# Rocío Titiunik – Curriculum Vitæ

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### **Contact Information**

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### Academic Positions

Princeton University.

Professor, Department of Politics, 2019–present.

Associated Faculty, Operations Research and Financial Engineering (ORFE), 2022-present.

Associated Faculty, Center for Statistics and Machine Learning (CSML), 2019-present.

Associated Faculty, Program in Latin American Studies, 2020–present.

Director, Data-Driven Social Science Initiative, 2023-present.

Co-Director, Program for Quantitative and Analytical Political Science, 2019-present.

Affiliated Faculty, Center for the Study of Democratic Politics, 2019–present.

Affiliated Faculty, Research Program in Political Economy, 2019–present.

## University of Michigan.

James Orin Murfin Professor, Department of Political Science, 2018–2019.

James Orin Murfin Associate Professor, Department of Political Science, 2016–2018.

Assistant Professor, Department of Political Science, 2010–2016.

Affiliated Faculty, Michigan Institute for Data Science (MIDAS), 2018–2019.

Research Professor, Center for Political Studies, Institute for Social Research, 2018–2019.

Research Associate Professor, Center for Political Studies, Institute for Social Research, 2016–2018.

Faculty Associate, Center for Political Studies, Institute for Social Research, 2009–2016.

### **Editorial Positions**

Associate Editor.

Science, Board of Reviewing Editors, 2019–present.

Science Advances, 2019-present.

Political Science Research and Methods, 2018–2021.

American Journal of Political Science, 2018–2019.

### Editorial Board Member.

Political Science Research and Methods, 2021-present.

Journal of Politics, 2019–2020.

Political Analysis, 2016–2020.

American Journal of Political Science, 2016–2018.

## Education

Postdoctoral Fellow, Department of Political Science, University of Michigan. 2009–2010.

Ph.D. in Agricultural and Resource Economics, UC-Berkeley. 2004–2009.

M.S. in Agricultural and Resource Economics, UC-Berkeley. 2004–2006.

Licentiate in Economics, Universidad de Buenos Aires, Argentina. 1997–2001.

## Monographs

A Practical Introduction to Regression Discontinuity Designs: Foundations, with Matias Cattaneo and Nicolas Idrobo.

<u>Cambridge Elements: Quantitative and Computational Methods for Social Science</u>, Cambridge University Press, 2020.

A Practical Introduction to Regression Discontinuity Designs: Extensions, with Matias Cattaneo and Nicolas Idrobo.

<u>Cambridge Elements: Quantitative and Computational Methods for Social Science</u>, Cambridge University Press, in preparation.

### **Journal Publications**

"A Guide to Regression Discontinuity Designs in Medical Applications", with Matias Cattaneo and Luke Keele.

Statistics in Medicine, forthcoming.

"Regression Discontinuity Designs", with Matias Cattaneo.

Annual Review of Economics 14: 821-851, 2022.

"Parties as Disciplinarians: Charisma and Commitment Problems in Programmatic Campaigning", with James Hollyer and Marko Klašnja.

American Journal of Political Science 66(1): 75-92, 2022.

"Extrapolating Treatment Effects in Multi-cutoff Regression Discontinuity Designs", with Matias Cattaneo, Luke Keele, and Gonzalo Vazquez-Bare.

Journal of the American Statistical Association 116(536): 1941–1952, 2021.

"Prediction Intervals for Synthetic Control Methods", with Matias Cattaneo and Yingjie Feng. Journal of the American Statistical Association 116(536): 1865–1880, 2021.

"Regression Discontinuity Designs Using Covariates", with Sebastian Calonico, Matias Cattaneo and Max Farrell

Review of Economics and Statistics 101(3): 442-451, 2019.

"Geographic Natural Experiments with Interference: The Effect of All-Mail Voting on Turnout in Colorado", with Luke Keele.

CESifo Economic Studies 64(2): 127-149, 2018.

"Legislative Behavior Absent Reelection Incentives: Findings from a Natural Experiment in the Arkansas Senate", with Andrew Feher.

