

EMPLOYMENT	<p>Stanford University Professor, Department of Economics (2024-) Associate Professor, Department of Economics (2020-2024) Assistant Professor, Department of Economics (2013-2020)</p> <p>University of Chicago Visiting Associate Professor, Department of Economics (January-March 2022)</p> <p>Microsoft Research, New England (July 2012-June 2013) Postdoctoral Researcher</p>
EDUCATION	<p>Massachusetts Institute of Technology (2007-2012) PhD, Economics Thesis: “Essays on Social Networks in Development Economics” Committee: Abhijit Banerjee, Esther Duflo, and Victor Chernozhukov</p> <p>Columbia University, <i>summa cum laude</i> (2003-2007) BA, Mathematics (Honors), Economics (Honors)</p>
AFFILIATIONS	<p>Abdul Latif Jameel Poverty Action Lab, Affiliate (J-PAL) Bureau for Research and Economic Analysis of Development (BREAD) Center for Effective Global Action (CEGA) National Bureau of Economic Research, Research Associate (NBER) Stanford Institute for Economic and Policy Research (SIEPR) Theoretical Research in Development Economics (ThReD) Yale Research Initiative on Innovation and Scale (Y-RISE)</p>
REFEREED PUBLICATIONS	<ol style="list-style-type: none">1. The diffusion of microfinance (with Abhijit Banerjee, Esther Duflo, and Matthew O. Jackson), <i>Science</i> (2013): Vol. 341, No. 6144 1236498 doi:10.1126/science.12364982. Network structure and the aggregation of information: Theory and evidence from Indonesia (with Vivi Alatas, Abhijit Banerjee, Rema Hanna, and Ben Olken), <i>American Economic Review</i> (July 2016): Vol. 106, No. 7, 1663-1704, doi:10.1257/aer.201407053. Social networks as contract enforcement: Evidence from a lab experiment in the field (with Cynthia Kinnan, and Horacio Larreguy), <i>American Economic Journal: Applied Economics</i> (October 2018): Vol. 10, No. 4, doi:10.1257/app.201500574. Social networks, reputation and commitment: Evidence from a savings monitors experiment (with Emily Breza), <i>Econometrica</i> (January 2019): Vol. 87, no. 1, 175-216, doi:10.3982/ECTA136835. Using gossips to spread information: Theory and evidence from two randomized controlled trials (with Abhijit Banerjee, Esther Duflo, and Matthew O. Jackson), <i>Review of Economic Studies</i> (February 2019): doi:10.1093/restud/rdz0086. Testing models of social learning on networks: Evidence from two experiments (with Horacio Larreguy and Juan Pablo Xandri), <i>Econometrica</i> (January 2020): Vol. 88, no. 1, 1-32, doi:10.3982/ECTA14407

