SUSAN CARLETON ATHEY

Stanford University
Graduate School of Business
655 Knight Way
Stanford, CA 94305
athey@stanford.edu

PERSONAL

Born November, 1970.
U.S. Citizen.

EDUCATION

Duke University
Bachelor of Arts, 1991.
Majors in economics, mathematics, and computer science.
Magna Cum Laude. Phi Beta Kappa.

Stanford Graduate School of Business
Ph.D., 1995
Dissertation: "Comparative Statics in Stochastic Problems with Applications."
Advisors: Paul Milgrom and John Roberts (co-chairs), Edward Lazear.

CURRENT POSITIONS

Stanford University Graduate School of Business
2014-present The Economics of Technology Professor
2013-2014 Professor of Economics
National Bureau of Economic Research
2001-present Research Associate. Co-organizer of Productivity and Information Technology/Digitization; Founding co-director of Market Design Working Group, 2008-2014.

PAST POSITIONS

Harvard University
2006-2012 Professor of Economics
Center for Advanced Study in the Behavioral Sciences
2004-2005 Fellow
Department of Economics, Stanford University
2001-2004 Associate Professor of Economics
2004-2006 Holbrook Working Professor of Economics and Professor (by courtesy) in the Graduate School of Business
Department of Economics, Massachusetts Institute of Technology
1999-2001 Castle Krob Career Development Associate Professor of Economics
1997-1999 Castle Krob Career Development Assistant Professor of Economics
1995-1997 Assistant Professor of Economics
Cowles Foundation for Economic Research, Yale University
1997-1998 Visiting Assistant Professor of Economics

Hoover Institution, Stanford University
2000-2001 National Fellow
National Bureau of Economic Research
1997-2001 Faculty Research Fellow

OTHER POSITIONS

2020-present	Member, Institute for Computational and Mathematical Engineering, Stanford
2018-present	Founding Director, Golub Capital Social Impact Lab, Stanford
2018-present	Associate Director, Stanford Human Centered Artificial Intelligence Institute
Ongoing	Boards of Directors: Lending Club (2018-present), Expedia (2015-present), Ripple (2014-present), Rover (2016-present), Turo (2019-present), Innovations for Poverty Action (2019-present), Proof School (2020-present), Research Improving People's Lives (2021-present)
2008-2018	Visiting/Consulting Researcher, Microsoft Research, New England
2007-2016	Consultant to Microsoft Corporation.
April,1999; October, 2000; February, 2001	Consultant, Research Department, Minneapolis Federal Reserve Bank
May, 1998	Visiting Professor, I.D.E.I. Toulouse.

CURRENT PROFESSIONAL ACTIVITIES

- Co-organizer of Productivity and Information Technology/Digitization, National Bureau of Economics Research, 2009-present.
- Member, California Governor's Council of Economic Advisors, 2020-present.

PAST PROFESSIONAL ACTIVITIES

- Member, Federal Economics and Statistics Advisory Committee, 2016-2018.
- Vice President, American Economics Association, 2017-2018.
- Advisory Board, Toulouse School of Economics, 2010-15.
- Member, National Academies Board on Science, Technology and Economic Policy Innovation Policy Form, 2013-2015.
- Member, President's Committee for the National Medal of Science (Presidential Appointment, two consecutive terms), 2011-2016.
- Member, National Academies Committee on Science, Engineering, and Public Policy, 2013-2016.
- Member, Nominating Committee for American Academy of Arts and Sciences, 2011-2012.
- Honors and Awards Committee, American Economics Association, 2013-2016.
- Membership Committee, National Academy of Science, 2013-2016.
  - NBER, Founding co-director of Market Design Working Group, 2008-2014.
  - Cambridge Economics Economics and Computational Day, co-founder, 2011.
  - Council, Game Theory Society, 2009-2012. (elected position).