Journal of the Royal Statistical Society: Series A 181(2): 351-378, 2018.

"Differential Registration Bias in Voter File Data: A Sensitivity Analysis Approach", with Brendan Nyhan and Christopher Skovron.

American Journal of Political Science 61(3): 744-760, 2017.

"Comparing Inference Approaches for RD Designs: A Reexamination of the Effect of Head Start on Child Mortality", with Matias Cattaneo and Gonzalo Vazquez-Bare.

Journal of Policy Analysis and Management 36(3): 643-681, 2017.

"The Incumbency Curse: Weak Parties, Term Limits, and Unfulfilled Accountability", with Marko Klašnja. American Political Science Review 111(1): 129-148, 2017.

"Understanding Regression Discontinuity Designs as Observational Studies", with Jasjeet Sekhon. Observational Studies 2: 174-182, 2016.

"Interpreting Regression Discontinuity Designs with Multiple Cutoffs", with Matias Cattaneo, Luke Keele and Gonzalo Vazquez-Bare.

Journal of Politics 78(4): 1229-1248, 2016.

"Cause or Effect? Turnout in Hispanic Majority-Minority Districts", with John Henderson and Jasjeet Sekhon.

Political Analysis 24(3): 404-412, 2016.

"Drawing Your Senator From a Jar: Term Length and Legislative Behavior". Political Science Research and Methods 4(2): 293-316, 2016.

"Natural Experiments Based on Geography", with Luke Keele.

Political Science Research and Methods 4(1): 65-95, 2016.

Reprinted in Advances in Political Methodology, R. Franzese Jr. (ed.), Edward Elgar Publishing, 2017.

- "Optimal Data-Driven Regression Discontinuity Plots", with Sebastian Calonico and Matias Cattaneo. Journal of the American Statistical Association 110(512): 1753-1769, 2015.
- "Using Regression Discontinuity to Uncover the Personal Incumbency Advantage", with Robert Erikson. Quarterly Journal of Political Science 10(1): 101-119, 2015.
- "Randomization Inference in the Regression Discontinuity Design: An Application to Party Advantages in the U.S. Senate", with Matias Cattaneo and Brigham Frandsen.

  Journal of Causal Inference 3(1): 1-24, 2015.
- "Geographic Boundaries as Regression Discontinuities", with Luke Keele. *Political Analysis* 23(1): 127-155, 2015.
- "Enhancing a Geographic Regression Discontinuity Design Through Matching to Estimate the Effect of Ballot Initiatives on Voter Turnout", with Luke Keele and Jose Zubizarreta.

  Journal of the Royal Statistical Society: Series A 178(1): 223-239, 2015.

  Reprinted in Advances in Political Methodology, R. Franzese Jr. (ed.), Edward Elgar Publishing, 2017.
- "Can Big Data Solve the Fundamental Problem of Causal Inference?".

PS: Political Science & Politics 48(1): 75-79, 2015.

"Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs", with Sebastian Calonico and Matias Cattaneo.

Econometrica 82(6): 2295-2326, 2014.

"When Natural Experiments Are Neither Natural Nor Experiments", with Jasjeet Sekhon.

American Political Science Review 106(1): 35-57, 2012.

Reprinted in Advances in Political Methodology, R. Franzese Jr. (ed.), Edward Elgar Publishing, 2017.

"Housing, Health and Happiness", with Matias Cattaneo, Sebastian Galiani, Paul Gertler and Sebastian Martinez.

American Economic Journal: Economic Policy 1(1): 75-105, 2009.

"Changes in the Panamanian Wage Structure: A Quantile Regression Analysis", with Sebastian Galiani.  $Economica\ 51(1)$ : 3-26, 2005.

# **Book Chapters and Other Publications**

- "Covariate Adjustment in Regression Discontinuity Designs", with Matias Cattaneo and Luke Keele. <u>Handbook of Matching and Weighting in Causal Inference</u>, eds. J. R. Zubizarreta, E. A. Stuart, D. S. Small and P. R. Rosenbaum, Chapman & Hall, Ch. 8, pp. 153-168, 2023.
- "Natural Experiments".

