Department of Economics University of Georgia Amos Hall B422 Athens, GA 30605

brantly.callaway@uga.edu brantlycallaway.com

Academic Appointments

University of Georgia, Department of Economics, 2020-

Associate Professor, 2023-

Assistant Professor, 2020-2023

Previous Positions:

Assistant Professor, Department of Economics, University of Mississippi, 2019-2020 Assistant Professor, Department of Economics, Temple University, 2016-2019

Education

Ph.D., Economics, Vanderbilt University, 2016

Dissertation: "Essays on Distributional Treatment Effects with Panel Data" Committee: Tong Li (chair), William Collins, Federico Gutierrez, Atsushi Inoue

M.S., Economics, Georgia Institute of Technology, 2010

B.S., Computer Science, Georgia Institute of Technology, 2007

Research Interests

Microeconometrics and Labor Economics

Publications

- 1. Policy Evaluation during a Pandemic, with Tong Li, Journal of Econometrics, Vol. 236, No. 1
- 2. Evaluating Policies Early in a Pandemic: Bounding Policy Effects with Nonrandomly Missing Data, with Tong Li, Forthcoming at *Review of Economics and Statistics*
- 3. Difference-in-Differences for Policy Evaluation, In: Zimmermann, K.F. (eds) *Handbook of Labor, Human Resources and Population Economics*, pp. 1–61, 2023

4. Treatment Effects in Interactive Fixed Effects Models with a Small Number of Time Periods, with Sonia Karami, *Journal of Econometrics*, Vol. 233, No. 1, pp. 184–208, 2023

- 5. Heterogeneous Effects of Job Displacement on Earnings, with Afrouz Azadikhah Jahromi, *Empirical Economics*, Vol. 62, No. 1, pp. 213-245, 2022
- 6. Difference in Differences with Multiple Time Periods, with Pedro Sant'Anna, *Journal of Econometrics*, Vol. 225, No. 2, pp. 200-230, 2021
- 7. Bounds on Distributional Treatment Effect Parameters using Panel Data with an Application on Job Displacement, *Journal of Econometrics*, Vol. 222, No. 2, pp. 861-881, 2021
- 8. Distributional Effects of a Continuous Treatment with an Application on Intergenerational Mobility, with Weige Huang, Oxford Bulletin of Economics and Statistics, Vol. 82, No. 4, pp. 808-842, 2020.
- 9. Quantile Treatment Effects in Difference in Differences Models with Panel Data, with Tong Li, *Quantitative Economics*, Vol. 10, No. 4, pp. 1579-1618, 2019.
- 10. Local Intergenerational Elasticities, with Weige Huang, *Economics Bulletin*, Vol. 39, No. 2, pp. 919-928, 2019.
- 11. Quantile Treatment Effects in Difference in Differences Models under Dependence Restrictions and with only Two Time Periods, with Tong Li and Tatsushi Oka, *Journal of Econometrics*, Vol. 206, No. 2, pp. 395-418, 2018.
- 12. Unions, Workers, and Wages at the Peak of the American Labor Movement, with William Collins, Explorations in Economic History, Vol. 68, pp. 95-118, 2018.

Working Papers

- 1. Treatment Effects in Staggered Adoption Designs with Non-Parallel Trends, with Emmanuel Tsyawo
- 2. Regulation, Emissions and Productivity: Evidence from China's Eleventh Five-Year Plan, with Tong Li, Joel Rodrigue, Yuya Sasaki, and Yong Tan, submitted.
- 3. Difference-in-Differences when Parallel Trends Holds Conditional on Covariates, with Carolina Caetano
- 4. Nonlinear Approaches to Intergenerational Income Mobility allowing for Measurement Error, with Tong Li and Irina Murtazashvili
- 5. Difference-in-Differences with a Continuous Treatment, with Andrew Goodman-Bacon and Pedro H.C. Sant'Anna

Works in Progress

- 1. Testing the Effects of an Unobservable Factor: Do Marriage Prospects Affect College-Major Choice?, with Hayri Alper Arslan and Tong Li
- 2. Inference on Counterfactual Transition Matrices, with Chengye Jia and Karen Yan