- Associate Editor, *Theoretical Economics*, 2005-2011.
- Council, Econometric Society, 2007-2010. (elected position)
- Executive Committee, American Economic Association, 2008-2010. (elected position)
- Advisory Committee on Editorial Appointments, American Economics Association, 2011.
- Co-Editor, *American Economic Journals: Microeconomics,* 2007-2008.
- Associate Editor, *Econometrica*, 2006-2007.
- Associate Editor, *Quarterly Journal of Economics*, 2001-2007.
- Editorial Board, *Not a Journal Economics,* 2001-2008.
- Fellows Nominating Committee, Econometric Society, 2006.
- Elaine Bennett Research Prize Committee (AEA/CSWEP), 2002, 2004, 2006 (Chair).
- Chair, Program Committee, Winter Meetings of the Econometric Society, 2006.
- National Science Foundation Economics Panel, 2004-2006.
- Co-director, Market Design Program, Stanford Institute for Economic Policy Research, 2004-2006.
    - Mentor, CeMent Mentoring Workshop, AEA/CSWEP, 2006.
- Young Faculty Nominating Committee, Center for Advanced Study in the Behavioral Sciences.
- Associate Editor, *American Economic Review*, 2002-2005.
- Associate Editor, *RAND Journal of Economics*, 2002-2004.
- Foreign Editor, *Review of Economic Studies,* 2001-2004.
- American Economic Association Nominating Committee, 2003.
- Stanford University Fellow, 2002-2004.
- Co-editor, *Journal of Economics and Management Strategy*, 1997-2001.
- Program Committee, Summer Meetings of the Econometric Society, 1997 and 1998; 8th World Congress of the Econometric Society, 2000; Winter Meetings of the Econometric Society, 2001 and 2005.

HONORS

- Adam Smith Award, National Association of Business Economists, 2020
- CME Group-Mathematical Sciences Research Institute Prize in Innovative Quantitative Applications, 2020
- Von Neumann Prize, Rajk László College for Advanced Studies, 2019
- Fellow, International Association of Applied Econometrics, elected 2019
- Fellow, Game Theory Society, elected 2017.
- Jean-Jacques Laffont Prize, 2016
- Corresponding Fellow, British Academy, elected 2016.
- Knight Fellows Favorite Professor Award, Stanford University, 2014.
- 2013 Best Paper Award, *American Economic Journal: Microeconomics*.
- Fellow, Society for the Advancement of Economic Theory, 2013.
- Member, National Academy of Science, elected 2012.
- Honorary doctorate, Duke University, 2009.
- Fellow, American Academy of Arts and Sciences, elected 2008.
- John Bates Clark Medal, 2007.

- Fellow, Econometric Society, elected 2004.
- Guggenhime Faculty Scholar, Stanford University, 2004-2006.
- Elaine Bennett Research Award, 2001.
- Sloan Foundation Research Fellow, 2000.
- Undergraduate Economics Association Teaching Award, 1995-1996.
- Review of Economic Studies Tour, 1995.
- Stanford University Lieberman Fellow, 1994-1995.
- State Farm Dissertation Award in Business, 1994.
- National Science Foundation Graduate Fellowship, 1991-1994.
- Jaedicke Scholar, Stanford Graduate School of Business, 1992-1993.
- Mary Love Collins Scholarship, Chi Omega Foundation, 1991-1992.
- Duke University Alice Baldwin Memorial Scholarship, 1990-1991.

DISTINGUISHED LECTURES

- Rosenthal Memorial Lecture, Boston University, 2020
- Invited speaker, American Association of Artificial Intelligence, 2020
- Ely Lecture, Johns Hopkins University, 2020
- T.W. Schultz Memorial Lecture, Agricultural and Applied Economics Association, 2020
- Invited keynote, INFORMS, 2019
- Jean Monnet Lecture, European Central Bank, 2019
- The Korean American Economics Association-Maekyung Forum Lecture, 2019
- Steine Lecture, Vanderbilt University, 2018
- BMO Lecture, Simon Fraser University, 2018
- Marshall Lecture, European Economics Association, 2018
- Keynote, North American Summer Meetings of the Econometric Society, 2018
- Nancy Schwarz Lecture, Kellogg, Northwestern University, 2018
- William Comanor '59 Lectureship in Economics, Haverford College, 2018
- Munich Lectures, 2017
- Distinguished Visiting Lecturer, Boston University, 2016
- Keynote, MIT Conference on Digital Experimentation, 2014, 2015, 2016, 2017, 2018, 2019
- Keynote, EARIE, 2016
- Keynote, European Conference on Machine Learning/European Knowledge, Discovery, and Data Mining Conference (ECML/EKDD), 2016
- Keynote, International Conference on Machine Learning (ICML), 2016
- Distinguished Lecturer, Department of Economics, Columbia, 2016
- Distinguished Lecture Series, Carnegie Mellon, 2016
- Manchot Lecture, Bonn, 2016
- WZB Distinguished Lecture in Social Sciences, 2016
- Keynote, Knowledge Discovery and Data Mining (KDD), Sydney, 2015
- Henry George Lecture, University of Scranton, 2015
- Milliman Lecture, University of Washington, 2015
- George Staller Lecture, Cornell, 2015
- Fathauer Lecture, University of Arizona, 2015