<u>Advances in Experimental Political Science</u>, J. N. Druckman and D. P. Green, eds., Cambridge University Press, Ch. 6, pp. 103-129, 2021.

"The Regression Discontinuity Design", with Matias Cattaneo and Gonzalo Vazquez-Bare.

<u>Handbook of Research Methods in Political Science and International Relations</u>, L. Curini and R. J. Franzese, eds., Sage Publications, Ch. 44, pp. 835-847, 2020.

- "On Interpreting the Regression Discontinuity Design as a Local Experiment", with Jasjeet Sekhon.

  Regression Discontinuity Designs: Theory and Applications (Advances in Econometrics, Volume 38),

  M. D. Cattaneo and J. C. Escanciano (ed.), Emerald Publishing Limited, pp. 1-28, 2017.
- "An Overview of Geographically Discontinuous Treatment Assignments With an Application to Children's Health Insurance", with Luke Keele, Scott Lorch, Molly Passarella, and Dylan Small.

  Regression Discontinuity Designs: Theory and Applications (Advances in Econometrics, Volume 38),
  M. D. Cattaneo and J. C. Escanciano (ed.), Emerald Publishing Limited, pp. 147-194, 2017.
- "Review of Field Experiments: Design, Analysis and Interpretation, by Alan S. Gerber and Donald P. Green".

Newsletter of the APSA Experimental Section, Volume 3, Issue 1, 2012.

"Two Tailed Test".

Encyclopedia of Research Design, SAGE Publications, 2010.

### Statistical Software Articles

- "scpi: Uncertainty Quantification for Synthetic Control Methods", with Matias Cattaneo, Yingjie Feng and Filippo Palomba.
- "Analysis of Regression Discontinuity Designs with Multiple Cutoffs or Multiple Scores", with Matias Cattaneo and Gonzalo Vazquez-Bare.

  Stata Journal, 20(4): 866-891, 2020.
- "Power Calculations for Regression Discontinuity Designs", with Matias Cattaneo and Gonzalo Vazquez-Bare.

Stata Journal 19(1): 210-245, 2019.

"rdrobust: Software for Regression Discontinuity Designs", with Sebastian Calonico, Matias Cattaneo and Max Farrell.

Stata Journal 17(2): 372-404, 2017.

"Inference in Regression Discontinuity Designs under Local Randomization", with Matias Cattaneo and Gonzalo Vazquez-Bare.

Stata Journal 16(2): 331-367, 2016.

"rdrobust: An R Package for Robust Nonparametric Inference in Regression-Discontinuity Designs", with Sebastian Calonico and Matias Cattaneo.

R Journal 7(1): 38-51, 2015.

"Robust Data-Driven Inference in the Regression-Discontinuity Design", with Sebastian Calonico and Matias Cattaneo.

Stata Journal 14(4): 909-946, 2014.

### Work in Progress

- "Uncertainty Quantification in Synthetic Controls with Staggered Treatment Adoption", with Matias Cattaneo, Yingjie Feng, and Filippo Palomba.
- "Charismatic Leaders and Democratic Backsliding", with James Hollyer and Marko Klašnja.
- "The Steroid Era in the Social Sciences", with Nicolas Idrobo, Arthur Lupia, and Hwayong Shin.
- "Covariate Distributions and Feasible Questions in Comparative Politics and Political Economy", with Nicolas Idrobo.
- "Estimation and Inference in Boundary Discontinuity Designs", with Matias Cattaneo and Rae Yu.

## Honors and Awards

Fellow of the International Association for Applied Econometrics (IAAE), elected 2022.

Fellow of the Society for Political Methodology, elected 2020.

Editor's Choice for "Geographic Natural Experiments with Interference: The Effect of All-Mail Voting on Turnout in Colorado". Published in CESifo Economic Studies, 2018.

Statistical Software Award for developing statistical software that makes a significant research contribution for RD designs software packages. Awarded by the Society for Political Methodology, 2017.