7. Using aggregated relational data to feasibly identify network structure without network data (with Emily Breza, Tyler McCormick, and Mengjie Pan), *American Economic Review* (July, 2020): Vol. 110, no. 8, 2454-2484, doi:10.1257/aer.20170861
8. Comparison of knowledge and information-seeking behavior after general COVID-19 public health messages and messages tailored for Black and Latinx communities: A randomized controlled trial (with Marcella Alsan, Fatima Cody Stanford, Abhijit Banerjee, Emily Breza, Sarah Eichmeyer, Paul Goldsmith-Pinkham, Lucy Ogbu-Nwobodo, Benjamin A. Olken, Carlos Torres, Anirudh Sankar, Pierre-Luc Vautrey, and Esther Duflo), *Annals of Internal Medicine* (December 21, 2020): doi:10.7326/M20-6141
9. Interacting regional policies in containing a disease (with Paul Goldsmith-Pinkham, Matthew O. Jackson, and Samuel Thau), *Proceedings of the National Academy of Sciences* (May 11, 2021): Vol. 118, no. 19, doi:10.1073/pnas.2021520118
10. Effect of physician-delivered COVID-19 public health messages and messages acknowledging racial inequity on Black and white adults' knowledge, beliefs, and practices related to COVID-19: A randomized clinical trial (Carlos Torres, Lucy Ogbu-Nwobodo, Marcella Alsan, Fatima Cody Stanford, Abhijit Banerjee, Emily Breza, Sarah Eichmeyer, Mohit Karnani, Tristan Loisel, Paul Goldsmith-Pinkham, Benjamin A. Olken, Pierre-Luc Vautrey, Erica Warner, and Esther Duflo), *JAMA Network Open* (July 14, 2021): doi:10.1001/jamanetworkopen.2021.17115
11. Effects of a large-scale social media advertising campaign on holiday travel and COVID-19 infections: a cluster randomized controlled trial (with Emily Breza, Fatima Stanford, Marcela Alsan, Burak Alsan, Abhijit Banerjee, Sarah Eichmeyer, Traci Glushko, Paul Goldsmith-Pinkham, Kelly Holland, Emily Hoppe, Mohit Karnani, Sarah Liegl, Tristan Loisel, Lucy Ogbu-Nwobodo, Ben Olken, Carlos Torres, Pierre-Luc Vautrey, Erica Warner, Susan Wootton, and Esther Duflo), *Nature Medicine* (August 19, 2021): doi:10.1038/s41591-021-01487-3
12. Naive learning with uninformed agents (with Abhijit Banerjee, Emily Breza, and Markus Mobius), *American Economic Review* (November, 2021): doi:10.1257/aer.20181151
13. A note on payments in the lab for infinite horizon dynamic games with discounting (with Juan Pablo Xandri), *Economic Theory* (2022): <https://doi.org/10.1007/s00199-021-01409-x>
14. Consistently estimating graph statistics using aggregated relational data (with Emily Breza, Shane Lubold, Tyler McCormick, and Mengjie Pan), *Proceedings of the National Academy of Sciences*: 120.21 (2023): e2207185120.
15. Identifying the latent space geometry of network models through analysis of curvature (with Shane Lubold and Tyler McCormick), *Journal of the Royal Statistical Society Series B: Statistical Methodology*: 85.2 (2023): 240-292.
16. When less is more: Experimental evidence on information delivery during India's demonetization (with Abhijit Banerjee, Emily Breza, and Ben Golub), *Review of Economic Studies* (July, 2023): doi.org/10.1093/restud/rdad068
17. Designing effective celebrity public health messaging: Results from a nationwide Twitter experiment promoting vaccination in Indonesia (with Vivi Alatas, Markus Mobius, Ben Olken, and Cindy Paladines), *The Economic Journal* (April, 2024): doi.org/10.1093/ej/uead102
18. Changes in social network structure in response to exposure to formal credit markets (with Abhijit Banerjee, Emily Breza, Esther Duflo, Matthew O. Jackson, and Cynthia Kinnan), *Review of Economic Studies* (May, 2024): doi.org/10.1093/restud/rdad065

19. Selecting the most effective nudge: Evidence from a large-scale experiment on immunization (with Abhijit Banerjee, Esther Duflo, Matthew O. Jackson, John Floretta, Harini Kannan, Francine Loza, Anirudh Sankar, Anna Schrimpf, and Maheshwor Shreshta) [forthcoming, *Econometrica*]
20. A network formation model based on subgraphs (with Matthew O. Jackson) [forthcoming, *Review of Economic Studies*]
21. Can a trusted messenger change behavior when information is plentiful? Evidence from the first months of the COVID-19 pandemic in West Bengal (with Marcella Alsan, Abhijit Banerjee, Emily Breza, Abhijit Chowdhury, Esther Duflo, Paul Goldsmith-Pinkham and Benjamin Olken) [forthcoming, *Review of Economics and Statistics*]

