." *American Journal of Political Science*, Vol. 60, No. 3 (July), pp. 783–802.
- 41. Imai, Kosuke and Kabir Khanna. (2016). "Improving Ecological Inference by Predicting Individual Ethnicity from Voter Registration Record." *Political Analysis*, Vol. 24, No. 2 (Spring), pp. 263–272.
- 40. Blair, Graeme, Kosuke Imai, and Yang-Yang Zhou. (2015). "Design and Analysis of the Randomized Response Technique." *Journal of the American Statistical Association*, Vol. 110, No. 511 (September), pp. 1304–1319.
- 39. Imai, Kosuke and Marc Ratkovic. (2015). "Robust Estimation of Inverse Probability Weights for Marginal Structural Models." *Journal of the American Statistical Association*, Vol. 110, No. 511 (September), pp. 1013–1023. (lead article)
- 38. Lyall, Jason, Yuki Shiraito, and Kosuke Imai. (2015). "Coethnic Bias and Wartime Informing." *Journal of Politics*, Vol. 77, No. 3 (July), pp. 833–848.
- 37. Imai, Kosuke, Bethany Park, and Kenneth Greene. (2015). "Using the Predicted Responses from List Experiments as Explanatory Variables in Regression Models." *Political Analysis*, Vol. 23, No. 2 (Spring), pp. 180–196. Translated in Portuguese and Reprinted in *Revista Debates* Vol. 9, No 1.
- 36. Blair, Graeme, Kosuke Imai, and Jason Lyall. (2014). "Comparing and Combining List and Endorsement Experiments: Evidence from Afghanistan." *American Journal of Political Science*, Vol. 58, No. 4 (October), pp. 1043–1063.
- 35. Tingley, Dustin, Teppei Yamamoto, Kentaro Hirose, Luke Keele, and Kosuke Imai. (2014). "mediation: R Package for Causal Mediation Analysis." *Journal of Statistical Software*, Vol. 59, No. 5 (August), pp. 1–38.
- 34. Imai, Kosuke and Marc Ratkovic. (2014). "Covariate Balancing Propensity Score." Journal of the Royal Statistical Society, Series B (Statistical Methodology), Vol. 76, No. 1 (January), pp. 243–263.

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- 33. Lyall, Jason, Graeme Blair, and Kosuke Imai. (2013). "Explaining Support for Combatants during Wartime: A Survey Experiment in Afghanistan." *American Political Science Review*, Vol. 107, No. 4 (November), pp. 679-705. Winner of the Pi Sigma Alpha Award.
- 32. Imai, Kosuke and Teppei Yamamoto. (2013). "Identification and Sensitivity Analysis for Multiple Causal Mechanisms: Revisiting Evidence from Framing Experiments." *Political Analysis*, Vol. 21, No. 2 (Spring), pp. 141–171. (lead article).
- 31. Imai, Kosuke and Marc Ratkovic. (2013). "Estimating Treatment Effect Heterogeneity in Randomized Program Evaluation." Annals of Applied Statistics, Vol. 7, No. 1 (March), pp. 443–470. Winner of the Tom Ten Have Memorial Award. Reprinted in Advances in Political Methodology, R. Franzese, Jr. ed., Edward Elger, 2017.
- 30. Imai, Kosuke, Dustin Tingley, and Teppei Yamamoto. (2013). "Experimental Designs for Identifying Causal Mechanisms." (with discussions) Journal of the Royal Statistical Society, Series A (Statistics in Society), Vol. 176, No. 1 (January), pp. 5–51. (lead article) Read before the Royal Statistical Society, March 2012.
- 29. Imai, Kosuke, and Dustin Tingley. (2012). "A Statistical Method for Empirical Testing of Competing Theories." *American Journal of Political Science*, Vol. 56, No. 1 (January), pp. 218–236.
- 28. Blair, Graeme, and Kosuke Imai. (2012). "Statistical Analysis of List Experiments." *Political Analysis*, Vol. 20, No. 1 (Winter), pp. 47–77.
- 27. Imai, Kosuke, Luke Keele, Dustin Tingley, and Teppei Yamamoto. (2011). "Unpacking the Black Box of Causality: Learning about Causal Mechanisms from Experimental and Observational Studies." American Political Science Review, Vol. 105, No. 4 (November), pp. 765–789. Reprinted in Advances in Political Methodology, R. Franzese, Jr. ed., Edward Elger, 2017.
- 26. Bullock, Will, Kosuke Imai, and Jacob N. Shapiro. (2011). "Statistical Analysis of Endorsement Experiments: Measuring Support for Militant Groups in Pakistan." *Political Analysis*, Vol. 19, No. 4 (Autumn), pp. 363–384. (lead article)
- 25. Imai, Kosuke. (2011). "Multivariate Regression Analysis for the Item Count Technique." Journal of the American Statistical Association, Vol. 106, No. 494 (June), pp. 407–416. (featured article)
- 24. Ho, Daniel E., Kosuke Imai, Gary King, and Elizabeth Stuart. (2011). "MatchIt: Non-parametric Preprocessing for Parametric Causal Inference." *Journal of Statistical Software*, Vol. 42 (Special Volume on Political Methodology), No. 8 (June), pp. 1–28.
- 23. Imai, Kosuke, Ying Lu, and Aaron Strauss. (2011). "eco: R Package for Ecological Inference in 2 × 2 Tables." *Journal of Statistical Software*, Vol. 42 (Special Volume on Political Methodology), No. 5 (June), pp. 1–23.
- 22. Imai, Kosuke and Aaron Strauss. (2011). "Estimation of Heterogeneous Treatment Effects from Randomized Experiments, with Application to the Optimal Planning of the Get-out-the-vote Campaign." *Political Analysis*, Vol. 19, No. 1 (Winter), pp. 1–19. (lead article) Winner of the Political Analysis Editors' Choice Award.

- Imai, Kosuke, Luke Keele, and Dustin Tingley. (2010). "A General Approach to Causal Mediation Analysis." Psychological Methods, Vol. 15, No. 4 (December), pp. 309–334. (lead article)
- Imai, Kosuke and Teppei Yamamoto. (2010). "Causal Inference with Differential Measurement Error: Nonparametric Identification and Sensitivity Analysis." American Journal of Political Science, Vol. 54, No. 2 (April), pp. 543–560.
- 19. Imai, Kosuke, Luke Keele, and Teppei Yamamoto. (2010). "Identification, Inference, and Sensitivity Analysis for Causal Mediation Effects." *Statistical Science*, Vol. 25, No. 1 (February), pp. 51–71.
- 18. King, Gary, Emmanuela Gakidou, Kosuke Imai, Jason Lakin, Ryan T. Moore, Clayton Nall, Nirmala Ravishankar, Manett Vargas, Martha María Téllez-Rojo, Juan Eugenio Hernández Ávila, Mauricio Hernández Ávila, and Héctor Hernández Llamas. (2009). "Public Policy for the Poor? A Randomized Ten-Month Evaluation of the Mexican Universal Health Insurance Program." (with a comment) The Lancet, Vol. 373, No. 9673 (April), pp. 1447–1454.
- 17. Imai, Kosuke, Gary King, and Clayton Nall. (2009). "The Essential Role of Pair Matching in Cluster-Randomized Experiments, with Application to the Mexican Universal Health Insurance Evaluation." (with discussions) *Statistical Science*, Vol. 24, No. 1 (February), pp. 29–53.
- Imai, Kosuke. (2009). "Statistical Analysis of Randomized Experiments with Nonignorable Missing Binary Outcomes: An Application to a Voting Experiment." Journal of the Royal Statistical Society, Series C (Applied Statistics), Vol. 58, No. 1 (February), pp. 83–104.
- 15. Imai, Kosuke, Gary King, and Olivia Lau. (2008). "Toward A Common Framework of Statistical Analysis and Development." *Journal of Computational and Graphical Statistics*, Vol. 17, No. 4 (December), pp. 892–913.
- 14. Imai, Kosuke. (2008). "Variance Identification and Efficiency Analysis in Experiments under the Matched-Pair Design." *Statistics in Medicine*, Vol. 27, No. 4 (October), pp. 4857–4873.
- 13. Ho, Daniel E., and Kosuke Imai. (2008). "Estimating Causal Effects of Ballot Order from a Randomized Natural Experiment: California Alphabet Lottery, 1978–2002." *Public Opinion Quarterly*, Vol. 72, No. 2 (Summer), pp. 216–240.
- 12. Imai, Kosuke, Gary King, and Elizabeth A. Stuart. (2008). "Misunderstandings among Experimentalists and Observationalists: Balance Test Fallacies in Causal Inference." Journal of the Royal Statistical Society, Series A (Statistics in Society), Vol. 171, No. 2 (April), pp. 481–502. Reprinted in Field Experiments and their Critics, D. Teele ed., New Haven: Yale University Press, 2013.
- 11. Imai, Kosuke, Ying Lu, and Aaron Strauss. (2008). "Bayesian and Likelihood Ecological Inference for 2 × 2 Tables: An Incomplete Data Approach." *Political Analysis*, Vol. 16, No. 1 (Winter), pp. 41–69.