- The GSB Salon, Stanford-Beijing Lecture, 2015
- Woytinksy Lecture, University of Michigan, 2014.
- Leigh Lecture, Washington State University, 2014.
- Central Planning Bureau Lecture, Netherlands, 2014.
- Keynote, DIMACS Workshop on Economic Aspects of Information Sharing, 2013.
- Association Lecture, Southern Economics Association, 2013.
- Keynote, Searle Antitrust Conference, 2012.
- Sir Richard Stone Annual Lecture, Cambridge University, 2012.
- Dunaway Lecture, Michigan State University, 2012.
- Keynote, 2011 MIT Center for Digital Business Annual Conference
- Keynote address, 2011 Southern California Symposium on Network Economics and Game Theory.
- Keynote address, International Joint Conferences on Artificial Intelligence, Barcelona, July 2011.
- Fisher Schultz Lecture, Econometric Society, 2011.
- Plenary Lecture for Society of Economic Dynamics, 2010.
- Plenary Lecture for joint meeting of Electronic Commerce and Theoretical Aspects of Rationality and Knowledge, 2009.
- Society of Economic Design Plenary Lecture, 2008.
- Frank Hahn Lecture, Royal Economic Society Conference, 2008.
- John F. Nash, Jr., Lecture, Carroll Round, Georgetown, 2008.
- Schultz Lecture, University of Chicago, 2007.
- Toulouse Lectures in Economics, 2007.
- Invited Speaker, 9th World Congress of the Econometric Society.
- Johnson Distinguished Lecturer in Economics, Duke University, 2004.

GRANTS AND RESEARCH AWARDS

- Human-Centered Artificial Intelligence seed grant, “Artificial Intelligence for Scientific Discovery,” 2019.
- Sloan Foundation Research Grant, 2017.
- “The Impact of Digitization on Labor Markets, Product Quality, and Information,” Cyber Initiative Grant, Stanford University, 2017.
- “Causal Inference,” DARPA/ONR Grant N00014-17-1-2131, 2016.
- “How Intermediaries Affect User Choice in News and Commerce,” Cyber Initiative Grant, Stanford University, 2016.
- “Private Information and Dynamic Games,” NSF Grant No. SES-0351500.
- “Private Information in Auctions, Pricing Games, and Ongoing Relationships,” NSF CAREER Award No. SES-9983820.
- “Bidding Behavior in U.S. Forest Service Timber Auctions,” MIT Provost's Fund for Humanities, Arts, and Social Sciences Research Award, 1997.
- “Empirical Tests for Complementarities: A Structural Approach,” MIT Sloan School of Management, Creative Research Award, 1996 (with Scott Stern).
- “Comparative Statics: Theory and an Empirical Framework for Testing Predictions,” NSF Grant No. SBR-9631760.

- "Product and Process Innovation," William Miller Fund, Stanford GSB.