3. Difference-in-Differences with Bad Controls, with Carolina Caetano, Stroud Payne, and Hugo Sant'Anna

Resting Papers

- 1. Adoption and Diffusion of Health Information Technology: The Case of Primary Care Clinics, with Vivek Ghosal (2012)
- 2. Difference in Differences with Time-Varying Covariates, with Carolina Caetano, Stroud Payne, and Hugo Rodrigues (2022), this paper replaced by "Difference-in-Differences with Covariates in the Parallel Trends Assumption" and by "Difference-in-Differences with Bad Controls".

Teaching

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University of Georgia
   Introduction to Econometrics (Undergraduate): 2020-2023
   Introduction to Econometrics (Ph.D.): 2021-2023
   Statistics for Econometrics (Ph.D.): 2022
University of Mississippi
   Econometrics II (Ph.D.): 2020
   Probability and Statistics (Ph.D.): 2019
Temple University
   Econometrics II (Ph.D.): 2017, 2018, 2019
   Introduction to Econometrics (Undergraduate): 2017, 2018, 2019
Vanderbilt University
   Economic Statistics (Undergraduate): 2013
Vanderbilt University, Teaching Assistant
   Probability and Statistics (Ph.D.): 2014
   Econometrics I (Ph.D.): 2013, 2014
   Econometrics II (Ph.D.): 2012, 2014
   Microeconometrics (Ph.D.): 2014, 2015
   Macroeconomics (Ph.D.): 2012
   Time Series Econometrics (M.A.): 2015
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Short Courses on Difference-in-Differences

Economic Statistics (Undergraduate): 2011

Poverty and Discrimination (Undergraduate): 2013

Intermediate Macroeconomic Theory (Undergraduate): 2012

University of Louisiana at Lafayette: 2020

Fondazione Eni Enrico Mattei (FEEM): 2021

Northwestern Causal Inference Workshop: 2023 (scheduled)

Mixtape Sessions: 2023 (scheduled)

Software

1. R qte package: Code for estimating quantile treatment effects particularly when panel data is available

- Available at bcallaway11.github.io/qte
- 2. R did package: Code for difference-in-differences with multiple time periods and variation in treatment timing
 - Available at bcallaway11.github.io/did
- 3. R ife package: Code for treatment effects in interactive fixed effects models with a small number of time periods
 - Available at github.come/bcallaway11/ife
- 4. R pte package: Generic functions for treatment effects with panel data
 - Available at github.com/bcallaway11/pte
- 5. R ppe package: Code for policy evaluation during a pandemic
 - Available at github.com/bcallaway11/ppe
- 6. R BMisc package: Miscellaneous functions for working with panel data, distribution functions, and dealing with formulas
 - Available at bcallaway11.github.io/BMisc
- 7. R csabounds package: Implements tight bounds on the distribution and quantile of the treatment effect when panel data is available
 - Available at bcallaway11.github.io/csabounds
- 8. R ccfa package: Tools for constructing counterfactual distributions with a continuous treatment
 - Available at weighuangecon.github.io/ccfa
- 9. R distreg package: Functions related to distribution regression
 - Available at github.com/bcallaway11/distreg
- 10. R lige package: Code to compute local versions of intergenerational elasticities
 - Available at github.com/bcallaway11/lige
- 11. R qrme package: Code for quantile regression with measurement error and nonlinear models with two-sided measurement error
 - Available at github.com/bcallaway11/qrme
- 12. R kotlarski code: Code for estimating the distribution of a latent variable when repeated measurements are available using Kotlarski's Lemma
 - Available at github.com/bcallaway11/kotlarski

Honors and Fellowships

1. Aigner Award (best applied paper at the *Journal of Econometrics*) for "Difference in differences with multiple time periods", 2023

- 2. Vanderbilt University Economics Fellowship, 2010-2016
- 3. Noel Dissertation Fellowship, 2015