- 10. Imai, Kosuke. (2008). "Sharp Bounds on the Causal Effects in Randomized Experiments with "Truncation-by-Death"." Statistics & Probability Letters, Vol. 78, No. 2 (February), pp. 144–149.
- 9. Imai, Kosuke and Samir Soneji. (2007). "On the Estimation of Disability-Free Life Expectancy: Sullivan's Method and Its Extension." *Journal of the American Statistical Association*, Vol. 102, No. 480 (December), pp. 1199–1211.
- 8. Horiuchi, Yusaku, Kosuke Imai, and Naoko Taniguchi. (2007). "Designing and Analyzing Randomized Experiments: Application to a Japanese Election Survey Experiment." *American Journal of Political Science*, Vol. 51, No. 3 (July), pp. 669–687.
- 7. Ho, Daniel E., Kosuke Imai, Gary King, and Elizabeth A. Stuart. (2007). "Matching as Nonparametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference." *Political Analysis*, Vol. 15, No. 3 (Summer), pp. 199–236. (lead article) Winner of the Warren Miller Prize.
- Ho, Daniel E., and Kosuke Imai. (2006). "Randomization Inference with Natural Experiments: An Analysis of Ballot Effects in the 2003 California Recall Election." Journal of the American Statistical Association, Vol. 101, No. 475 (September), pp. 888–900.
- 5. Imai, Kosuke, and David A. van Dyk. (2005). "MNP: R Package for Fitting the Multinomial Probit Model." *Journal of Statistical Software*, Vol. 14, No. 3 (May), pp. 1–32. abstract reprinted in *Journal of Computational and Graphical Statistics* (2005) Vol. 14, No. 3 (September), p. 747.
- 4. Imai, Kosuke. (2005). "Do Get-Out-The-Vote Calls Reduce Turnout? The Importance of Statistical Methods for Field Experiments." *American Political Science Review*, Vol. 99, No. 2 (May), pp. 283–300.
- 3. Imai, Kosuke, and David A. van Dyk. (2005). "A Bayesian Analysis of the Multinomial Probit Model Using Marginal Data Augmentation." *Journal of Econometrics*, Vol. 124, No. 2 (February), pp. 311–334.
- 2. Imai, Kosuke, and David A. van Dyk. (2004). "Causal Inference With General Treatment Regimes: Generalizing the Propensity Score." *Journal of the American Statistical Association*, Vol. 99, No. 467 (September), pp. 854–866.
- 1. Imai, Kosuke, and Gary King. (2004). "Did Illegal Overseas Absentee Ballots Decide the 2000 U.S. Presidential Election?" *Perspectives on Politics*, Vol. 2, No. 3 (September), pp. 537–549. Our analysis is a part of *The New York Times* article, "How Bush Took Florida: Mining the Overseas Absentee Vote" By David Barstow and Don van Natta Jr. July 15, 2001, Page 1, Column 1.

#### Invited Contributions

19. Imai, Kosuke, Michael Linzhe Li. "¡a A Comment on: Fisher-Schultz Lecture: Generic Machine Learning Inference on Heterogenous Treatment Effects in Randomized Experiments, with an Application to Immunization in India." *Econometrica*, Forthcoming.

- 18. Imai, Kosuke, Michael Rosenblum, and Mark Rothmann. (2023). "14th Annual University of Pennsylvania Conference on statistical issues in clinical trials/subgroup analysis in clinical trials: Opportunities and challenges (afternoon panel discussion)." *Clinical Trials*, Vol. 24, No. 4, pp. 405–415.
- 17. Imai, Kosuke, Zhichao Jiang, D. James Greiner, Ryan Halen, and Sooahn Shin. (2023). "Authors' Reply to the Discussion of 'Experimental Evaluation of Algorithm-Assisted Human Decision-Making: Application to Pretrial Public Safety Assessment'." Journal of the Royal Statistical Society, Series A (Statistics in Society), Vol. 186, No. 2 (April), pp. 212–216.
- Imai, Kosuke, and Yang Ning. (2023). "Covariate Balancing Propensity Score." Hand-book of Matching and Weighting Adjustments for Causal Inference. Zubizarreta, Jose R., Elizabeth A. Stuart, Dylan S. Small, and Paul R. Rosenbaum (eds). Chapman & Hall. pp. 283–292.
- 15. Imai, Kosuke. (2022). "Causal Diagrams and Social Science Research." *Probabilistic and Causal Inference: The Works of Judea Pearl*. Geffner, Hector and Dechter, Rina and Halpern, Joseph Y. (eds). Association for Computing Machinery and Morgan & Claypool, pp. 647–654.
- 14. Imai, Kosuke, and Zhichao Jiang. (2019). "Comment: The Challenges of Multiple Causes." *Journal of the American Statistical Association*, Vol. 114, No. 528, pp. 1605—1610.
- 13. Benjamin, Daniel J., et al. (2018). "Redefine Statistical Significance." Nature Human Behaviour, Vol. 2, No. 1, pp. 6–10.
- 12. de la Cuesta, Brandon and Kosuke Imai. (2016). "Misunderstandings about the Regression Discontinuity Design in the Study of Close Elections." *Annual Review of Political Science*, Vol. 19, pp. 375–396.
- 11. Imai, Kosuke (2016). "Book Review of Causal Inference for Statistics, Social, and Biomedical Sciences: An Introduction. by Guido W. Imbens and Donald B. Rubin." Journal of the American Statistical Association, Vol. 111, No. 515, pp. 1365–1366.
- 10. Imai, Kosuke, Bethany Park, and Kenneth F. Greene. (2015). "Usando as respostas previsíveis da abordagem list-experiments como variaveis explicativás em modelos de regressão." Revista Debates, Vol. 9, No. 1, pp. 121–151. First printed in Political Analysis, Vol. 23, No. 2 (Spring).
- 9. Imai, Kosuke, Luke Keele, Dustin Tingley, and Teppei Yamamoto. (2014). "Comment on Pearl: Practical Implications of Theoretical Results for Causal Mediation Analysis." *Psychological Methods*, Vol. 19, No. 4 (December), pp. 482–487.
- 8. Imai, Kosuke, Gary King, and Elizabeth A. Stuart. (2014). "Misunderstandings among Experimentalists and Observationalists: Balance Test Fallacies in Causal Inference." in Field Experiments and their Critics: Essays on the Uses and Abuses of Experimentation in the Social Sciences, D. L. Teele ed., New Haven: Yale University Press, pp. 196–227. First printed in Journal of the Royal Statistical Society, Series A (Statistics in Society), Vol. 171, No. 2 (April).