ARTICLES

1. "Market Design to Accelerate COVID-19 Vaccine Supply" (with Amrita Ahuja, Arthur Baker, Eric Budish, Juan Camilo Castillo, Rachel Glennerster, Scott Duke Kominers, Michael Kremer, Greg Larson, Jean Lee, Canice Prendergast, Christopher M. Snyder, Alex Tabarrok, Brandon Joel Tan, Witold Wiecek), 2021, *Science*.
2. "Tractable contextual bandits beyond realizability," (with Sanath Kumar Krishnamurthy and Vitor Hadad), preprint arXiv:2002.09814 (2021), *Forthcoming in AIStats* (The 24th International Conference on Artificial Intelligence and Statistics).
3. "Matrix Completion Methods for Causal Panel Data Models," (with Mohsen Bayati, Guido Imbens, Nikolay Doudchenko, Guido Imbens, Khashayar Khosravi), 2017. https://arxiv.org/abs/1710.10251 *forthcoming, Journal of the American Statistical Association.*
4. "Confidence Intervals for Policy Evaluation in Adaptive Experiments," (with Vitor Hadad, David A. Hirshberg, Ruohan Zhan, Stefan Wager), 2019, http://arXiv.org/abs/1911.02768. *Forthcoming, Proceedings of the National Academy of Sciences.*
5. "Preparing for a Pandemic: Accelerating Vaccine Availability" (with Amrita Ahuja, Susan Athey, Arthur Baker, Eric Budish, Juan Camilo Castillo, Rachel Glennerster, Scott Duke Kominers, Michael Kremer, Jean Lee, Canice Prendergast, Christopher M. Snyder, Alex Tabarrok, Brandon Joel Tan, Witold Wiecek), forthcoming, *American Economic Review Papers and Proceedings*, 2021.
6. "Falling living standards during the COVID-19 crisis: Quantitative evidence from nine developing countries." with Egger, Dennis, Edward Miguel, Shana S. Warren, Ashish Shenoy, Elliott Collins, Dean Karlan, Doug Parkerson et al. *Science Advances* 7, no. 6 (2021): eabe0997.
7. "Association of α1-Blocker Receipt With 30-Day Mortality and Risk of Intensive Care Unit Admission Among Adults Hospitalized With Influenza or Pneumonia in Denmark." *JAMA Netw Open.* 2021;4(2):e2037053. with Thomsen RW, Christiansen CF, Heide-Jørgensen U, et al.
8. "Counterfactual Inference for Consumer Choice Across Many Product Categories" (with Robert Donnelly, Francisco R. Ruiz, and David Blei), 2019. https://arxiv.org/abs/1906.02635 Forthcoming, *Quantitative Marketing and Economics*.
9. "Policy Learning with Observational Data," with Stefan Wager, *Econometrica*, 89 (1): 133-161, 2021. https://arxiv.org/abs/1702.02896 (formerly titled "Efficient Policy Learning").
10. "Peaches, Lemons, and Cookies: Designing Auction Markets with Dispersed Information." With Ittai Abraham, Moshe Babaioff, Michael Grubb. Forthcoming, *Games and Economic Behavior.*
11. "Using Wasserstein Generative Adversarial Networks for the Design of Monte Carlo Simulations" (with Guido Imbens, Jonas Metzger, Evan Munro), forthcoming, *Journal of Econometrics.* http://arXiv.org/abs/1909.02210.

