Current: December 2022

Gautam Gowrisankaran

PERSONAL:

Department of Economics

Columbia University E-mail: gautamg2@gmail.com 420 West 118th St. Citizenship: USA and Canada

New York, NY 10027 Languages: English, French, fluent, Spanish, moderate

Rm. 1026 IAB, MC 3308 Date of Birth: March 18, 1971

RESEARCH INTERESTS:

Industrial Organization, Health Economics, Environmental Economics, Applied Econometrics

EDUCATION:

Doctorate Honoris Causa, University of Oulu, 2017

Ph.D., Economics, Yale University, 1995

Dissertation advisors: Steven Berry and Ariel Pakes

Dissertation title: A Dynamic Analysis of Mergers

M.Phil., Economics, Yale University, 1993

M.A., Economics, Yale University, 1992

B.A., Economics, Swarthmore College, 1991

PROFESSIONAL EXPERIENCE:

Current position:

Professor of Economics (with tenure), Department of Economics, Columbia University, 2021 –

Other current affiliations:

Research Fellow, Centre for Economic Policy Research, 2021 – present

Research Associate, National Bureau of Economic Research, 2012 – present

Professor of Marketing (by courtesy), Department of Marketing, Eller College of Management, University of Arizona, 2011 – present

Professeur affilié, Institut d'économie appliquée, HEC Montréal, 2007 – present

Past positions:

Professor of Economics (with tenure) and Peter and Nancy Salter Chair in Healthcare Management, Department of Economics, Eller College of Management, University of Arizona, 2020 – 21

Arizona Public Service Professor of Economics (with tenure), Department of Economics, Eller College of Management, University of Arizona, 2011 – 20

Visiting Scholar, Becker-Friedman Institute, Department of Economics, University of Chicago, Spring 2016

Visiting Professor, Department of Economics, Northwestern University, Winter, Spring 2014

Visiting Professor, Universidad de los Andes, Santiago, Chile, Fall 2013

Faculty Research Fellow, National Bureau of Economic Research, 2001 – 12

- Associate Professor of Economics (with tenure), Department of Economics, Eller College of Management, University of Arizona, 2007 11
- Visiting Scholar, Center for the Study of Industrial Organization, Department of Economics, Northwestern University, 2009, 2010
- Research Associate Professor, Department of Ophthalmology and Vision Sciences, Washington University in St. Louis School of Medicine, 2007 09
- Visiting Associate Professor, Department of Economics, Eller College of Management, University of Arizona, Spring 2007
- Assistant Professor of Economics, John M. Olin School of Business, Washington University in St. Louis, 2003 2007

Visiting Scholar, Federal Reserve Bank of San Francisco, 2001 – 02, 2005

Consultant, Federal Reserve Bank of New York, 2002 – 04

Visiting Assistant Professor, Department of Economics, Yale University, Spring 2003

Visiting Assistant Professor, Department of Economics, Harvard University, Fall 2002

Assistant Professor, Department of Economics, University of Minnesota, 1995 – 2002

Visiting Assistant Professor, Department of Economics, University of Michigan, 1997 – 98

PUBLICATIONS:

Published and forthcoming:

- Gowrisankaran, Gautam, Keith Joiner and Pierre-Thomas Léger (2022). "Physician Practice Style and Healthcare Costs: Evidence from Emergency Departments." Forthcoming, *Management Science*. (Also NBER Working Paper 21,155.)
- Fleitas, Sebastian, Gautam Gowrisankaran, and Anthony Lo Sasso (2022). "Incumbent Regulation and Adverse Selection: You Can Keep Your Health Plan, But at What Cost?" Forthcoming, *Journal of Public Economics*.
- Barrette, Eric, Gautam Gowrisankaran and Robert Town (2022). "Countervailing Market Power and Hospital Competition." *The Review of Economics and Statistics* 104: 1351-60. (Also NBER Working Paper 27,005.)
- Blundell, Wesley, Gautam Gowrisankaran and Ashley Langer (2020). "Escalation of Scrutiny: The Gains from Dynamic Enforcement of Environmental Regulations." *American Economic Review* 110: 2558-85. (Also NBER Working Paper 24,810.)
- Dalton, Christina M., Gautam Gowrisankaran and Robert Town (2020). "Salience, Myopia and Complex Dynamic Incentives: Evidence from Medicare Part D." *The Review of Economic Studies* 87: 822-869. (Also NBER Working Paper 21,104.)
- Easterbrook, Kathleen, Gautam Gowrisankaran, Dina Older Aguilar and Yufei Wu (2019). "Accounting for Complementarities in Hospital Mergers: Is a Substitute Needed for Current Approaches?" *Antitrust Law Journal* 82, 497-531.
- Collard-Wexler, Allan, Gautam Gowrisankaran and Robin Lee (2019). "Nash-in-Nash' Bargaining: A Microfoundation for Empirical Work." *Journal of Political Economy* 127: 163-95. (Also NBER Working Paper 20,640.)
- Gowrisankaran, Gautam, Claudio Lucarelli, Philipp Schmidt-Dengler and Robert J. Town (2018). "Can Amputation Save the Hospital? The Impact of the Medicare Rural Flexibility Program on Demand and Welfare." *Journal of Health Economics* 58: 110-122. (Also NBER Working Paper 18,894.)
- Griffin, Stephanie, David Bui, Gautam Gowrisankaran, Eric A. Lutz, Charles He,

- Chengcheng Hu and Jefferey L. Burgess (2018). "Risk Management Interventions to Reduce Injuries and Maximize Economic Benefits in U.S. Mining." *Journal of Occupational and Environmental Medicine* 60(3): 226-233.
- Gowrisankaran, Gautam, Stanley Reynolds and Mario Samano (2016). "Intermittency and the Value of Renewable Energy." *Journal of Political Economy* 124(4): 1187-1234. (Also NBER Working Paper 17,086.)
- Gautam Gowrisankaran, Aviv Nevo and Robert Town (2015). "Mergers When Prices Are Negotiated: Evidence from the Hospital Industry." *American Economic Review* 175(1): 172-203. (Also NBER Working Paper 18,875.)
- Gowrisankaran, Gautam, Karen Norberg, Steven Kymes, Michael Chernew, Dustin Stwalley, Leah Kemper and William Peck (2013). "A Hospital System's Wellness Program Linked To Health Plan Enrollment Cut Hospitalizations But Not Overall Costs." *Health Affairs* 32(3): 477–85.
- Gowrisankaran, Gautam and Marc Rysman (2012). "Dynamics of Consumer Demand for New Durable Goods." *Journal of Political Economy* 120(6): 1173-1219. (Also NBER Working Paper 14,737.)
- Gowrisankaran, Gautam and John Krainer (2011). "Entry and Pricing in a Differentiated Products Industry: Evidence from the ATM Market." *RAND Journal of Economics* 42: 1-22.
- Gowrisankaran, Gautam, Claudio Lucarelli, Philipp Schmidt-Dengler and Robert Town (2011). "The Impact of the Medicare Rural Hospital Flexibility Program on Patient Choice." *International Journal of Industrial Economics* 29: 342-344.
- Gowrisankaran, Gautam, Robert J. Town and Eric Barrette (2011). "Managed Care, Drug Benefits, and Mortality: An Analysis of the Elderly." *The B.E. Journal of Economic Analysis and Policy* 11: Issue 2 (*Advances*) Article 3.
- Chernew, Michael, Gautam Gowrisankaran and Dennis Scanlon (2008). "Learning and the Value of Information: Evidence from Health Plan Report Cards." *Journal of Econometrics* 144: 156-74. (Also NBER Working Paper 8589.)
- Gowrisankaran, Gautam, Matthew F. Mitchell and Andrea Moro (2008). "Electoral Design and Voter Welfare from the U.S. Senate: Evidence from a Dynamic Selection Model." (Also NBER Working Paper 10748.) *Review of Economic Dynamics* 11: 1–17.
- Ackerberg, Daniel A. and Gautam Gowrisankaran (2006). "Quantifying Equilibrium Network Externalities in the ACH Banking Industry." *RAND Journal of Economics* 37: 738-61. (Also NBER Working Paper 12,488.)
- Gowrisankaran, Gautam and Thomas J. Holmes (2004). "Mergers and the Evolution of Industry Concentration: Results from the Dominant Firm Model." *RAND Journal of Economics* 35: 561–82. (Also NBER Working Paper 9151.)
- Gowrisankaran, Gautam and Joanna Stavins (2004). "Network Externalities and Technology Adoption: Lessons from Electronic Payments." *RAND Journal of Economics* 35: 260–276. (Also NBER Working Paper 8943.)
- Chernew, Michael, Gautam Gowrisankaran, Catherine McLaughlin and Teresa Gibson (2004). "Quality and Employers' Choice of Health Plan." *Journal of Health Economics* 23: 471–92. (Also NBER Working Paper 9847.)
- Gowrisankaran, Gautam and Robert J. Town (2003). "Competition, Payers and Hospital Quality." *Health Services Research* 38: 1403 22. (Also NBER Working Paper