Citation of Excellence Award for highly cited papers relating to the areas of Business Management, Finance, Accounting, Economics and Marketing, for "Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs". Awarded by Emerald Group Publishing, 2017.

Emerging Scholar Award to honor a young researcher, within ten years of their degree, who is making notable contributions to the field of political methodology. Awarded by the Society for Political Methodology, 2016.

Gosnell Prize for Excellence in Political Methodology for best work in political methodology presented at any political science conference during the preceding year for "Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs". Awarded by the Society for Political Methodology, 2015.

Thomas R. Ten Have Citation for exceptionally creative or skillful research on causal inference for "Geographic Boundaries as Regression Discontinuities". Awarded at Atlantic Causal Inference Conference, 2011.

Robert H. Durr Award for best paper applying quantitative methods to a substantive problem for "Exploiting Tom DeLay: A New Method for Estimating Incumbency Advantage and the Effect of Candidate Ethnicity on Turnout". Awarded by the Midwest Political Science Association, 2009.

#### Keynote Lectures.

West Indies Economic Conference (WECON), The University of the West Indies, Jamaica, 2023.

Stata Virtual Symposium, 2022.

National Bureau of Economic Research (NBER), Summer Institute, Methods Lectures, 2021.

Public Policy Research Network (PPRN), University College London, London, 2021.

Texas Methodology Conference, University of Texas at Austin, Austin, 2020 (postponed).

Latin American Political Methodology Conference, Montevideo, 2019.

Workshop in Political Economy, Barcelona Institute of Economics, Barcelona, 2019.

Minnesota Political Methodology Colloquium Conference, University of Minnesota, Minneapolis, 2019.

Latin American Political Methodology Conference, Santiago de Chile, 2017.

CESifo Economic Studies Conference, Ifo Institute, Munich, 2016.

#### Princeton University.

Large-scale Research Award, Data-Driven Social Science (DDSS) Initiative, 2020.

#### University of Michigan.

James Orin Murfin chair professorship, 2016–2019.

Associate Professor Support Fund, 2016.

Converse-Miller Award, Center for Political Studies, ISR, 2014.

Roy Pierce Award, Center for Political Studies, ISR, 2013.

Spring/Summer Research Grant, Rackham Graduate School, 2013.

Eldersveld Prize for outstanding research contributions, Department of Political Science, 2012.

## University of California at Berkeley.

Mike Synar Research Fellowship, Institute of Governmental Studies, 2008.

Dissertation Research Award, Institute of Business and Economic Research, 2007.

Tinker Summer Field Research Grant, Center for Latin American Studies, 2006.

Universidad de Buenos Aires, Magna Cum Laude, Department of Economics, 2001.

## **External Grants**

National Science Foundation, Research Grants (PI or Co-PI).

SES-2241575 "Partitioning-Based Learning Methods for Treatment Effect Estimation and Inference."

\$453,195, 2023-2026, with Matias Cattaneo.

SES-2116224: "Charismatic Politicians, Weak Parties and the Disruption of Democracy."

\$266,795, 2021-2024, with Marko Klašnja.

SES-2019432: "New Developments in Program Evaluation Methodology."

\$460,000, 2020-2023, with Matias Cattaneo.

SES-1357561: "New Methodological Developments for Inference in the Regression Discontinuity Design."

\$276,756, 2014–2017, with Matias Cattaneo.

National Science Foundation, Training Grants (PI or Co-PI).

SES-2033912: "Empirical Implications of Theoretical Models (EITM) Summer Institutes 2019-2022."

\$795,027, 2020–2023, with Sean Gailmard, Scott de Marchi, and Maggie Penn.

SES-1756746: "Empirical Implications of Theoretical Models (EITM) Summer Institutes 2019-2022."

\$970,327, 2019–2020, with Sean Gailmard, Scott de Marchi, and Maggie Penn.

SES-2023405: "Empirical Implications of Theoretical Models (EITM) Summer Institutes 2016-2019."

\$71,286, 2016–2019, with Sean Gailmard, Arthur Lupia, Scott de Marchi, and Maggie Penn.