12. "Local Linear Forests," (with Rina Friedberg, Julie Tibshirani, and Stefan Wager). Forthcoming, *Journal of Computational and Graphical Statistics*. arXiv preprint https://arXiv.org/abs/1807.11408
13. "policytree: Policy learning via doubly robust empirical welfare maximization over trees" (with Erik Sverdrup, Ayush Kanodia, Zhengyuan Zhou, Susan Athey, and Stefan Wager), *Journal of Open Source Software*, 5(50), 2020.
14. "Design-based Analysis in Difference-In-Differences Settings with Staggered Adoption," (with Guido Imbens), https://arxiv.org/abs/1808.05293 2018. Forthcoming, *Journal of Econometrics.*
15. "Preventing cytokine storm syndrome in COVID-19 using α-1 adrenergic receptor antagonists," with Konig, M. F., Powell, M. A., Staedtke, V., Bai, R. Y., Thomas, D. L., Fischer, N. M., ... & Mensh, B. *The Journal of Clinical Investigation.* https://www.jci.org/articles/view/139642
16. "Sampling-based vs. Design-based Uncertainty in Regression Analysis" (with Alberto Abadie, Guido Imbens, and Jeffrey Wooldridge), *Econometrica*, 88(1), 2020, 265-296. https://arxiv.org/abs/1706.01778
17. "The Allocation of Decision Authority to Human and Artificial Intelligence," (with Kevin A. Bryan and Joshua S. Gans), forthcoming, *AEA Papers and Proceedings,* 2020.
18. "Stable Prediction with Model Misspecification and Agnostic Distribution Shift" (with Kun Kuang, Ruoxuan Xiong, Peng Cui, and Bo Li), *Association for the Advancement of Artificial Intelligence (AAAI),* 2020.
19. "Estimating Treatment Effects with Causal Forests: An Application" (with Stefan Wager), 2019. *Observational Studies*. https://arxiv.org/abs/1902.07409
20. "Ensemble Methods for Causal Effects in Panel Data Settings" (with Mohsen Bayati, Guido Imbens, and Zhaonan Qu), *American Economic Review Papers and Proceedings*, May, 2019. https://arxiv.org/abs/1903.10079
21. "SHOPPER: A Probabilistic Model of Consumer Choice with Substitutes and Complements," (with Francisco Ruiz and David Blei), *Annals of Applied Statistics,* forthcoming. Selected for inclusion as one of the best papers accepted in 2019 for "Annals of Applied Statistics Lecture" at *Joint Statistical Meetings*, 2020. https://arxiv.org/abs/1711.03560
22. "Balanced Linear Contextual Bandits," with Maria Dimakopoulou, Zhengyuan Zhou, and Guido Imbens, *Association for the Advancement of Artificial Intelligence (AAAI),* 2019.
23. "Generalized Random Forests," *Annals of Statistics*, with Julie Tibshirani and Stefan Wager, 47 (2), 1148-1178, 2019. http://arxiv.org/abs/1610.01271
24. "Estimation and Inference of Heterogeneous Treatment Effects using Random Forests" (with Stefan Wager), http://arxiv.org/abs/1510.04342 *Journal of the American Statistical Association*, 113 (523), 1228-1242, 2018.
25. "Learning in Games with Lossy Feedback," (with Zhengyuan Zhou, Panayotis Mertikopoulos, Nicholas Bambos, Peter Glynn and Yinyu Ye), *Neural Information Processing Systems (NeurIPS)*, 2018.
26. "Stable Prediction across Unknown Environments," (with Kun Kuang, Ruoxuan Xiong, Peng Cui, and Bo Li), *Knowledge Discovery and Data Mining (KDD)*, 2018.
27. "Estimating Heterogeneous Consumer Preferences for Restaurants and Travel Time Using Mobile Location Data," (with David Blei, Robert Donnelly, Francisco Ruiz, and Tobias Schmidt), *American Economic Review Papers and Proceedings*, May, 2018. https://arxiv.org/abs/1801.07826

28. "Efficient Inference of Average Treatment Effects in High Dimensions via Approximate Residual Balancing" (with Guido Imbens and Stefan Wager), *Journal of the Royal Statistical Society-Series B*, 80(4), 2018, 597-623. http://arxiv.org/abs/1604.07125
29. "Exact P-values for Network Interference" (with Dean Eckles and Guido Imbens). *Journal of the American Statistical Association*, 113.521 (2018): 230-240.
30. "Context Selection for Embedding Models," (with Liping Liu, Francisco Ruiz, and David Blei), *Neural Information Processing Systems (NeurIPS),* 4819-4827, 2017. http://papers.nips.cc/paper/7067-context-selection-for-embedding-models.pdf
31. "Structured Embedding Models for Grouped Data," with Maja Rudolph, Francisco Ruiz, and David Blei, *Neural Information Processing Systems (NeurIPS),* 250-260, 2017. https://arxiv.org/abs/1709.10367
32. "Beyond Prediction: Using Big Data for Policy Problems," *Science*, February 3, 2017.
33. "Estimating Average Treatment Effects: Supplementary Analyses and Remaining Challenges," (with Guido Imbens, Thai Pham, and Stefan Wager), *American Economic Review Papers and Proceedings*, May 2017.
34. "The Impact of Consumer Multi-homing on Advertising Markets and Media Competition" (with Emilio Calvano and Joshua Gans). *Management Science*, 64(4), 2017, 1574-1590.
35. "Recursive Partitioning for Heterogeneous Causal Effects" (with Guido Imbens), *Proceedings of the National Academy of Science* 2016 113 (27) 7353-7360.
36. "A Measure of Robustness to Misspecification" (with Guido Imbens), *American Economic Review Papers and Proceedings*, May 2015, 105 (5), 476-480.
37. "Dynamics of Open Source Movements," (with Glenn Ellison), *Journal of Economics and Management Strategy,* 2014, 23 (2), 294-316.
38. "An Efficient Dynamic Mechanism," (with Ilya Segal), *Econometrica*, 2013, 81 (6), 2463-2485.
39. "Subsidies and Set-Asides in Auctions," (with Jonathan Levin and Dominic Coey). *American Economic Journal: Microeconomics*, 2013, 5 (1), 1-27. Winner: 2013 Best Paper Award, *American Economic Journal: Microeconomics*.
40. "Position Auctions with Consumer Search," (with Glenn Ellison). *Quarterly Journal of Economics,* 2011, 126(3), 1213-1270.
41. "Comparing Open and Sealed Bid Auctions: Theory and Evidence from Timber Auctions," (with Jonathan Levin and Enrique Seira). *Quarterly Journal of Economics,* 2011, 126(1), 207-257.
42. "The Impact of Targeting Technology on Advertising Markets and Media Competition," with Joshua Gans, *American Economic Review Papers and Proceedings,* May 2010.
43. "Skewed Bidding in Pay Per Action Models of Online Advertising," with Nikhil Agarwal and David Yang. *American Economic Review Papers and Proceedings*, May 2009.
44. "Collusion with Persistent Cost Shocks," (with Kyle Bagwell). *Econometrica*, May 2008, 76 (3), 493-540.
45. "Designing Efficient Mechanisms for Dynamic Bilateral Trading Games," (with Ilya Segal), *American Economic Review Papers and Proceedings*, May 2008.
46. "Efficiency in Repeated Trade with Hidden Valuations," (with David Miller). *Theoretical Economics*, 2007, 2 (3), 299-354.
47. "Discrete Choice Models with Multiple Unobserved Choice Characteristics," (with Guido Imbens). *International Economic Review*, 2007, 48 (4), 1159-1192.