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- 7. Imai, Kosuke, Dustin Tingley, and Teppei Yamamoto. (2013). "Reply to Discussions of "Experimental Designs for Identifying Causal Mechanisms"." *Journal of the Royal Statistical Society, Series A (Statistics in Society)*, Vol. 173, No. 1 (January), pp. 46–49.
- 6. Imai, Kosuke. (2012). "Comments: Improving Weighting Methods for Causal Mediation Analysis." *Journal of Research on Educational Effectiveness*, Vol. 5, No. 3, pp. 293–295.
- Imai, Kosuke. (2011). "Introduction to the Virtual Issue: Past and Future Research Agenda on Causal Inference." Political Analysis, Virtual Issue: Causal Inference and Political Methodology.
- 4. Imai, Kosuke, Booil Jo, and Elizabeth A. Stuart. (2011). "Commentary: Using Potential Outcomes to Understand Causal Mediation Analysis." *Multivariate Behavioral Research*, Vol. 46, No. 5, pp. 842–854.
- 3. Imai, Kosuke, Luke Keele, Dustin Tingley, and Teppei Yamamoto. (2010). "Causal Mediation Analysis Using R," in *Advances in Social Science Research Using R*, H. D. Vinod (ed.), New York: Springer (Lecture Notes in Statistics), pp. 129–154.
- 2. Imai, Kosuke, Gary King, and Clayton Nall. (2009). "Rejoinder: Matched Pairs and the Future of Cluster-Randomized Experiments." *Statistical Science*, Vol. 24, No. 1 (February), pp. 65–72.
- 1. Imai, Kosuke. (2003). "Review of Jeff Gill's Bayesian Methods: A Social and Behavioral Sciences Approach," The Political Methodologist, Vol. 11 No. 1, 9–10.

### Refereed Conference Proceedings

1. Svyatkovskiy, Alexey, Kosuke Imai, Mary Kroeger, and Yuki Shiraito. (2016). "Large-scale text processing pipeline with Apache Spark," *IEEE International Conference on Big Data*, Washington, DC, pp. 3928-3935.

### Other Publications and Manuscripts

- 7. Chan, K.C.G, K. Imai, S.C.P. Yam, Z. Zhang. "Efficient Nonparametric Estimation of Causal Mediation Effects."
- 6. Barber, Michael and Kosuke Imai. "Estimating Neighborhood Effects on Turnout from Geocoded Voter Registration Records."
- 5. Hirano, Shigeo, Kosuke Imai, Yuki Shiraito, and Masaki Taniguchi. "Policy Positions in Mixed Member Electoral Systems: Evidence from Japan."
- 4. Goldstein, Daniel, Kosuke Imai, Anja S. Göritz, and Peter M. Gollwitzer. (2008). "Nudging Turnout: Mere Measurement and Implementation Planning of Intentions to Vote."
- 3. Ho, Daniel E. and Kosuke Imai. (2004). "The Impact of Partisan Electoral Regulation: Ballot Effects from the California Alphabet Lottery, 1978–2002." Princeton Law & Public Affairs Paper No. 04-001; Harvard Public Law Working Paper No. 89.
- 2. Imai, Kosuke. (2003). "Essays on Political Methodology," *Ph.D. Thesis.* Department of Government, Harvard University.

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 Imai, Kosuke, and Jeremy M. Weinstein. (2000). "Measuring the Economic Impact of Civil War," Working Paper Series No. 51, Center for International Development, Harvard University.

## Selected Manuscripts

- 19. Jia, Zeyang, Kosuke Imai, and Michael Lingzhi Li. "Cramming Contextual Bandits for On-policy Statistical Evaluation."
- 18. Mukaigawara, Mitsuru, and Kosuke Imai, Jason Lyall, and Georgia Papadogeorgou. "¡a Spatiotemporal causal inference with arbitrary spillover and carryover effects."
- 17. Breuer, Adam, Bryce J. Dietrich, Michael H. Crespin, Matthew Butler, J.A. Pyrse, Kosuke Imai. "Using AI to Summarize US Presidential Campaign TV Advertisement Videos, 1952-2012."
- 16. Zhou, Lingxiao, and Kosuke Imai, Jason Lyall, and Georgia Papadogeorgou. "Estimating Heterogeneous Treatment Effects for Spatio-Temporal Causal Inference: How Economic Assistance Moderates the Effects of Airstrikes on Insurgent Violence."
- 15. Zhang, Yi, Melody Huang, and Kosuke Imai. "Minimax Regret Estimation for Generalizing Heterogeneous Treatment Effects with Multisite Data."
- 14. Jiang, Zhichao, Eli Ben-Michael, D. James Greiner, Ryan Halen, Kosuke Imai, and Zhichao Jiang. "Longitudinal Causal Inference with Selective Eligibility."
- 13. Miyazaki, Sho, Kento Yamada, and Kosuke Imai. "Estimating the Partisan Bias of Japanese Legislative Redistricting Plans Using a Simulation Algorithm."
- 12. Imai, Kosuke and Kentaro Nakamura. "Causal Representation Learning with Generative Artificial Intelligence: Application to Texts as Treatments."
- 11. McCartan, Cory, Christopher Kenny, Tyler Simko, Emma Ebowe, Michael Zhao, and Kosuke Imai. "Redistricting Reforms Reduce Gerrymandering by Constraining Partisan Actors."
- 10. Ben-Michael, Eli, D. James Greiner, Melody Huang, Kosuke Imai, Zhichao Jiang, Sooahn Shin. "Does AI help humans make better decisions? A methodological framework for experimental evaluation."
- 9. Chattopadhyay, Ambarish, Kosuke Imai, and Jose R. Zubizarreta. "Design-based inference for generalized network experiments with stochastic interventions."
- 8. Zhang, Yi and Kosuke Imai. "Individualized Policy Evaluation and Learning under Clustered Network Interference,"
- 7. Li, Michael Lingzhi and Kosuke Imai. "Statistical Performance Guarantee for Subgroup Identification with Generic Machine Learning."
- 6. Jia, Zeyang, Eli Ben-Michael, and Kosuke Imai. "Bayesian Safe Policy Learning with Chance Constrained Optimization: Application to Military Security Assessment during the Vietnam War."

- 5. Lo, Adeline, Santiago Olivella, and Kosuke Imai. "A Statistical Model of Bipartite Networks: Application to Cosponsorship in the United States Senate."
- 4. McCartan, Cory, Jacob Goldin, Daniel E. Ho, Kosuke Imai. Estimating Racial Disparities When Race is Not Observed.
- 3. Bertsimas, Dimitris, Kosuke Imai, and Michael Lingzhi Li. "Distributionally Robust Causal Inference with Observational Data."
- 2. Zhang, Yi, Eli Ben-Michael, and Kosuke Imai. "Safe Policy Learning under Regression Discontinuity Designs."
- Malani, Anup, Phoebe Holtzman, Kosuke Imai, Cynthia Kinnan, Morgen Miller, Shailender Swaminathan, Alessandra Voena, Bartosz Woda, and Gabriella Conti. "Effect of Health Insurance in India: A Randomized Controlled Trial."

## Publications in Japanese

- 5. Imai, Kosuke. (2025). "Nihon wa Data Science Senshinkoku wo Mezase." *Kagaku*, Vol. 95, No. 4. Invited introduction essay for the special issue on data science.¡/div¿¡/td¿ ¡/tr¿
- 4. Imai, Kosuke. "Ippyo no Kakusa: Algorithm de Kaizen Dekiru." *Nikkei Business*, December 19, pp.72–75.
- 3. Imai, Kosuke. (2007). "Keiryō Seijigaku niokeru Ingateki Suiron (Causal Inference in Quantitative Political Science)." *Leviathan*, Vol. 40, Spring, pp. 224–233.
- Horiuchi, Yusaku, Kosuke Imai, and Naoko Taniguchi. (2005). "Seisaku Jyōhō to Tōhyō Sanka: Field Jikken ni yoru Kensyō (Policy Information and Voter Participation: A Field Experiment)." Nenpō Seijigaku (The Annals of the Japanese Political Science Association), 2005–I, pp. 161–180.
- 1. Taniguchi, Naoko, Yusaku Horiuchi, and Kosuke Imai. (2004). "Seitō Saito no Etsuran ha Tohyō Kōdō ni Eikyō Suruka? (Does Visiting Political Party Websites Influence Voting Behavior?)" Nikkei Research Report, Vol. IV, pp. 16–19.