- 9206.)
- Geweke, John, Gautam Gowrisankaran and Robert J. Town (2003). "Bayesian Inference For Hospital Quality in a Selection Model." *Econometrica* 71: 1215 1238. (Also NBER Working Paper 8497.)
- Chernew, Michael, Gautam Gowrisankaran and A. Mark Fendrick (2002). "Payer Type and the Returns to Bypass Surgery: Evidence from Hospital Entry Behavior," *Journal of Health Economics* 21: 451 474. (Also NBER Working Paper 8632.)
- Gowrisankaran, Gautam (1999). "A Dynamic Model of Endogenous Horizontal Mergers," *RAND Journal of Economics* 30: 56 83.
- Gowrisankaran, Gautam (1999). "Efficient Representation of State Spaces for Some Dynamic Models." *Journal of Economic Dynamics and Control* 23: 1077 98.
- Gowrisankaran, Gautam and Robert J. Town (1999). "Estimating the Quality of Care in Hospitals Using Instrumental Variables," *Journal of Health Economics* 18: 747 67.
- Gowrisankaran, Gautam and Robert J. Town (1997). "Dynamic Equilibrium in the Hospital Industry." *Journal of Economics and Management Strategy* 6: 45 74.

Submitted papers:

- Gowrisankaran, Gautam, Keith Joiner and Jianjing Lin (2022). "How Do Hospitals Respond to Payment Incentives?" (Also NBER Working Paper 26,455.)
- Butters, Andrew, Jackson Dorsey, and Gautam Gowrisankaran (2021). "Soaking Up the Sun: Battery Investment, Renewable Energy, and Market Equilibrium." Revise and resubmit, *Econometrica*. (Also NBER Working Paper 29,138.)
- Fleitas, Sebastian, Gautam Gowrisankaran and Anthony Lo Sasso (2020). "Reclassification Risk in the Small Group Health Insurance Market." Revise and resubmit, *The Review of Economics and Statistics*. (Also NBER Working Paper 24,663.)
- Gowrisankaran, Gautam and Marc Rysman (2020). "A Framework for Empirical Models of Dynamic Demand."

Working papers:

- Gowrisankaran, Gautam, Charles He, Eric Lutz and Charles Burgess (2020). "Productivity, Safety, and Regulation in Underground Coal Mining: Evidence from Disasters and Fatalities." (Also NBER Working Paper 21,129.)
- Gowrisankaran, Gautam, Marc Rysman and Grace Yu (2016). "Computing Price-Cost Margins in a Durable Goods Environment."
- Gowrisankaran, Gautam, Marc Rysman and Minsoo Park (2012). "Measuring Network Effects in a Dynamic Environment."