48. "What Does Performance in Graduate School Predict? Graduate Economics Education and Student Outcomes" (with Larry Katz, Alan Krueger, James Poterba, and Steve Levitt), *American Economic Review*, May 2007.
49. "Identification and Inference in Nonlinear Difference-In-Difference Models," (with Guido Imbens). *Econometrica* 74 (2), March, 2006, 431-498.
50. "The Optimal Degree of Monetary Policy Discretion," (with Andrew Atkeson and Patrick Kehoe), *Econometrica* 73 (5), September, 2005, 1431-1476.
51. "Collusion and Price Rigidity," (with Kyle Bagwell and Chris Sanchirico). *Review of Economic Studies* 71 (2), April 2004, 317-349.
52. "Identification in Standard Auction Models," (with Philip Haile), *Econometrica*, 70 (6), *November* 2002, pp. 2107-2140.
53. "The Impact of Information Technology on Emergency Health Care Outcomes," (with Scott Stern), *RAND Journal of Economics*, 33 (3), Autumn 2002, pp. 399-432.
54. "Monotone Comparative Statics Under Uncertainty," *Quarterly Journal of Economics*, February 2002, CXVII (1): 187-223.
55. "Optimal Collusion with Private Information," (with Kyle Bagwell), *RAND Journal of Economics*, Autumn 2001, 32 (3): 428-465.
56. "Single Crossing Properties and the Existence of Pure Strategy Equilibria in Games of Incomplete Information," *Econometrica* 69 (4), July, 2001: 861-890.
57. "Organizational Design: Decision Rights and Incentive Contracts," (with John Roberts), *American Economic Review*, May 2001.
58. "Information and Competition in U.S. Forest Service Timber Auctions," (with Jonathan Levin), *Journal of Political Economy*, 109 (2), April 2001. Reprinted in: Empirical Industrial Organization, Paul Joskow and Michael Waterson, ed., Critical Ideas in Economics, Edward Elgar, forthcoming 2004.
59. "Investment and Market Dominance," (with Armin Schmutzler), *RAND Journal of Economics* 32 (1), Spring 2001: 1-26.
60. "Mentoring and Diversity," (with Chris Avery and Peter Zemsky), *American Economic Review* 90 (4) September 2000: 765-786.
61. "Information Technology and Training in Emergency Call Centers." (with Scott Stern). *Proceedings of the Fifty-First Annual Meetings* (New York, Jan 3-5, 1999). Madison, WI: Industrial Relations Research Association, pp. 53-60.
62. "Product and Process Flexibility in an Innovative Environment," (with Armin Schmutzler), *RAND Journal of Economics*, 26 (4) Winter1995: 557-574.