## Statistical Software

- 28. Nakamura, Kentaro and Kosuke Imai. "GPI: Generative-AI Powered Inference." available through GitHub
- 27. Goplerud, Max, Nicle E. Pashley, and Kosuke Imai. "FactorHet: Estimate Heterogeneous Effects in Factorial Experiments Using Grouping and Sparsity." available through The Comprehensive R Archive Network and GitHub
- 26. Mukaigawara, Mitsuru, Georgia Papadogeorgou, Jason Lyall, and Kosuke Imai. "geocausal: Causal Inference with Spatio-Temporal Data." available through The Comprehensive R Archive Network and GitHub
- 25. Shin, Sooahn, Zhichao Jiang, and Kosuke Imai. "aihuman: Experimental Evaluation of Algorithm-Assisted Human Decision-Making" available through The Comprehensive R Archive Network and GitHub

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- 24. Ham, Dae Woong Ham, Kosuke Imai, Lucas Janson, and Jacob Bien. "CRTConjoint: Conditional Randomization Testing (CRT) Approach for Conjoint Analysis" available through The Comprehensive R Archive Network and GitHub
- 23. Huang, Karissa, Zhichao Jiang, and Kosuke Imai. "RCT2: Designing and Analyzing Two-Stage Randomized Experiments." available through The Comprehensive R Archive Network and GitHub
- 22. Christopher T. Kenny, Cory McCartan, Benjamin Fifield, and Kosuke Imai. "redistmetrics: Redistricting Metrics." available through The Comprehensive R Archive Network and GitHub.
- 21. Eshima, Shusei, Kosuke Imai, and Tomoya Sasaki. "Keyword Assisted Topic Models." The Comprehensive R Archive Network and GitHub.
- 20. Li, Michael Lingzhi and Kosuke Imai. "evalITR: Evaluating Individualized Treatment Rules." available through The Comprehensive R Archive Network and GitHub.
- 19. Egami, Naoki, Brandon de la Cuesta, and Kosuke Imai. "factorEx: Design and Analysis for Factorial Experiments." available through The Comprehensive R Archive Network and GitHub.
- 18. Kim, In Song, Erik Wang, Adam Rauh, and Kosuke Imai. "PanelMatch: Matching Methods for Causal Inference with Time-Series Cross-Section Data." available through GitHub.
- 17. Olivella, Santiago, Adeline Lo, Tyler Pratt, and Kosuke Imai. "NetMix: Mixed-membership Regression Stochastic Blockmodel for Networks." available through CRAN and Github.
- 16. Enamorado, Ted, Benjamin Fifield, and Kosuke Imai. "fastLink: Fast Probabilistic Record Linkage." available through The Comprehensive R Archive Network and GitHub. Winner of the Statistical Software Award.
- 15. Khanna, Kabir, Brandon Bertelsen, Santiago Olivella, Evan Rosenman, and Kosuke Imai. "wru: Who Are You? Bayesian Predictions of Racial Category Using Surname, First Name, Middle Name, and Geolocation." available through The Comprehensive R Archive Network and GitHub.
- 14. Christopher T. Kenny, Cory McCartan, Benjamin Fifield, and Kosuke Imai. "redist: Markov Chain Monte Carlo Methods for Redistricting Simulation." available through The Comprehensive R Archive Network and GitHub. Winner of the Statistical Software Award.
- 13. Imai, Kosuke, James Lo, and Jonathan Olmsted. "emIRT: EM Algorithms for Estimating Item Response Theory Models." available through The Comprehensive R Archive Network.
- 12. Blair, Graeme, Yang-Yang Zhou, and Kosuke Imai. "rr: Statistical Methods for the Randomized Response Technique." available through The Comprehensive R Archive Network and GitHub.

- 11. Fong, Christian, Marc Ratkovic, and Kosuke Imai. "CBPS: R Package for Covariate Balancing Propensity Score." available through The Comprehensive R Archive Network and GitHub.
- 10. Egami, Naoki, Marc Ratkovic, and Kosuke Imai. "FindIt: R Package for Finding Heterogeneous Treatment Effects." available through The Comprehensive R Archive Network and GitHub.
- 9. Kim, In Song, and Kosuke Imai. "wfe: Weighted Linear Fixed Effects Regression Models for Causal Inference." available through The Comprehensive R Archive Network.
- 8. Shiraito, Yuki, and Kosuke Imai. "endorse: R Package for Analyzing Endorsement Experiments." available through The Comprehensive R Archive Network and GitHub.
- 7. Blair, Graeme, and Kosuke Imai. "list: Statistical Methods for the Item Count Technique and List Experiments." available through The Comprehensive R Archive Network and GitHub.
- 6. Tingley, Dustin, Teppei Yamamoto, Kentaro Hirose, Luke Keele, and Kosuke Imai. "mediation: R Package for Causal Mediation Analysis." available through The Comprehensive R Archive Network and GitHub. Winner of the Statistical Software Award. Reviewed in *Journal of Educational and Behavioral Statistics*.
- 5. Imai, Kosuke. "experiment: R Package for Designing and Analyzing Randomized Experiments." available through The Comprehensive R Archive Network.
- 4. Ho, Daniel E., Kosuke Imai, Gary King, and Elizabeth Stuart. "MatchIt: Nonparametric Preprocessing for Parametric Causal Inference." available through The Comprehensive R Archive Network and GitHub.
- 3. Imai, Kosuke, Ying Lu, and Aaron Strauss. "eco: Ecological Inference in  $2 \times 2$  Tables." available through The Comprehensive R Archive Network and GitHub.
- 2. Imai, Kosuke, and David A. van Dyk. "MNP: R Package for Fitting the Multinomial Probit Model." available through The Comprehensive R Archive Network and GitHub.
- 1. Imai, Kosuke, Gary King, and Olivia Lau. "Zelig: Everyone's Statistical Software." available through The Comprehensive R Archive Network.

#### External Research Grants

#### Principal and Co-Principal Investigator

- 21. National Institute of Health and National Institute on Aging (2024–2026). "Precision blood pressure control, cognition and adverse events in older adults: detecting heterogeneity in treatment effects in randomized trials using machine-learning approaches." (1R03AG087481-01A1) Co-Principal Investigator (with Yuan Ma). \$302,960
- 20. National Institute of Mental Health (2022–2027). "The impact of social drivers, conditional cash transfers and their mechanisms on mental health of the young: an integrated retrospective and forecasting approach using the 100 million Brazilian Cohort." (1R01MH128911–01) Co-Principal Investigator (with Daiane Borges Machado et al.). \$1,993,614.

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- 19. National Science Foundation (2022–2025). "Collaborative Research: Understanding the Evolution of Political Campaign Advertisements over the Last Century." (Accountable Institutions and Behavior Program, SES–2148928). Principal Investigator (with Michael Crespin and Bryce Dietrich) \$538,484.
- 18. Netflix Research Grant (2024). \$35,000.
- 17. National Science Foundation (2021–2024). "Collaborative Research: Causal Inference with Spatio-Temporal Data on Human Dynamics in Conflict Settings." (Algorithm for Threat Detection Program; DMS–2124463). Principal Investigator (with Georgia Papadogeorgou and Jason Lyall) \$485,340.
- National Science Foundation (2021–2024). "Evaluating the Impacts of Machine Learning Algorithms on Human Decisions." (Methodology, Measurement, and Statistics Program; SES–2051196). Principal Investigator (with D. James Greiner and Zhichao Jiang) \$330,000.
- 15. Meta Research Grant (2022). \$50,000.
- 14. Cisco Systems, Inc. (2020–2024). "Evaluating the Impacts of Algorithmic Recommendations on the Fairness of Human Decisions." (Ethics in AI; CG# 2370386) Principal Investigator (with D. James Greiner and Zhichao Jiang) \$110,085.
- The Alfred P. Sloan Foundation (2020–2022). "Causal Inference with Complex Treatment Regimes: Design, Identification, Estimation, and Heterogeneity." (Economics Program; 2020–13946) Co-Principal Investigator (with Francesca Dominici and Jose Zubizarreta) \$996,299
- 12. Facebook Research Grant (2018). \$25,000.
- 11. National Science Foundation (2016–2021). "Collaborative Conference Proposal: Support for Conferences and Mentoring of Women and Underrepresented Groups in Political Methodology." (Methodology, Measurement and Statistics and Political Science Programs; SES–1628102) Principal Investigator (with Jeffrey Lewis) \$312,322. Supplement (SES–1831370) \$60,000.
- 10. The United States Agency for International Development (2015–2017). "Unemployment and Insurgent Violence in Afghanistan: Evidence from the Community Development Program." (AID–OAA–A–12–00096) Principal Investigator (with Jason Lyall) \$188,037
- The United States Institute of Peace (2015–2016). "Assessing the Links between Economic Interventions and Stability: An impact evaluation of vocational and skills training in Kandahar, Afghanistan," Principal Investigator (with David Haines, Jon Kurtz, and Jason Lyall) \$144,494.
- 8. Amazon Web Services in Education Research Grant (2014). Principal Investigator (with Graeme Blair and Carlos Velasco Rivera) \$3,000.
- Development Bank of Latin America (CAF) (2013). "The Origins of Citizen Support for Narcos: An Empirical Investigation," Principal Investigator (with Graeme Blair, Fabiana Machado, and Carlos Velasco Rivera). \$15,000.