BOOK CHAPTERS
AND
NON-REFEREED
PUBLICATIONS

22. Econometrics of network formation. *Oxford Handbook on the Economics of Networks*. (edited by Yann Bramouille, Andrea Galeotti and Brian Rogers). Oxford University Press, 2016.
23. Networks in economic development. (with Emily Breza, Benjamin Golub, and Aneesh Parvathaneni) *Oxford Review of Economic Policy*, (edited by Matt Elliott, Sanjeev Goyal, and Alex Teytelboym), Vol. 35, No. 4, 678-721
24. Mobile phone messaging to promote preventive behaviors (with Abhijit Banerjee, Marcella Alsan, Emily Breza, Esther Duflo, Paul Goldsmith-Pinkham, Benjamin A. Olken) in End COVID-19 in low and middle-income countries (Ahmed et al.). *Science*, 375,1105-1110(2022).doi:10.1126/science.abo4089
25. The impact of large-scale social media advertising campaigns on COVID-19 vaccination: Evidence from two randomized controlled trials (with Emily Breza, Lisa Y. Ho, Marcella Alsan, Abhijit Banerjee, Fatima Cody Stanford, Renato Fior, Paul Goldsmith-Pinkham, Kelly Holland, Emily Hoppe, Louis-Maël Jean, Lucy Ogbu-Nwobodo, Benjamin A. Olken, Carlos Torres, Pierre-Luc Vautrey, Erica Warner, and Esther Duflo. *AEA Papers and Proceedings*, 113: 653-58

WORKING PAPERS **Revisions**

26. Non-robustness of diffusion estimates on networks with measurement error (with Paul Goldsmith-Pinkham, Tyler McCormick, Samuel Thau, and Jerry Wu) [revision requested at *Econometrica*]
27. Robustly estimating heterogeneity in factorial data using Rashomon Partitions (with Aparajithan Venkateswaran, Anirudh Sankar, and Tyler McCormick) [revised and resubmitted to *Journal of the Royal Statistical Society Series B: Statistical Methodology*]
28. Network centrality and informal institutions: Evidence from a lab experiment in the field (with Emily Breza and Horacio Larreguy) [revision requested at *Journal of Public Economics*]
29. Best linear approximations to set identified functions: with an application to the gender wage gap (with Victor Chernozhukov, Francesca Molinari, and Paul Schrimpf) [revision requested at *Quantitative Economics*]

In Progress

30. Generalizability with ignorance in mind: learning what we do (not) know for archetypes discovery (with Emily Breza and Davide Viviano)
31. Model-based inference and experimental design for interference using partial network data (with Steve Wilkins-Reeves, Shane Lubold, and Tyler McCormick)

32. Multiplexing and diffusion (with Vasu Chaudhary, Ben Golub, and Matthew O. Jackson)
33. General covariance-based conditions for central limit theorems with dependent triangular arrays (with Matthew O. Jackson, Tyler McCormick, and Vydhourie Thiyaeswaran)
34. Blue spoon; or, Sparking communication about appropriate technology use (with Esther Duflo, Michael Kremer, João Pugliese, Jonathan Robinson, and Frank Schilbach)
35. Liquidity, financial centrality, and the value of key players (with Rob Townsend and Juan Pablo Xandri)
36. Small changes in survey recruitment protocols lead to large differences in policymaker inference: evidence from a randomized controlled trial on COVID-19 surveillance (with Marcella Alsan, Abhijit Banerjee, Emily Breza, Esther Duflo, Paul Goldsmith-Pinkham, Weston Merrick, and Benjamin Olken)
37. Network-based hiring: Local benefits; global costs (with Melanie Morten and Alessandra Peter)
38. Signaling, shame, and silence in social learning (with Ben Golub and He Yang)
39. Seeing the forest for the trees? An investigation of network knowledge (with Emily Breza and Alireza Tahbaz-Salehi)

RESEARCH IN PROGRESS

40. Effects of caste-based affirmative action in governance on socio-economic networks and resource provision (with Sumhith Aradhyula, Emily Breza, and M. R. Sharan)
41. Noise and diffusion (with Abhijit Banerjee and Emily Breza) [*piloting in progress*]
42. Advice (with Ben Golub and He Yang) [*piloting in progress*]
43. Skepticism (with Emily Breza and Ben Golub) [*piloting in progress*]

OLD STUFF

44. Econometrics of sampled networks (with Randall Lewis)
 - Retired. Instead see “Using aggregated relational data to feasibly identify network structure without network data,” “Consistently estimating graph statistics using aggregated relational data,” and “Model-based inference and experimental design for interference using partial network data”
45. Tractable and consistent random graph models (with Matthew O. Jackson), *NBER working paper w20276*, *arXiv: 1210.7375*
 - Retired. Instead see “A network formation model based on subgraphs”
46. Investments in social ties, risk sharing, and inequality (with Attila Ambrus and Matt Elliott), *NBER working paper w20669*
47. Information, networks and insurance: Evidence from a lab experiment in the field (with Cynthia Kinnan and Horacio Larreguy), *CFSP working paper*
48. Come play with me: Experimental Evidence of information diffusion about rival goods (with Abhijit Banerjee, Emily Breza, Esther Duflo and Matthew O. Jackson) *Paper was presented at NEUDC 2012, AEA 2014, ASSA 2016.*