BOOKS/SURVEYS/COMMENTS/CONFERENCE VOLUMES

1. "Generic Drug Repurposing for COVID-19 and Beyond," (with Rena Conti, Richard Frank, and Jonathan Gruber), policy paper, Boston University. http://www.bu.edu/ihsip/2020/07/17/generic-drug-repurposing-for-covid-19-and-beyond/
2. "Computational social science: Obstacles and opportunities." Lazer, David MJ, Alex Pentland, Duncan J. Watts, Sinan Aral, Susan Athey, Noshir Contractor, Deen Freelon et al. *Science* 369, no. 6507 (2020): 1060-1062.

3. "Comment on: "Blessing of Multiple Causes" by Yixin Wang and David M. Blei," with Guido Imbens and Michael Pollman, forthcoming, *Journal of the American Statistical Association.*
4. "Machine Learning Methods Economists Should Know About," with Guido Imbens, *Annual Reviews*, August, 2019 https://arxiv.org/abs/1903.10075
5. "Economists (and Economics) in Tech Firms," with Michael Luca, *Journal of Economic Perspectives*, 2018. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3247794
6. "The Impact of Machine Learning on Economics," *The Economics of Artificial Intelligence*, NBER volume.
7. "Yuliy Sannikov: Winner of the 2016 John Bates Clark Medal," with Andrzej Skrzypacz, *Journal of Economic Perspectives*, 2017.
8. "The State of Applied Econometrics - Causality and Policy Evaluation," with Guido Imbens, *Journal of Economic Perspectives,* 2017. http://arxiv.org/abs/1607.00699
9. "The Econometrics of Randomized Experiments," with Guido Imbens, *Handbook of Development Economics.* http://arxiv.org/abs/1607.00698
10. "Machine Learning and Causal Inference for Policy Evaluation," KDD '15 Proceedings of the 21th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, Pages 5-6.
11. "The Nature and Incidence of Software Piracy: Evidence from Windows" (with Scott Stern), *The Economics of Digitization*, University of Chicago Press.
12. "Empirical Models of Auctions," in *Advances in Economics and Econometrics: Theory and Applications, Ninth World Congress, Volume II*. Richard Blundell, Whitney K. Newey, Torsten Persson, eds., Cambridge University Press, 2007.
13. "Nonparametric Approaches to Auctions," *Handbook of Econometrics*, Volume 6.
14. *Robust Comparative Statics* (with Paul Milgrom and John Roberts), research monograph (draft form).
15. "Adoption and Impact of Advanced Technologies in Emergency Response Systems," (with Scott Stern), in *The Changing Hospital Industry: Comparing Not-for-Profit and For-Profit Institutions*, David Cutler, ed. University of Chicago Press, 2000, pp. 113-155.

WORKING PAPERS/UNDER REVIEW

1. "Uncovering interpretable potential confounders in electronic medical records." With Zeng, Jiaming, Michael F. Gensheimer, Daniel L. Rubin, and Ross D. Shachter. medRxiv (2021).
2. "A how-to guide for conducting retrospective analyses: example COVID-19 study." Powell, Michael, Allison Koenecke, James Brian Byrd, Akihiko Nishimura, Maximilian F. Konig, Ruoxuan Xiong, Sadiqa Mahmood et al. OSF.io preprint. (2020).
3. "Combining experimental and observational data to estimate treatment effects on long term outcomes." with Raj Chetty, and Guido Imbens. arXiv preprint arXiv:2006.09676 (2020).
4. "A retrospective clinical study supporting the rationale for trials of Alpha-1 Adrenoreceptor Antagonists to prevent cytokine storm and severe COVID-19," (with Vogelstein, J. T., Powell, M., Koenecke, A., Xiong, R., Konig, M. F., Fischer, N., ... & Vogelstein, B.), 2020, arXiv preprint arXiv:2004.10117.