Other Research Experience and Employment

1. Vanderbilt University

Research Assistant for Tong Li, 2013-2016

Research Assistant for William Collins, 2013

Research Assistant for Yangin Fan, 2012

2. Georgia Institute of Technology

Research Assistant for Vivek Ghosal, 2009-2010

3. Home Depot, Atlanta, GA

Information Technology Developer, 2007-2008

Advising

Dissertation Committee Chair

- 1. Chengye Jia: Ph.D., Temple University, 2021, First Placement: Shandong University of Finance and Economics
- 2. Sonia Karami: Ph.D. Temple University, 2021, First Placement: Data Scientist, Federal Reserve Bank of Richmond
- 3. Emmanuel Tsyawo: Ph.D., Temple University, 2020. First Placement: Assistant Professor, Mohammed VI Polytechnic University
- 4. Qin Wei: Ph.D., Temple University, 2020, First Placement: Depository Trust & Clearing Corporation
- 5. Afrouz Azadikhah-Jahromi: Ph.D., Temple University, 2019. First Placement: Assistant Professor, Widener University.
- 6. Weige Huang: Ph.D., Temple University, 2019. First Placement: Assistant Professor, Wenlan School of Business, Zhongnan University of Economics and Law, Current Position: Associate Professor, Shenzhen MSU-BIT University

Dissertation Committee Member

- 1. Hugo Sant'Anna: Ph.D., University of Georgia, in progress
- 2. Pablo Troncoso: Ph.D., University of Georgia, 2023. First Placement: Instructional Assistant Professor, University of Houston.

3. Chenchen Xie: Ph.D., Temple University, 2021.

M.A. Thesis Advisor

1. Stroud Payne: M.A., University of Georgia, 2022, Placement: Vanderbilt University Ph.D. program

M.A. Thesis Committee Member

1. Emmett Allen: M.A., University of Georgia, 2023.

Professional Activities

Invited Seminars:

- 1. Central European University, 2023
- 2. George Washington University, 2023
- 3. Miami University, 2023 (scheduled)
- 4. NEXT-D Workshop at Tulane University, 2023
- 5. Queen's University, 2023 (scheduled)
- 6. University of Connecticut, 2023
- 7. Urban Institute, 2023
- 8. Virginia Tech, 2023
- 9. Washington University in St. Louis, 2023
- 10. Auburn University, 2022,
- 11. Bureau of Economic Analysis, 2022
- 12. Columbia University, 2022
- 13. Emory Quantitative Theory and Methods, 2022
- 14. Florida State University, 2022
- 15. McMaster University, 2022
- 16. Northwestern University, 2022
- 17. University of Duisburg-Essen, 2022
- 18. University of Illinois Urbana-Champaign, 2022
- 19. University of Virginia, 2022
- 20. University of Wisconsin Agricultural and Applied Economics, 2022
- 21. University of Zurich, 2022
- 22. Zhongnan University of Economics and Law, 2022
- 23. Workshop on current issues in difference-in-differences and two-way fixed effect research designs at the University of Michigan, 2022
- 24. Amazon, 2021
- 25. Brown University, 2021
- 26. Icesi University, 2021

- 27. Michigan State University, 2021
- 28. Monash University, 2021
- 29. University of São Paulo, 2021
- 30. Difference in Differences Reading Group, 2021
- 31. One World YoungStats Webinar, 2021
- 32. Texas A&M, 2020
- 33. UC Merced, 2020
- 34. University of Georgia, 2020
- 35. Vanderbilt University, 2020
- 36. Southern Methodist University, 2019
- 37. University of Central Florida, 2018
- 38. University of Mississippi, 2018
- 39. University of Pennsylvania, 2018
- 40. Baylor University, 2016
- 41. Bureau of Economic Analysis, 2016
- 42. Concordia University, 2016
- 43. Consumer Financial Protection Bureau, 2016
- 44. Indiana University, 2016
- 45. Lancaster University, 2016
- 46. Mathematica Policy Research, 2016
- 47. Temple University, 2016
- 48. UC Davis, 2016
- 49. UC Merced, 2016