- 6. The International Growth Centre (2011–2013). "Poverty, Militancy, and Citizen Demands in Natural Resource-Rich Regions: Randomized Evaluation of the Oil Profits Dividend Plan for the Niger Delta" (RA–2010–12–013). Principal Investigator (with Graeme Blair). \$117,116.
- 5. National Science Foundation, (2009–2012). "Statistical Analysis of Causal Mechanisms: Identification, Inference, and Sensitivity Analysis," (Methodology, Measurement, and Statistics Program and Political Science Program; SES–0918968). Principal Investigator. \$97.574.
- 4. National Science Foundation, (2009–2011). "Collaborative Research: The Measurement and Identification of Media Priming Effects in Political Science," (Methodology, Measurement, and Statistics Program and Political Science Program; SES–0849715). Principal Investigator (with Nicholas Valentino). \$317,126.
- 3. National Science Foundation, (2008–2009). "New Statistical Methods for Randomized Experiments in Political Science and Public Policy," (Political Science Program; SES–0752050). Principal Investigator. \$52,565.
- 2. National Science Foundation, (2006–2009). "Collaborative Research: Generalized Propensity Score Methods," (Methodology, Measurement and Statistics Program; SES–0550873). Principal Investigator (with Donald B. Rubin and David A. van Dyk). \$460,000.
- 1. The Telecommunications Advancement Foundation, (2004). "Analyzing the Effects of Party Webpages on Political Opinions and Voting Behavior," Principal Investigator (with Naoko Taniguchi and Yusaku Horiuchi). \$12,000.

### Adviser and Statistical Consultant

- 4. National Science Foundation (2016–2017). "Doctoral Dissertation Research: Crossing Africa's Arbitrary Borders: How Refugees Shape National Boundaries by Challenging Them." (Political Science Program, SES–1560636). Principal Investigator and Adviser for Co-PI Yang-Yang Zhou's Dissertation Research. \$18,900.
- 3. Institute of Education Sciences (2012–2014). "Academic and Behavioral Consequences of Visible Security Measures in Schools" (R305A120181). Statistical Consultant (Emily Tanner-Smith, Principal Investigator). \$351,228.
- National Science Foundation (2013–2014). "Doctoral Dissertation Research: Open Trade for Sale: Lobbying by Productive Exporting Firm" (Political Science Program, SES– 1264090). Principal Investigator and Adviser for Co-PI In Song Kim's Dissertation Research. \$22,540.
- National Science Foundation (2012–2013). "Doctoral Dissertation Research: The Politics of Location in Resource Rent Distribution and the Projection of Power in Africa" (Political Science Program, SES–1260754). Principal Investigator and Adviser for Co-PI Graeme Blair's Dissertation Research. \$17,640.

## **Invited Short Courses and Outreach Lectures**

- Short Course on Causal Inference and Statistics Department of Political Science, Rice University, 2009; Institute of Political Science, Academia Sinica, 2014.
- Short Course on Causal Inference and Identification, The Empirical Implications of Theoretical Models (EITM) Summer Institute – Harris School of Public Policy, University of Chicago, 2011; Department of Politics, Princeton University, 2012.
- 4. Short Course on Causal Mediation Analysis Summer Graduate Seminar, Institute of Statistical Mathematics, Tokyo Japan, 2010; Society for Research on Educational Effectiveness Conference, Washington DC, Fall 2011, Spring 2012, Spring 2015; Inter-American Development Bank, 2012; Center for Education Research, University of Wisconsin, Madison, 2012; Bobst Center for Peace and Justice, Princeton University, 2014; Graduate School of Education, University of Pennsylvania, 2014; EITM Summer Institute, Duke University, 2014; Center for Lifespan Psychology, Max Planck Institute for Human Development, 2015; School of Communication Research, University of Amsterdam, 2015; Uppsala University, 2016
- Short Course on Covariate Balancing Propensity Score Society for Research on Educational Effectiveness Conference, Washington DC, Spring 2013; Uppsala University, 2016
- Short Course on Matching Methods for Causal Inference Institute of Behavioral Science, University of Colorado, Boulder, 2009; Department of Political Science, Duke University, 2013.
- Lecture on Statistics and Social Sciences New Jersey Japanese School, 2011, 2016;
  Kaisei Academy, 2012, 2014; Princeton University Wilson College, 2012; University of Tokyo, 2014

### Selected Presentations

- 30. Keynote speaker, Political Methodology Europe Conference, London School of Economics, 2025.
- 29. Distinguished speaker, Department of Statistics, University of Oxford, 2025.
- 28. Distinguished lecturer, Mannheim Center for Data Science, University of Mannheim, 2025.
- 27. Keynote speaker, Netflix Causal Inference & Experimentation Summit, 2024.
- Keynote speaker, Promises and Limits of Inferring Protected-Class Data for Disparate Impact Testing of AI Systems, DLA Piper and O'Neil Risk Consulting & Algorithmic Auditing, 2023.
- 25. Distinguished speaker, Hariri Institute for Computing and Computational Science and Engineering, Boston University, 2023.
- 24. Keynote speaker, Michigan Student Symposium for Interdisciplinary Statistical Sciences (MSSISS), 2023.

- 23. Keynote speaker, CIVICA Data Science Days, The European University of Social Sciences, 2022.
- 22. Distinguished speaker, Harvard College Summer Program for Undergraduates in Data Science, 2021.
- 21. Keynote speaker, Kansas-Western Missouri Chapter of the American Statistical Association, 2021.
- 20. Invited plenary panelist, Association for Computing Machinery Conference on Fairness, Accountability, and Transparency (ACM FAccT) 2021.
- 19. Keynote speaker, Taiwan Political Science Association, 2020.
- 18. Keynote speaker, Boston Japanese Researchers Forum, Massachusetts Institute of Technology, 2020.
- 17. Keynote speaker, Causal Mediation Analysis Training Workshop, Mailman School of Public Health, Columbia University, 2020.
- 16. Keynote speaker, Special Workshop on Evidence-based Policy Making. World Economic Forum, Centre for the Fourth Industrial Revolution, Japan, 2020.
- 15. Distinguished speaker, Institute for Data, Systems, and Society. Massachusetts Institute of Technology, 2019.
- 14. Keynote speaker, The Harvard Experimental Political Science Graduate Student Conference, Harvard University, 2019.
- 13. Invited speaker, Beyond Curve Fitting: Causation, Counterfactuals, and Imagination-based AI. Association for the Advancement of Artificial Intelligence, Spring Symposium, Stanford University, 2019.
- 12. Inaugural speaker, Causal Inference Seminar, Departments of Biostatistics and Statistics, Boston University, 2019.
- 11. Keynote speaker, The Second Latin American Political Methodology Meeting, Universidad de los Andes (Department of Political Science), 2018.
- 10. Keynote speaker, The First Latin American Political Methodology Meeting, Pontifical Catholic University of Chile (Department of Political Science), 2017.
- 9. Keynote speaker, Workshop on Uncovering Causal Mechanisms, University of Munich (Department of Economics), 2016.
- 8. Keynote speaker, The National Quality Registry Research Conference, Stockholm, 2016.
- Keynote speaker, The UK-Causal Inference Meeting, University of Bristol (School of Mathematics), 2015.
- 6. Keynote speaker, The UP-STAT Conference, the Upstate Chapters of the American Statistical Association, 2015.
- 5. Keynote speaker, The Winter Conference in Statistics, Swedish Statistical Society and Umeå University (Department of Mathematics and Mathematical Statistics), 2015.