### Professional Service and Activities

Hunter African School Program to Expand Representation in Economics (HASPERE).

Participating faculty, 2021–present.

National Science Foundation.

Member of Advisory Committee, Directorate for Social, Behavioral, and Economic Sciences, 2018–2023. Member of Advisory Panel, Methodology, Measurement, and Statistics Program, 2017–2019.

American Political Science Association.

Elected Member of Council, 2018–2021.

Member of Council Teaching and Learning Committee, 2018–2019.

Midwest Political Science Association.

Elected Member of Council, 2022–2025.

Chair of Methodology Posters Section, Annual Meeting, 2013.

Society for Political Methodology.

Chair of Long-Range Planning Committee, 2022–2023.

Member of Long-Range Planning Committee, 2019–2022.

Member of Publications Committee, 2019–present.

Member at Large, 2017–2019.

Chair of Diversity Committee, 2017–2019.

Member of Diversity Committee, 2011–2013 and 2015.

Institute of Mathematical Statistics.

Member of Council, 2022–2023.

Econometric Society.

Program Chair, Latin American Meeting, 2022.

Member of Program Committee, North American Winter Meeting, 2022.

Society for Causal Inference.

Elected Member at Large, 2022–2024.

Empirical Implications of Theoretical Models (EITM) Summer Institute.

Co-principal investigator and leadership team, 2017–present.

Invited speaker, Duke University, 2016.

Invited speaker, University of Michigan, 2015.

Co-chair, Symposium in Honor of the Scholarship of Professor Robert S. Erikson, 2016.

Member of Experiments on Governance and Politics (EGAP), 2016–present.

Member of expert panel to revise Regression Discontinuity Design standards for What Works Clearinghouse (WWC), Institute of Education Sciences, U.S. Department of Education, 2013–2014. Coordinated by Mathematica Policy Research.

### Princeton University.

DDSS, Member of Executive Committee, 2020–2023.

CSML, Member of Executive Committee, 2020–2022.

Committee on the Library and Computing, 2023-2026.

New College West, Faculty Adviser, 2022–2023.

First College, Faculty Adviser, 2021–2022.

Department of Politics:

Chair of Junior Search Committee (Quantitative Methodology), 2020, 2021, 2022.

Member of Target of Opportunity Committee, 2022.

Member of Senior Search Committee (American Politics), 2022.

Member of Executive Committee, Program on Race, Ethnicity and Identity in Politics, 2021.

Member of Search Committee (Political Economy of Development), 2021.

Organizer of Quantitative Social Science Colloquium (QSSC), 2019–2023.

Member of Graduate Admissions Committee, 2019.

## University of Michigan.

Co-founder and co-organizer of Interdisciplinary Seminar in Quantitative Methods (ISQM), 2013–2019.

Member of Faculty Engagement and Recruitment Committee, MIDAS, 2018–2019.

Co-organizer of Women in Data Science Symposium (WiDS), MIDAS, 2018.

Member of Committee on Quantitative Social Science, LSA Dean Office, 2016–2017.

Member of Advisory Committee, ICPSR Summer Program, Institute of Social Research, 2015–2016.

Elected member of Executive Committee, Department of Political Science, 2018–2019.

Coordinator of Methods subfield, Department of Political Science, 2016–2019.

Visiting Scholar, Department of Political Science, MIT. 2011–2012.

## Refereeing Service

Best Reviewer Award, Political Science Research and Methods, 2017.

Refereeing experience in Social and Behavioral Sciences, and Policy:

American Economic Journal: Economic Policy; American Economic Review; American Economic Review: Insights; American Journal of Political Science; American Politics Research; American Political Science Review; British Journal of Political Science; Comparative Political Studies; Economics and Politics; Economic Journal; Educational Administration Quarterly; European Economic Review; Journal of Elections, Public Opinion and Parties; Journal of Experimental Political Science; Journal of Law, Economics and Organization; Journal of Legal Studies; Journal of Policy Analysis and Management; Journal of Politics; Journal of Public Economics; Journal of Race, Ethnicity, and Politics; Journal of Theoretical Politics; Latin American Research Review; Legislative Studies Quarterly; Party Politics; Political Analysis; Political Behavior; Political Research Quarterly; Political Science Research and Methods; Public Opinion Quarterly; Publius: The Journal of Federalism; Quarterly Journal of Political Science; Research and Politics; Review of Economics and Statistics; Review of Economic Studies; State Politics and Policy Quarterly; Statistics, Politics, and Policy; Sociological Methods and Research; and Studies in Comparative International Development.