FELLOWSHIPS,
HONORS, AND
AWARDS

- Infosys Prize in Economics (2024)
- King Center Global Development Research Funding (2023)
- National Science Foundation Grant, Panel Data for the Study of Network Economics and Risk Sharing SES-2215369, Co-PI (2022-2025, with Emily Breza and Tyler McCormick)
- Stanford Impact Labs Impact Lab Design Fellowship (2021)
- Weiss Fund (2020, with Marcella Alsan, Abhijit Banerjee, Emily Breza, Esther Duflo, Paul Goldsmith-Pinkham, and Ben Olken)
- National Science Foundation RAPID Grant, Extreme Effects of Uncertainty on Social Learning: An Investigation of Endogenously Limited Communication, Skepticism, and Biased Beliefs, SI (2020-2023, with Co-PIs Marcella Alsan, Abhijit Banerjee, Emily Breza, Esther Duflo, Paul Goldsmith-Pinkham (SI), and Ben Olken)
- The Foundations of Human Behavior Initiative, Affirmative Action, Attitudes and Social Networks: Evidence from Caste-Based Reservation in India, Co-PI (2020-2022, with Emily Breza)
- National Science Foundation Grant, Extreme Effects of Uncertainty on Social Learning: An Investigation of Endogenously Limited Communication, Skepticism, and Biased Beliefs, Co-PI (2020-2023, with Emily Breza)
- King Center on Global Development Junior Faculty Research Grant (2019, with Emily Breza and M. R. Sharan)
- National Science Foundation Grant, Workshop on Network Economics SES-1757223, Co-PI (2018-2022, with Ben Golub, Matthew O. Jackson, and Sudipta Sarangi)
- Alfred P. Sloan Research Fellow (2018-2020)
- Weiss Fund (2018, with Emily Breza and M. R. Sharan)
- National Science Foundation Grant, Talk, noise, and silence in networks: Obstacles to information sharing SES-1658940, PI (2018-2020, with Ben Golub)
- National Science Foundation Grant, Multiplexing: Theories and Tests of Interactions Between Types of Relationships SES-1629328, Co-PI (2017-2020, with Ben Golub and Matthew O. Jackson)
- National Science Foundation Grant, The Impact of Participation Policies on Socioeconomic Interactions SES-1559469, Co-PI (2016-2020, with Emily Breza)
- SEED Grant (2015, with Emily Breza)
- National Science Foundation Grant, Experimentally Identifying Constraints to Risk Sharing: Separating Limited Commitment, Moral Hazard and Hidden Income SES-1530791, Co-PI (2015-2020, with Melanie Morten)
- PEDL Grant (2015, with Emily Breza and Mounu Prem)
- IRiSS Seed Grant (2015)
- SIEPR/SCID Grant (2014)
- National Science Foundation Grant, The Economic Benefits of Investing into Social Relationships SES-1429959, Co-PI (2015-2019, with Attila Ambrus and Matt Elliott)
- PEDL Grant (2014, with Xiao Yu Wang)
- SEED Grant (2014, with Emily Breza and Xiao Yu Wang)
- Empirical Microeconomists' Jamboree, Duke University (2014)