- 4. Inaugural invited speaker, The International Methods Colloquium, Rice University, 2015.
- 3. Invited speaker, The International Meeting on Experimental and Behavioral Social Sciences, University of Oxford (Nuffield College), 2014.
- 2. Keynote speaker, The Annual Conference of Australian Society for Quantitative Political Science, University of Sydney, 2013.
- 1. Keynote speaker, The Graduate Student Conference on Experiments in Interactive Decision Making, Princeton University. 2008.

## Conferences Organized

- The Asian Political Methodology Meetings (January 2014, 2015, 2016, 2017, 2018; coorganizer)
- 5. The Experimental Research Workshop (September 2012; co-organizer)
- 4. The 12th World Meeting of the International Society for Bayesian Analysis (June 2012; a member of the organizing committee)
- 3. Conference on Causal Inference and the Study of Conflict and State Building (May 2012; organizer)
- 2. The 28th Annual Society for Political Methodology Summer Meeting (July 2011; host)
- 1. Conference on New Methodologies and their Applications in Comparative Politics and International Relations (February 2011; co-organizer)

## Teaching

## Courses Taught at Harvard

- 1. Stat 286/Gov 2003 Causal Inference (formally Stat 186/Gov 2002): introduction to causal inference
- 2. Gov 2017: Applied Bayesian Statistics in Social Sciences
- 3. Gov 2003 Topics in Quantitative Methodology: causal inference, applied Bayesian statistics, machine learning

#### Courses Taught at Princeton

- 1. POL 245 Visualizing Data: exploratory data analysis, graphical statistics, data visualization
- 2. POL 345 Quantitative Analysis and Politics: a first course in quantitative social science
- 3. POL 451 Statistical Methods in Political Science: basic probability and statistical theory, their applications in the social sciences
- 4. POL 502 Mathematics for Political Science: real analysis, linear algebra, calculus
- 5. POL 571 Quantitative Analysis I: probability theory, statistical theory, linear models

- 6. POL 572 Quantitative Analysis II: intermediate applied statistics
- 7. POL 573 Quantitative Analysis III: advanced applied statistics
- 8. POL 574 Quantitative Analysis IV: advanced applied statistics with various topics including Bayesian statistics and causal inference
- 9. Reading Courses: basic mathematical probability and statistics, applied bayesian statistics, spatial statistics

## Advising

#### **Current Students**

- 1. María Ballesteros (Government)
- 2. Sima Biondi (Government)
- 3. Kyla Chasalow (Statistics)
- 4. Shuning Ge (Political Science and Statistics, Massachusetts Institute of Technology)
- 5. Benedikt Koch (Statistics)
- 6. Taegyun Lim (Government)
- 7. Qi Liu (Government)
- 8. Ruofan Ma (Government)
- 9. Jerry Min (Government)
- 10. Mitsuru Mukaigawara (Government)
- 11. Kentaro Nakamura (Harvard Kennedy School)
- 12. Philip O'Sullivan (Statistics and Harvard Law School)
- 13. Sun Young Park (Government)
- 14. Sooahn Shin (Government)
- 15. Souhardya Sengupta (Statistics)
- 16. Dom Valentino (Government)
- 17. Longlin Wang (Statistics)

#### Former Students

- 50. Jialu Li (Ph.D. in 2025, Department of Government, Harvard University). Data Scientist, Google
- 49. Zeyang Jia (Ph.D in 2025, Department of Statistics, Harvard University; Dissertation Committee Chair). Quantitative Researcher, Citadel Securities
- 48. Christopher T. Kenny (Ph.D in 2025, Department of Government, Harvard University; Dissertation Committee Chair). Postdoctoral Fellow, Princeton University
- 47. Yi Zhang (Ph.D in 2025, Department of Statistics, Harvard University; Dissertation Committee Chair) Research Data Scientist, Netflix
- 46. Tyler Simko (Ph.D. in 2024, Department of Government, Harvard University; Dissertation Committee Chair). Postdoctoral Fellow, Princeton University, followed by Assistant Professor, Department of Political Science, University of Michigan
- 45. Dae Woong Ham (Ph.D. in 2024, Department of Statistics, Harvard University; Dissertation Committee Chair). Assistant Professor, Technology and Operations, Michigan Ross Business School
- 44. Averell Schmidt (Ph.D. in 2024, Harvard Kennedy School). Postdoctoral Fellow, Brown University, followed by Assistant Professor, Department of Political Science and International Relations, University of Southern California
- 43. Adam Breuer (Ph.D. in 2023, Department of Computer Science and Department of Government). Assistant Professor, Department of Government and Department of Computer Science, Dartmouth College
- 42. Sayumi Miyano (Ph.D. in 2023, Department of Politics, Princeton University) Assistant Professor, The Osaka School of International Public Policy at Osaka University
- 41. Shusei Eshima (Ph.D. in 2023, Department of Government, Harvard University; Dissertation Committee Chair). Data Scientist, Netflix
- 40. Casey Petroff (Ph.D. in 2023, Havard Kennedy School). Assistant Professor, Department of Political Science, University of Rochester
- 39. Soubhik Barari (Ph.D. in 2023, Department of Government, Harvard University). Research Methdoologist, NORC at the University of Chicago
- 38. Cory McCartan (Ph.D. in 2023, Department of Statistics, Harvard University; Dissertation Committee Chair). Assitant Professor, Department of Statistics, Pennsylvania State University
- 37. Soichiro Yamauchi (Ph.D. in 2022, Departement of Government, Harvard University; Dissertation Committee Chair). Data Scientist, Google. To be Assistant Professor, Department of Political Science, University of California, San Diego
- 36. Georgina Evans (Ph.D. in 2022, Department of Government, Harvard University). Research Scientist, Google DeepMind

- 35. Ambarish Chattopadhyay (Ph.D. in 2022, Department of Statistics, Harvard University). Postdoctoral Fellow, Stanford University
- 34. Jacob Brown (Ph.D. in 2022, Department of Government, Harvard University). Assistant Professor, Department of Political Science, Boston University
- 33. Alexander Tarr (Ph.D. in 2021, Department of Electrical and Computer Engineering, Princeton University; Dissertation Committee Chair)
- 32. Connor Jerzak (Ph.D. in 2021, Department of Government, Harvard University). Assistant Professor, Department of Government, University of Texas, Austin
- 31. Shiro Kuriwaki (Ph.D. in 2021, Department of Government, Harvard University). Assistant Professor, Department of Political Science, Yale University
- 30. Erik Wang (Ph.D. in 2020, Department of Politics, Princeton University). Assistant Professor, Department of Politics, New York University
- 29. Diana Stanescu (Ph.D. in 2020, Department of Politics, Princeton University). Data Scientist, World Bank
- 28. Nicole Pashley (Ph.D. in 2020, Department of Statistics, Harvard University). Assistant Professor, Department of Statistics, Rutgers University
- 27. Asya Magazinnik (Ph.D. in 2020, Department of Politics, Princeton University). Professor of Social Data Science, Hertie School
- 26. Max Goplerud (Ph.D. in 2020, Department of Government, Harvard University). Assistant Professor, Department of Political Science, University of Pittsburgh
- 25. Naoki Egami (Ph.D. in 2020, Department of Politics, Princeton University; Dissertation Committee Chair). Assistant Professor, Department of Political Science, Columbia University
- 24. Brandon de la Cuesta (Ph.D. in 2019, Department of Politics, Princeton University). Postdoctoral Fellow, Center on Global Poverty and Development, Stanford University
- 23. Yang-Yang Zhou (Ph.D. in 2019, Department of Politics, Princeton University). Assistant Professor, Department of Government, Dartmouth College
- 22. Winston Chou (Ph.D. in 2019, Department of Politics, Princeton University). Senior Data Scientist, Netflix
- Ted Enamorado (Ph.D. in 2019, Department of Politics, Princeton University; Dissertation Committee Chair). Assistant Professor, Department of Political Science, Washington University in St. Louis
- 20. Benjamin Fifield (Ph.D. in 2018, Department of Politics, Princeton University; Dissertation Committee Chair). Data Scientist, Meta
- 19. Tyler Pratt. (Ph.D. in 2018, Department of Politics, Princeton University). Assistant Professor, Department of Political Science, University of North Carolina at Chapel Hill