5. "Service Quality in the Gig Economy: Empirical Evidence about Driving Quality at Uber" (with Juan Camilo Castillo and Bharat Chandar), 2019, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3499781
6. "Optimal Experimental Design for Staggered Rollouts" (with Ruoxuan Xiong, Mohsen Bayati, Guido Imbens), 2019, arXiv:1911.03764
7. "Sufficient Representations for Categorical Variables (with Jonathan Johannemann, Vitor Hadad, Stefan Wager), 2019. https://arxiv.org/abs/1908.09874
8. "Synthetic Difference in Differences" (with David A. Hirshberg, Guido W. Imbens, and Stefan Wager), 2019. https://arxiv.org/abs/1812.09970
9. "Experienced Segregation," (with Billy Ferguson, Matthew Gentzkow, and Tobias Schmidt), 2019. http://web.stanford.edu/~gentzkow/research/experienced-segregation.pdf.
10. "Offline Multi-Action Policy Learning: Generalization and Optimization," (with Zhengyuan Zhou and Stefan Wager), https://arxiv.org/abs/1810.04778. Selected as finalist for George Nicholson student paper competition at Informs, 2018.
11. "Estimation Considerations in Contextual Bandits," with Maria Dimakopoulou, Zhengyuan Zhou, and Guido Imbens, 2017. https://arxiv.org/abs/1711.07077
12. "When Should You Adjust Standard Errors for Clustering?" with Alberto Abadie, Guido Imbens, and Jeffrey Wooldridge, 2017. https://arxiv.org/abs/1710.02926
13. "The Digital Privacy Paradox: Small Money, Small Costs, Small Talk," with Christian Catalini and Catherine Tucker, Working Paper, MIT, 2017.
14. "Model Criticism for Bayesian Causal Inference," with David Blei, Francisco Ruiz, and Dustin Tran, 2016. http://arxiv.org/abs/1610.09037
15. "The Impact of Aggregators on Internet News Consumption," with Markus Mobius and Jeno Pal, 2016.
16. "Bitcoin Pricing, Adoption, and Usage: Theory and Evidence," with Ivo Parashkevov, Vishnu Sarukkai, Jing Xia. Stanford GSB Working Paper, 2016.
17. "Estimating Treatment Effects using Multiple Surrogates: The Role of the Surrogate Score and the Surrogate Index" (with Raj Chetty, Guido Imbens and Hyunseung Kang), 2016 http://arxiv.org/abs/1603.09326
18. "A Structural Model of Sponsored Search Advertising Markets" (with Denis Nekipelov). Working paper, 2012. Under review.
19. "The Impact of News Aggregators on Internet News Consumption: The Case of Localization" (with Markus Mobius). Working paper, 2012.
20. "Exchange Rate Fluctuations, Consumer Demand, and Advertising: the Case of Internet Search" (with Maya Cohen Meidan). Working paper, 2011.
21. "A Theory of Group Formation and Social Hierarchy," (with Saumitra Jha and Emilio Calvano). Working Paper, 2010.
22. "Characterizing Properties of Stochastic Objective Functions," MIT Working Paper 96-1R. *Revise & Resubmit, B.E. Journals in Theoretical Economics.*
23. "Investment and Information Value for a Risk-Averse Firm," MIT Working Paper No. 00-30. *Revise & Resubmit, B.E. Journals in Theoretical Economics.*
24. "The Value of Information in Monotone Decision Problems," (with Jonathan Levin), MIT Working Paper No. 98-24, November 1998.
25. "An Empirical Framework for Testing Theories about Complementarities in Organizational Design," (with Scott Stern). NBER Working Paper 6600, February 1998. *Revise & Resubmit, Management Science.*

26. “The Allocation of Decisions in Organizations,” (with Joshua Gans and Scott Stern), Mimeo, MIT, 1996.

TEACHING

- MBA: Data Driven Impact, Technology for Social Impact, Marketplaces, Economics of Internet Search, Platform Competition in Digital Markets, Financial Technology, Advertising and Monetization, Cryptocurrency
- Graduate: Machine Learning and Causal Inference, Economics of Information Technology, Market Design, Advanced Topics in Game Theory, Industrial Organization, Contract Theory, Microeconomic Theory.
- Undergraduate: Market Design, Industrial Organization, Intermediate Applied Microeconomics.

NON-ACADEMIC HONORS

- Microsoft Research Distinguished Collaborator Award, 2016
- World Innovation Summit on Entrepreneurship and Innovation’s World’s Most Innovative People Award, 2012.
- World Economic Forum Young Global Leader, selected 2008.
- Fast Company's 100 Most Creative People in Business
- Diversity MBA's Top 100 under 50 Diverse Executives
- Kilby Award Foundation's Young Innovator Award, 1998.