- National Science Foundation Grant, Making the Dynamics of Social Learning Visible SES-1326661, Co-PI (2013-2019, with Abhijit Banerjee, Emily Breza and Markus Mobius)
- USAID Grant AID-OAA-F-13-00038 (2013-2014, with Emily Breza, Manaswini Rao and Ashish Shenoy)
- Russell Sage Foundation Small Grant in Consumer Finance #98-13-10 (2013-2014)
- Stanford Institute for Innovation in Developing Economies (SEED) Grant (2013, with Emily Breza)
- Institute for Research in the Social Sciences (IRiSS) Seed Grant (2013)
- National Science Foundation Grant, Collaborative Research: Social Networks and Microfinance SES-1156182, Co-PI (2012-2017, with Abhijit Banerjee, Esther Duflo and Matt Jackson [SES-1155302])
- Agricultural Technology Adoption Initiative (ATAI) Grant (2012)
- Phaal Curry Monster (2012) - for eating *Naga Jolokia* ghost chili curry
- National Science Foundation Graduate Research Fellowship (2007-2011)
- Consortium on Financial Systems and Poverty (CFSP) Seed Grants (2010, 2011, with Horacio Larreguy, Cynthia Kinnan and Emily Breza)
- Innovations for Poverty Action (IPA), Graduate Student Fund Award (2011)
- George and Obie Shultz Fund Grants (2009-2011, with Horacio Larreguy and Cynthia Kinnan)
- MIT Center for International Studies Grant (2009, 2011)
- MIT International Science and Technology Initiatives Grants (2009-2010)
- Sanford S. Parker Prize, Columbia University (2007)
- Princeton Summer Program in Analysis & Geometry (2006) (Stein/Tian/Rodnianski)
- Phi Beta Kappa, Columbia University (2006)

PROFESSIONAL ACTIVITIES

Associate Editor for the *American Economic Review* (2020-)
 Associate Editor for the *Journal of the European Economic Association* (2018-2023)
 Guest Editor for *Proceedings of the National Academy of Sciences* (2021)
 Director, Stanford Institute for Theoretical Economics (2020-2021)

Referee for *AEJ: Applied Economics*; *AEJ: Microeconomics*; *AEJ: Policy*; *American Economic Review*; *American Economic Review: Insights*; *American Journal of Political Science*; *Econometrica*; *Economic Development and Cultural Change*; *Economic Journal*; *Journal of Agricultural Economics*; *Journal of Applied Econometrics*; *Journal of the American Statistical Association*; *Journal of Development Economics*; *Journal of Econometrics*; *Journal of Economic Theory*; *Journal of the European Economic Association*; *Journal of Finance*; *Journal of Health Economics*; *Journal of Human Capital*; *Journal of Labor Economics*; *Journal of Political Economy*; *Journal of Public Economics*; *Nature*; *PLoS One*; *PNAS*; *Quantitative Economics*; *Quarterly Journal of Economics*; *Review of Economics and Statistics*; *Review of Economic Studies*; *Science*; *World Bank Economic Review*

Reviewer for the National Science Foundation; Program Committee Member for EC (2013, 2014); Organizer for the Annual Conference on Network Science and Economics (2018-); Organizer for SITE (2013-19, 2025-)

INVITED
PRESENTATIONS

- 2025 Carnegie Mellon, Dept. of Statistics and Data Science; University of Wisconsin-Madison, Economics (Econometrics)
- 2024 MIT & Harvard, Economics (Econometrics); London School of Economics (Microeconomics); Workshop on Causal Inference and Prediction for Network Data (BIRS)
- 2023 UC Riverside, Economics (Applied Micro)
- 2022 Michigan State University, Economics (Applied Economics); Northwestern, Economics (Development); Stanford, Economics (Development); Queen Mary (Econometrics); Cornell, Dyson (Applied Economics and Policy); MIT, Economics (Applied Micro)
- 2021 ASSA (Information in Social Networks); Research on Algorithms and Incentives in Networks (RAIN, Stanford); Queen's University (Microeconomics); Columbia, Economics (Development); Cornell, Economics (Econometrics); UC Santa Cruz, Economics (Microeconomics); University of Chicago, Economics (Development)
- 2020 ASSA (Advances in Network Economics); Northwestern (Institute for Data, Econometrics, Algorithms, and Learning); Georgia State (CEAR); The Gary Chamberlain Seminar in Econometrics; Rice, Economics (Applied Micro & Econometrics); UC Berkeley (Center for Effective Global Action); Virginia Tech, Economics (Theory); University of Chicago, Booth (Applied Micro)
- 2019 Northwestern (Global Poverty Research Lab); UC Berkeley, Haas (Oliver Williamson Seminar)
- 2018 London School of Economics (Microeconomics); Yale, Economics (Development)
- 2017 AEA; UC Berkeley, Economics (Development); MIT/Harvard Economics (Development); University of Chicago, Economics (Applied Micro); Glasgow; Barcelona GSE (Information Frictions); Princeton, Economics (Behavioral); UC Davis, Economics (Development)
- 2016 Bocconi (Theory & Experiments); University of Pennsylvania, Economics (Empirical Microeconomics); Calvó-Armengol Prize Workshop; Caltech (WISE 2016); PUC-Chile
- 2015 AEA; ESA; Cambridge, Economics (Microeconomics); Harvard/MIT, Economics (Econometrics); USC, Economics (Development); Information Transmission in Networks (Harvard); SED; Barcelona GSE (Information Frictions and Learning); Advances in Empirical Macroeconomics and Development; Johns Hopkins, Carey; NBER-NSF Time Series Conference (Vienna University of Economics and Business); Brown, Economics (Applied Micro); UNC Chapel Hill, Economics (Econometrics)
- 2014 Indian School of Business; Duke, Economics (Labor and Development); Princeton, Economics (Econometrics); SMU, Economics; Princeton (Politics, CSDP); MIT (Political Science); Berkeley, Economics (Development); UCSD, Economics; BREAD (Junior Pre-Conference); CEPR; European Meeting of Network Economics (University of Essex); Duke, Economics (Microeconomics Jamboree); CEME
- 2013 Yale, Economics (Development); London School of Economics/University College London (Development); University of British Columbia, Economics; University of Wisconsin-Madison, Applied Economics; Central European University; CHOICE Symposium Workshop; NBER Summer Institute (Development); Simons Workshop (Berkeley)