Refereeing experience in Statistics, Econometrics, and Others:

Annals of Applied Statistics; Big Data & Society; Biostatistics; Clinical Infectious Diseases; Ecological Applications; Econometric Theory; Journal of the American Statistical Association; Journal of Applied Econometrics; Journal of Business & Economic Statistics; Journal of Econometrics; Journal of Evaluation in Clinical Practice; Journal of the Royal Statistical Society: Series A; Journal of the Royal Statistical Society: Series C; Nature Communications; Nature Sustainability; Physica A: Statistical Mechanics and its Applications; PLOS ONE; Science.

Grant reviewer for: National Science Foundation, Department of Education.

## Workshops and Short Courses

Regression Discontinuity Design, Mixtape Sessions. May 2023.

Regression Discontinuity and Instrumental Variable Designs, Northwestern Workshop on Research Design for Causal Inference.

August 2022.

Regression Discontinuity Designs, Bogota Summer School in Economics. June 2022.

Regression Discontinuity Designs, Statistical Horizons.

August 2022, October 2021, January 2021, December 2019.

Regression Discontinuity Designs, ICPSR Summer Program.

July 2021, June 2020, May 2018, May 2017, July 2016, June 2015.

Program Evaluation, International Initiative for Impact Evaluation (3ie). June 2021.

Experimental and Quasi-Experimental Methods, JPAL Latin America & Caribbean.

Universidad Torcuato Di Tella, Buenos Aires, Argentina, November 2017.

Instituto Tecnológico Autónomo de México, Mexico City, Mexico, December 2016.

Universidad Torcuato Di Tella, Buenos Aires, Argentina, August 2015.

Regression Discontinuity Designs, Winter School in Methodology and Data Analysis. Universidad Católica del Uruguay, Montevideo, Uruguay: July 2016, July 2015.

Randomization Inference and Factorial Designs, Workshop on Field Experimentation in Political Economy. Columbia Center for the Study of Development Strategies, Columbia University, NYC, May 2011.

## Teaching Experience

Princeton University, Department of Politics, 2019–present.

POL: Junior Workshop in Developing Democracies. (Undergraduate.)

POL 300: Conducting Independent Research in Political Science (Junior Practicum). (Undergraduate.)

POL 345: Introduction to Quantitative Social Science. (Undergraduate.)

POL 571: Quantitative Analysis I. (Ph.D.)

POL 572: Quantitative Analysis II. (Ph.D.)

POL 573: Quantitative Analysis III. (Ph.D.)

University of Michigan, Department of Political Science, 2010–2019.

POLSCI 300: Quantitative Empirical Methods of Political Science. (Undergraduate.)

POLSCI 347: Latin American Politics. (Undergraduate.)

POLSCI 489: Causal Inference in Political Science Research. (Undergraduate.)

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POLSCI 499: Quantitative Methods for Political Analysis. (Undergraduate.)
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POLSCI 688: Causal Inference in the Social Sciences. (Ph.D.)

POLSCI 699: Statistical Methods II. (Ph.D.)

POLSCI 787: Multivariate Analysis. (Ph.D.)

POLSCI 799: Advanced Quantitative Empirical Methods. (Ph.D.)

University of Michigan, Department of Economics, 2016.

ECON 675: Applied Microeconometrics. (Ph.D.) Cross-listed with POLSCI 787.

# Personal

Naturalized U.S. citizen, born in Argentina in 1979.

Married to Matias Cattaneo. Mother of Lucero (born 2009) and Maite (born 2011).