- 18. Romain Ferrali (Ph.D. in 2018, Department of Politics, Princeton University). Assistant Professor, Aix-Marseille School of Economics
- 17. Julia Morse (Ph.D. in 2017, Woodrow Wilson School, Princeton University). Assistant Professor, Department of Political Science, University of California, Santa Barbara
- Yuki Shiraito (Ph.D. in 2017, Department of Politics, Princeton University; Dissertation Committee Chair). Assistant Professor, Department of Political Science, University of Michigan
- 15. Carlos Velasco Rivera (Ph.D. in 2016, Department of Politics, Princeton University). Research Scientist, Netflix
- Gabriel Lopez Moctezuma (Ph.D. in 2016, Department of Politics, Princeton University).
  Assistant Professor, Division of the Humanities and Social Sciences, California Institute of Technology
- 13. Graeme Blair (Ph.D. in 2016, Department of Politics, Princeton University). Associate Professor, University of California, Los Angeles
- 12. Jaquilyn R. Waddell Boie (Ph.D. in 2015, Department of Politics, Princeton University). Associate, Heidman Law Firm
- 11. Scott Abramson (Ph.D. in 2014, Department of Politics, Princeton University). Associate Professor, Department of Political Science, University of Rochester
- 10. Michael Barber (Ph.D. in 2014, Department of Politics, Princeton University). Associate Professor, Department of Political Science, Brigham Young University
- 9. In Song Kim (Ph.D. in 2014, Department of Politics, Princeton University). Associate Professor, Department of Political Science, Massachusetts Institute of Technology
- 8. Alex Ruder (Ph.D. in 2014, Department of Politics, Princeton University). Principal Advisor, Federal Reserve Bank of Atlanta
- 7. Meredith Wilf (Ph.D. in 2014, Department of Politics, Princeton University). Senior Director, Capital Rx
- 6. Will Bullock. (Ph.D. candidate, Department of Politics, Princeton University). Senior Researcher, Meta
- 5. Teppei Yamamoto (Ph.D. in 2011, Department of Politics, Princeton University; Dissertation Committee Chair). Professor, Department of Political Economics, Waseda University
- 4. Dustin Tingley (Ph.D. in 2010, Department of Politics, Princeton University). Professor, Department of Government, Harvard University
- 3. Aaron Strauss (Ph.D. in 2009, Department of Politics, Princeton University). Former Executive Director, Analyst Institute
- 2. Samir Soneji (Ph.D. in 2008, Office of Population Research, Princeton University; Dissertation Committee Chair). Associate Professor, Department of Health Behavior at the Gillings School of Global Public Health, University of North Carolina, Chapel Hill

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1. Ying Lu (Ph.D. in 2005, Woodrow Wilson School, Princeton University; Dissertation Committee Chair). Associate Professor, Steinhardt School of Culture, Education, and Human Development, New York University

#### Former Predocs and Postdocs

- 16. Melody Huang (Postdoctoral Fellow, 2023–2024). Assistant Professor, Department of Political Science and Department of Statistics and Data Science, Yale University
- 15. Evan Rosenman (Postdoctoral Fellow, 2021–2023). Assistant Professor, Department of Mathematical Sciences, Claremont McKenna College
- 14. Eli Ben-Michael (Postdoctoral Fellow, 2021–2022). Assistant Professor, Department of Statistics and Data Science and Heinz College of Informations Systems and Public Policy
- 13. Zhichao Jiang (Postdoctoral Fellow, 2016–2019). Professor, School of Mathematics, Sun Yat-sen University
- 12. Adeline Lo (Postdoctoral Fellow, 2016–2019). Assistant Professor, Department of Political Science, University of Wisconsin, Madison
- 11. Yunkyu Sohn (Postdoctoral Fellow, 2016–2018). Assistant Professor, Department of Sociology, Seoul National University
- 10. Xiaolin Yang (Postdoctoral Fellow, 2015–2017). Research Scientist, Amazon
- 9. Santiago Olivella (Postdoctoral Fellow, 2015–2016). Associate Professor, Department of Political Science, University of North Carolina
- 8. Drew Dimmery (Predoctoral Fellow, 2015–2016). Professor, Data Science Lab, Hertie School
- 7. James Lo (Postdoctoral Fellow, 2014–2016). Data Scientist, Meta
- 6. Steven Liao (Predoctoral Fellow, 2014–2015). Assistant Professor, Department of Political Science, University of California, Riverside
- 5. Michael Higgins (Postdoctoral Fellow, 2013–2015). Associate Professor, Department of Statistics, Kansas State University
- 4. Kentaro Hirose (Postdoctoral Fellow, 2012–2015). Associate Professor, Faculty of International Studies and Regional Development, University of Niigata Prefecture
- 3. Chad Hazlett (Predoctoral Fellow, 2013–2014). Associate Professor, Departments of Political Science and Statistics, University of California, Los Angeles
- 2. Florian Hollenbach (Predoctoral Fellow, 2013–2014). Associate Professor, Department of International Economics, Government and Business at the Copenhagen Business School
- 1. Marc Ratkovic (Predoctoral and Postdoctoral Fellow, 2010–2012). Professor, School of Social Science, University of Mannheim

### Editorial and Referee Service

Co-editor for Journal of Causal Inference (2014 – present)

Associate editor for American Journal of Political Science (2014 – 2019), American Political Science Review (2022 – present), Journal of Business & Economic Statistics (2015 – 2024), Journal of Causal Inference (2011 – 2014), Journal of Experimental Political Science (2013 – 2017), Observational Studies (2014 – present), Political Analysis (2014 – 2017).

Editorial board member for Asian Journal of Comparative Politics (2014 – present), Journal of Educational and Behavioral Statistics (2011 – present), Journal of Politics (2007 – 2008, 2019–2020), Journal of Research on Educational Effectiveness (2014 – 2016), Political Analysis (2010 – 2013; 2025 – 2026), Political Science Research and Methods (2019 – present).

Guest editor for *Political Analysis* virtual issue on causal inference (2011).

Referee for ACM Computing Surveys, American Economic Journal: Applied Economics, American Economic Review: Insights, American Journal of Epidemiology, American Journal of Evaluation, American Journal of Political Science, American Political Science Review, American Politics Research, American Sociological Review, Annals of Applied Statistics, Annals of Statistics, Annals of the Institute of Statistical Mathematics, Biometrics, Biometrika, Biostatistics, BMC Medical Research Methodology, British Journal of Mathematical and Statistical Psychology, British Journal of Political Science, Canadian Journal of Statistics, Chapman & Hall/CRC Press, Child Development, Communications for Statistical Applications and Methods, Computational Statistics and Data Analysis, Electoral Studies, Econometrica, Econometrics, Electronic Journal of Statistics, Empirical Economics, Environmental Management, Epidemiology, European Union Politics, IEEE Transactions on Information Theory, International Journal of Biostatistics, International Journal of Epidemiology, International Journal of Public Opinion Research, International Migration Review, John Wiley & Sons, Journal of Applied Econometrics, Journal of Applied Statistics, Journal of Biopharmaceutical Statistics, Journal of Business and Economic Statistics, Journal of Causal Inference, Journal of Computational and Graphical Statistics, Journal of Conflict Resolution, Journal of Consulting and Clinical Psychology, Journal of Econometrics, Journal of Educational and Behavioral Statistics, Journal of Empirical Legal Studies, Journal of Multivariate Analysis, Journal of Official Statistics, Journal of Peace Research, Journal of Politics, Journal of Research on Educational Effectiveness, Journal of Statistical Planning and Inference, Journal of Statistical Software, Journal of Survey Statistics and Methodology, Journal of the American Statistical Association (Case Studies and Applications; Theory and Methods), Journal of the Japanese and International Economies, Journal of the Japan Statistical Society, Journal of the Royal Statistical Society (Series A; Series B; Series C), Law & Social Inquiry, Legislative Studies Quarterly, Management Science, MacArthur Fellows Program, Multivariate Behavioral Research, National Science Foundation (Economics; Methodology, Measurement, and Statistics; Political Science), Natural Sciences and Engineering Research Council of Canada, Nature Ecology & Evolution, Nature Machine Intelligence, Nature Scientific Data, NeuroImage, Osteoporosis International, Oxford Bulletin of Economics and Statistics, Pharmaceutical Statistics, Pharmacoepidemiology and Drug Safety, PLOS One, Policy and Internet, Political Analysis, Political Behavior, Political Communication,