- 2012 Harvard Kennedy School; Columbia (Economics and SIPA); NYU, Economics; Stanford, Economics; University of Chicago, Booth; Harvard, Economics; UC Berkeley, Economics; University of Chicago, Economics; Northwestern, Economics; Microsoft Research, New England; NSF Conference on Networks and Development (LSU); Workshop on Networks and Applied Micro (Brown); SINS (Synergic Investigations in Network Science, BiCi); CIRANO Workshop on Networks in Trade and Finance; ESRC-INET Conference on Networks (Cambridge)
- 2011 Symposium on Economic Experiments in Developing Countries (Berkeley); North East Universities Development Consortium (NEUDC, Yale)
- 2010 NEUDC (MIT); CFSP; Calvó-Armengol Prize Workshop

COURSES TAUGHT Graduate Development Economics I (Econ 214): (2013)
 Graduate Development Economics II (Econ 215): (2020)
 Graduate Development Economics III (Econ 216): (2015-2018, 2020-)
 Graduate Social and Economic Networks (Econ 291): (2016, 2021, 2023-)
 Graduate 3rd Year Seminar (Econ 300): (2024-)
 Undergraduate Development Economics (Econ 125): Economic Development, Microfinance and Social Networks (2013, 2015-2018, 2020-)
 Undergraduate Econometrics (Econ 102B): Applied Econometrics (2021)

PH.D. STUDENTS For completed PhDs, initial placement noted.

- Development
 - In progress: Daliah Al-Shakshir, Renan Chaves, Eva Lestant, Kyra Frye, Florencia Hnilo, João Pugliese, Anirudh Sankar, Nicolás Suárez, Sahana Subramanyam
 - Mark Walsh, 2024 (GiveWell)
 - Andrés Rodríguez, 2024 (Stanford Impact Labs)
 - Travis Baseler, 2019 (University of Rochester)
 - Santiago Saavedra, 2017 (Universidad de Rosario)
 - Mounu Prem, 2016 (Universidad de Rosario)
- Statistics and Econometrics
 - In progress: Samuel Higbee, Dept. of Economics, University of Chicago
 - Shane Lubold, Dept. of Statistics, University of Washington, 2023 (U.S. Census Bureau; Amazon)
 - Michael Leung, 2015 (post-doc MIT Institute for Data, Systems, and Society; USC Economics)
- Behavioral
 - In progress: Lily Liu
 - Alexandr Lenk, 2024 (Instacart)
- History
 - Santiago Pérez, 2017 (UC Davis)
- Industrial Organization
 - In progress: Harsh Gupta
- Theory
 - In progress: Ben Davies
 - Yiqing Xing, 2016 (Johns Hopkins, Carey Business School)