Conference Presentations:

- 1. Canadian Econometrics Study Group, 2023 (scheduled)
- 2. Georgia Econometrics Workshop, 2023
- 3. Kansas University Econometrics Workshop, 2023
- 4. Southern Economics Association Conference, 2023 (scheduled)
- 5. Econometric Society Summer Meetings, 2022
- 6. International Association of Applied Econometrics, 2022
- 7. Midwest Econometrics Group Conference, 2022
- 8. Society of Labor Economists, 2022
- 9. Southern Economics Association Conference, 2022
- 10. 17th IZA & 4th IZA/CREST Conference: Labor Market Policy Evaluation, 2022
- 11. Annual Health Econometrics Workshop, 2021
- 12. 26th International Panel Data Conference, 2021
- 13. Southern Economics Association Conference, 2021

- 14. Labor Breakfast Roundtable at ASSA, 2020
- 15. Southeastern Micro Labor Workshop, 2020
- 16. Southern Economics Association Conference, 2020
- 17. Economic Applications of Quantile Regression 2.0 Conference, 2019
- 18. Econometric Society Summer Meetings, 2019
- 19. Southern Economics Association Conference, 2019
- 20. Conference on Identification in Econometrics at Vanderbilt University, 2018
- 21. Southern Economics Association Conference, 2018
- 22. Triangle Econometrics Conference, 2018
- 23. Midwest Econometrics Group Conference, 2017
- 24. Southern Economics Association Conference, 2017
- 25. Midwest Econometrics Group Conference, 2016
- $26.\,$ 9th International Conference of the ERCIM WG on Computational and Methodological Statistics, $2016\,$
- 27. Econometric Society World Congress, 2015
- 28. Midwest Econometrics Group Conference, 2015

Referee:

- 1. American Political Science Review
- 2. Annals of Applied Statistics (2)
- 3. American Economic Review
- 4. Biometrics
- 5. Canadian Journal of Economics
- 6. Econometric Reviews (3)
- 7. Econometrics and Statistics
- 8. Economics Letters (2)
- 9. Empirical Economics (4)
- 10. European Review of Agricultural Economics
- 11. Evaluation Review
- 12. Health Economics
- 13. Health Services and Outcomes Research Methodology
- 14. Industrial Relations
- 15. Journal of Applied Econometrics (8)
- 16. Journal of the Association of Environmental and Resource Economists
- 17. Journal of Business and Economic Statistics (9)
- 18. Journal of Econometric Methods (3)
- 19. Journal of Econometrics (8)
- 20. Journal of Economic Behavior and Organization

- 21. Labour Economics
- 22. Nature Human Behavior
- 23. Oxford Bulletin of Economics and Statistics
- 24. Research in Labor Economics
- 25. Quarterly Journal of Economics
- 26. Review of Economics and Statistics (2)
- 27. Southern Economic Journal
- 28. Statistics and Probability Letters

Service:

- 1. Terry College Promotion and Tenure for Lecturers Committee, 2023
- 2. Association for Public Policy Analysis and Management (APPAM) submission reviewer for the Methods and Tools of Analysis program, 2023
- 3. Co-organizer Georgia Econometrics Workshop, 2022 & 2023
- 4. UGA Economics Hiring Committee Chair, 2022-2023
- 5. UGA Economics Department Graduate Program Committee, 2022-
- 6. Research proposal reviewer for the Israel Science Foundation, 2022
- 7. Co-founder UGA Econometrics Reading Group, 2021-
- 8. University of Georgia Economics Hiring Committee, 2020-2021
- 9. Founded Temple Econometrics Reading Group, 2016-2019
- 10. Temple Economics Department Undergraduate Affairs Committee, 2016-2019
- 11. Temple Economics Department Seminar Committee, 2016-2019
- 12. Temple Economics Department Hiring Committee, 2018
- Faculty Supervisor for Center for Regional Economics at Temple
 Consulting project for Comcast, 4 students, \$30,000 budget, 2017
- 14. Temple College of Liberal Arts Technology Committee, 2016-2017