Political Research Quarterly, Political Science Research and Methods, Population Health Metrics, Population Studies, Prevention Science, Proceedings of the National Academy of Sciences, Princeton University Press, Psychological Methods, Psychometrika, Public Opinion Quarterly, Quarterly Journal of Economics, Quarterly Journal of Political Science, Review of Economics and Statistics, Routledge, Sage Publications, Scandinavian Journal of Statistics, Science, Sloan Foundation, Springer, Sociological Methodology, Sociological Methods & Research, Statistical Methodology, Statistical Methods and Applications, Statistical Methods in Medical Research, Statistical Science, Statistica Sinica, Statistics & Probability Letters, Statistics in Medicine, Systems Biology, U.S.-Israel Binational Science Foundation, Value in Health, World Politics.

# University and Departmental Committees

## Harvard University

Department of Government

Chair, Full Professor Promotion Review Committee (2023–2024)

Chair, Senior Faculty Search Committee (2022–2023)

Chair, Second-year Progress Committee (2023–2024)

Member, Chair's Advisory Committee (2023–2024)

Member, Senior Lecturer Search Committee (2022–2023)

Member, Curriculum and Educational Policy Committee (2020–2021, 2022–2023)

Member, Second-year Progress Committee (2019–2020)

Member, Graduate Placement Committee (2019–2020)

Member, Graduate Admissions Committee (2018–2019)

Member, Graduate Poster Session Committee (2018–2019)

#### Department of Statistics

Chair, Senior Faculty Search Committee (2021–2022)

Member, Associate Professor Promotion Review Committee (2022-2023)

Member, Junior Faculty Search Committee (2018–2019)

Member, Second-year Progress Committee (2018–2019, 2020–2021)

#### Other Departments

Member, Senior Faculty Search Committee, Department of Economics (2022-2023)

Co-chair, Postdoctoral Fellow Selection Committee, Harvard Data Science Initiative (2022–2023)

#### Princeton University

#### University

Executive Committee Member, Program in Statistics and Machine Learning (2013–2018)

Executive Committee Member, Committee for Statistical Studies (2011-2018)

Member, Organizing Committee, Retreat on Data and Information Science at Princeton (2016)

Member, Council of the Princeton University Community (2015)

Member, Search Committee for the Dean of College (2015)

Member, Committee on the Library and Computing (2013–2016)

Member, Committee on the Fund for Experimental Social Science (2013–2018)

Member, Personally Identifiable Research Data Group (2012–2018)

Member, Research Computing Advisory Group (2013–2018)

Member, Task Force on Statistics and Machine Learning (2014–2015)

### Department of Politics

Chair, Department Committee on Research and Computing (2012–2018)

Chair, Formal and Quantitative Methods Junior Search Committee (2012–2013, 2014–2015, 2016–2017)

Chair, Reappointment Committee (2015–2016)

Member, Diversity Initiative Committee (2014–2015)

Member, American Politics Junior Search Committee (2012–2014)

Member, Department Chair's Advisory Committee (2010–2013, 2015–2016)

Member, Department Priority Committee (2012–2013, 2014–2015, 2016–2017)

Member, Formal and Quantitative Methods Curriculum Committee (2005–2006)

Member, Formal and Quantitative Methods Junior Search Committee (2009–2010, 2015–2016)

Member, Formal and Quantitative Methods Postdoc Search Committee (2009–2018)

Member, Graduate Admissions Committee (2012–2013)

Member, Reappointment Committee (2014–2016)

Member, Space Committee (2014–2016)

Member, Undergraduate Curriculum Committee (2014–2015)

Member, Undergraduate Exam Committee (2007–2008)

Member, Undergraduate Thesis Prize Committee (2005–2006, 2008–2011)

#### Center for Statistics and Machine Learning

Executive Committee Member (2016–2018)

Member, Search Committee (2015–2017)

#### Services to the Profession

National Academies of Sciences, Engineering, and Medicine

Committee on National Statistics, Division of Behavioral and Social Sciences and Education, Panel on the Review and Evaluation of the 2014 Survey of Income and Program Participation Content and Design (2014–2017)

#### National Science Foundation

Proposal Review Panel (2020)

The Society for Political Methodology

President (2017–2019)

Vice President and President Elect (2015–2017)

Annual Meeting Committee, Chair (2011)

Career Award Committee (2015–2017)

Program Committee for Annual Meeting (2012), Chair (2011)

Graduate Student Selection Committee for the Annual Meeting (2005), Chair (2011)

Miller Prize Selection Committee (2010–2011)

Statistical Software Award Committee (2009–2010)

Emerging Scholar Award Committee (2013)

#### American Statistical Association

Journal of Educational and Behavioral Statistics Management Committee (2016 – present)

#### Others

External Review Committee member (New Data Science PhD Program), Emory University (2025)

External Review Committee member (New Data Science Masters Programs), Brooks School of Public Policy, Cornell University (2024)

External Review Committee member, Department of Political Science, University of Rochester (2022)

External Expert, Department of Methodology, London School of Economics and Political Science (2017)

# Memberships

American Political Science Association; American Statistical Association; Midwest Political Science Association; The Society for Political Methodology.

## Expert Reports

- 12. Petition of the Central Bucks School District for Approval of Plan For Redistricting Electoral Regions. Court of Common Pleas Bucks County, Pennsylvania, Case No. 2022-06425. Petition to Redistrict the Central Bucks School District into Three Electoral Regions for the Election of School Directors, Case No. 2023-00469
- 11. Jacksonville Branch of the NAACP, et al. v. City of Jacksonville et al. United States District Court for the Middle District of Florida Jacksonville Division, Case No. 3:22-cv-493-MMH-LLL
- 10. The South Carolina State Conference of the NAACP, et al. v. Alexander et al. United States District Court for the District of South Carolina Columbia Division, Case No. 3-21-cv-03302-JMC-TJH-RMG
- 9. Graham et al. v. Adams et al. Commonwealth of Kentucky Franklin Circuit Court Division, Case No. 22-CI-00047
- 8. League of Women Voters of Ohio et al. v. Frank LaRose et al. The Supreme Court of Ohio, Case No. 2022–0303
- 7. Meryl Neiman, et al. v. Secretary of State Frank LaRose, et al. The Supreme Court of Ohio, Case No. 2022–0298
- Benninghoff v. 2021 Legislative Reapportionment Commission. The Supreme Court of Pennsylvania, Case No. 11 MM 2022
- 5. The Pennsylvania Legislative Reapportionment Commission, January 2022.
- 4. The South Carolina State Conference of the NAACP, et al. v. McMaster, et al. United States District Court for the District of South Carolina Columbia Division, Case No. 3-21-cv-03302-JMC-TJH-RMG
- 3. Milligan et al. v. Merrill et al. United States District Court for the Northern District of Alabama, Case No. 2:2021cv01530
- 2. League of Women Voters of Ohio et al. v. Ohio Redistricting Commission et al. The Supreme Court of Ohio, Case No. 2021–1193
- 1. League of Women Voters of Ohio et al. v. Ohio Redistricting Commission et al. The Supreme Court of Ohio, Case No. 2021–1449