Other (non-refereed) publications:

- Gowrisankaran, Gautam (2019). "Comments on Jones et al. (2019) and Advice to for the Graduate School Application Process." Forthcoming, *Journal of Economic Education*.
- Gowrisankaran, Gautam (2011). "Evaluating the Impact of a Hospital Merger Using the Difference-in-Difference of Prices." (Comment on article by Steven Tenn.) *International Journal of the Economics of Business* 18: 83 89.
- Gowrisankaran, Gautam (2008). "Competition Among Hospitals and Hospital Quality" (2008), Ch. 12 of *Incentives and Choice in Health and Health Care*, F. Sloan and H. Kasper, eds. Cambridge: MIT Press.
- Gowrisankaran, Gautam and John Krainer (2005). "Bank ATMs and ATM Surcharges,"

Federal Reserve Bank of San Francisco Economic Letter 2005-36.

Gowrisankaran, Gautam (2002). "Why Do Americans Still Write Checks?" Federal Reserve Bank of San Francisco Economic Letter 2002-27.

Gowrisankaran, Gautam (2002). "Productivity in Heart Attack Treatments," Federal Reserve Bank of San Francisco Economic Letter 2002-20.

Gowrisankaran, Gautam (2002). "Competition and Regulation in the Airline Industry," Federal Reserve Bank of San Francisco Economic Letter 2002-01.

AWARDS AND HONORS:

Profiled, Global Competition Review's inaugural edition of Antitrust Academics, 2022 Winner, Lexology Client Choice Awards, 2022

Georgescu-Roegen Lecture, Sewanee College, March, 2022

2021 and 2009 Kalt Prize Recipient, for Best Doctoral Student Mentorship at the Eller College of Management

Winner, Best Paper in Regulatory Economics Prize at 2021 International Industrial Organization Conference, for "Soaking Up the Sun: Battery Investment, Renewable Energy, and Market Equilibrium," (joint with Andrew Butters and Jackson Dorsey) Bernie Saffran Lecture, Swarthmore College, March, 2019

Keynote speech, North Carolina Health Economics Colloquium, Wake Forest University, October, 2018

Keynote speech, International Conference on Innovation and Industrial Economics, Nanjing University, Nanjing, China, 2018, 2016

Excellence in refereeing award, American Economic Association, 2007, 2008, 2018 Invited speaker, 2018 Latin American Workshop in Econometrics, August, 2018, Lima, Peru Doctorate *Honoris Causa*, University of Oulu, May, 2017

Grossman Lecture, Colby College, March, 2017

Winner, Best Paper Award from the 2016 Workshop in Health IT and Economics (WHITE), for "Does Health IT Lead to Better Information or Worse Incentives?" (under former title), joint with Keith Joiner and Jianjing Lin

Invited lecture, Shanghai University of Finance and Economics Industrial Organization Summer School, Shanghai, China, June, 2016

Winner, 2016 <u>Antitrust Writing Award</u> for best academic paper on mergers, for "Mergers When Prices Are Negotiated: Evidence from the Hospital Industry," joint with Aviv Nevo and Robert Town

Invited lecture, Martti Ahtisaari Institute, Oulu, Finland, August, 2015

Invited speaker, Colombian Health Economics Association, Cali, Colombia, 2015

Invited speaker, Latin American Meetings of the Econometric Society, Sao Paulo, Brazil, 2014

Invited speaker, European Association for Research in Industrial Economics, Evora, Portugal, 2013

Keynote speech, Zhejiang University Conference on Industrial Economics, Hangzhou, China, 2013

Canadian Economic Association State of the Art Lecture, Montreal, Canada, 2013

Keynote speech, Network of Industrial Economists Conference, London, United Kingdom, 2012

Keynote speech, Copenhagen Business School Conference, Common Ground: Recent Work

- in Empirical Labour and Industrial Organization, Copenhagen, Denmark, 2012
- Keynote speech, Center for European Economic Research (ZEW) Symposium, A Framework for Estimating Demand in Consumer Durable Goods Markets, Mannheim, Germany, 2011
- Grande conférence (keynote speech), Les Journées de CIRPÉE 2009 (Annual Meetings), Québec, Canada
- Eller College Fellow, University of Arizona, 2007–11
- Distinguished Visitor, Boston University Department of Economics, June 2008

GRANTS:

- National Science Foundation Grant SES-2149335, "Collaborative Research: Regulating Electricity Markets: Impacts on Energy Transitions and Environmental Justice," 2022-25, \$242,500 (Role: PI).
- National Science Foundation Grant SES-1824348, "Collaborative Research: Pollution Mitigation and Productivity in Developing Countries," 2018-21, \$202,831 (Role: PI).
- Eller College Small Research Grant and Center for Management Innovations in Healthcare Grant, "Preferred Pharmacy Networks," 2017, \$12,000 (Role: PI).
- Agency for Healthcare Quality and Research 1R01HS024850-01, "Narrow Network Health Plans: Effects on Access, Cost, Quality, and Selection," 2016-19, \$383,180 for University of Arizona subcontract only (Role: co-PI; PI of University of Arizona subcontract).
- National Science Foundation Grant SES-1425063, "Bargaining in Bilateral Oligopolies with Application to the Health Sector," 2014-17, \$256,999 (Role: PI).
- Alpha Foundation for the Improvement of Mine Safety and Health Grant, "Implementation of Risk Management Programs: Identification of Best Practices to Reduce Injuries and Maximize Economic Benefits," 2013-15, \$668,518 (Role: co-PI).
- University of Arizona Renewable Energy Network Policy Research Initiative Grant, "Intermittency and Multiple Sources in Renewable Energy," 2012-13, \$11,998 (Role: PI)
- University of Arizona, Center for Management Innovations in Health Care Summer Grants, 2011, 2012, 2013, 2015 (Role: PI)
- Agency for Healthcare Research and Quality Grant R01-HS018424-01A1, "Hospital Choice, Hospital Quality and Patient Welfare for Rural Residents," 2010–13, \$577,514 (Role: PI)
- National Science Foundation Grant SES-0922540, "Collaborative Research: Estimation and Computation of Dynamic Oligopoly and Network Effects Model," 2009–13, \$207,164 (Role: PI)
- NET Institute Fellowship, 2009, 2004, 2003
- Missouri Foundation for Health contract. "Healthy Outcomes: The Impact of Employee Cost-Sharing on Healthcare Costs and Outcomes," 2007–08, \$416,714 (Role: PI)
- Commonwealth Foundation Grant 20070068. "Healthy Outcomes: The Impact of Employee Cost-Sharing on Healthcare Costs and Outcomes," 2007, \$121,320 (Role: PI)
- National Science Foundation Grant SES-0551360, "Collaborative Research: Dynamic Demand for New Durable Goods: An Empirical Model and Applications to Pricing and Welfare," 2006 09, \$104,897 (Role: PI)
- National Science Foundation Grant SES-0318170, "Estimating Models of Firm Entry," 2003–06, \$207,645 (Role: PI)
- University of Minnesota, Faculty Summer Research Fellowship, 1999, 1996 University of Minnesota, Single Quarter Leave, Winter 1998

Alfred P. Sloan Foundation Doctoral Dissertation Fellowship, 1994 – 95
Social Sciences and Humanities Research Council of Canada Doctoral Fellowship, 1993 – 95
Master's and Doctoral Fellowship (latter declined) from the Government of Quebec, Fonds pour la formation des chercheurs et l'aide à la recherché (FCAR), 1991 – 95
Yale University Fellowship, 1991 – 95

EXTERNAL SERVICE:

Editorial positions:

Associate editor, RAND Journal of Economics, 2015-

Associate editor, International Economic Review, 2014-

Associate editor, Journal of Business and Economic Statistics, 2009-

Member of board of editors, American Economic Review, 2011–2016

Associate editor, *Economic Inquiry*, 2008–13

Ad-hoc referee:

American Economic Review

American Journal of Preventive Medicine

B.E. Journals in Economic Analysis & Policy

Canadian Journal of Economics

Energy Journal

Econometrica

Economic Journal

Economic Inquiry

Economica

European Economic Review/Journal of the European Economic Association

Health Affairs

Health Economics

Health Economics, Policy and Law

Health Services Research

International Economic Review

International Journal of Disaster Risk Reduction

International Journal of Industrial Organization

Journal of Applied Econometrics

Journal of Banking and Finance

Journal of Business and Economics Statistics

Journal of Comparative Economics

Journal of Econometrics Journal of Economic Theory

Journal of Economics and Business

Journal of Economics and Management Strategy

Journal of Health Economics

Journal of Human Resources

Journal of Industrial Economics

Journal of Law and Economics

Journal of Law, Economics and Organization

Journal of Political Economy

Management Science

Marketing Science

Quarterly Journal of Economics

RAND Journal of Economics

Review of Economic Dynamics

Review of Economic Studies

Review of Economics and Statistics

Review of Network Economics

Southern Economic Journal

Ad-hoc reviewer:

Chilean National Science Foundation

Hong Kong Research Grants Council

National Science Foundation

W.W. Norton & Company

Trinity College Dublin, Institute for International Integration Studies

University of Venice Doctoral Committee

John Wiley & Sons

University of Gothenburg, opponent for dissertation exam

Public and government outreach and service:

Panel presentation, *Pharmacy Benefit Managers: Economics and Enforcement Interest*, 49th Annual Conference on International Antitrust Law and Policy and Antitrust Economics Workshops, Fordham University School of Law, September 2022

Member of U.S. Congressional Budget Office Health Advisory Panel, 2020 – present, Health Insurance Simulation Advisory Panel, 2018 – 20

Presentation, <u>Recent Research on the Economics of Discrimination: What Do We Know</u> <u>and Where to From Here?</u> Congressional Budget Office, January, 2021

Co-organizer, University of Arizona Department of Economics <u>Reading Group on the Economics of Discrimination</u>, Fall 2020

Panel presentation, *Perspectives and Lessons from the Canadian Healthcare System*, UC Berkeley Gilbert Center International Health Systems Conference, October, 2020

Member of National Science Foundation Economics Program Review Panel, 2017 – 19 Panel presentation, *Preparing Undergraduates for Application to Graduate School*,

Allied Social Sciences Association Winter Meetings, Atlanta, GA, January, 2019

Panel presentation, *Narrow Networks and State Level Policies*, State Policy Mini-Conference, Berkeley, March, 2018

Panel presentation, New Models of Healthcare Delivery: How Is Healthcare Changing? How is the Government Responding? Cornerstone Research and Stanford Institute for Economic and Policy Research, Stanford, January, 2017

Panel presentation, *The Ghosts of Small Group Health Insurance: Past, Present, and Future*, Caribbean Health Economics Symposium, Tortola, BVI, December, 2016

Panel presentation, *The Economics of Accountable Care Organizations*, Accountable Care Organizations and Antitrust Conference, UC Berkeley, November, 2011

Participant in Federal Reserve Board of Governors Academic Consultant Meeting, 2011 Lecture series, *Estimation of Durable Goods Models for Differentiated Products*, Bureau of Economic Analysis, 2010

Faculty Advisor for Graduate Student Dissertation Workshop, Western Economic Association International, Portland, OR, 2010

Expert reports, declarations, and testimony:

- USA and Plaintiff States v. UnitedHealth Group, Inc. and Change Healthcare, Inc, Expert Report (June 10, 2022), Rebuttal Report (July 17, 2022), Deposition (July 25, 2022), and Trial Testimony (August 9 and 16, 2022) in support of plaintiffs.
- Djeneba Sidibe v. Sutter Health, United States District Court for the Northern District of California, Declaration (October 5, 2017; updated April 3, 2018) and Deposition (February 6, 2018), Expert Report (June 21, 2019) and Deposition (July 17, 2019), Supplement to Expert Report (March 12, 2021) and Deposition (March, 29, 2021), and Trial Testimony (March 4, 2022) in support of defendants.
- In re: Purdue Pharma L.P., et al., Debtors, Expert Report (June 15, 2021) and trial testimony (August 12, 2021) in support of debtors.
- FTC v. Hackensack Meridian Health, Inc. and Englewood Healthcare Foundation, Expert Report (April 9, 2021), Deposition (May 5, 2021) and trial testimony (May 17, 2021) in support of defendants.
- Sentry Data Systems, Inc. v. CVS Pharmacy, Inc., United State District Court for the Southern District of Florida, Expert Report (September 9, 2019) in support of defendants.
- UFCW & Employers Benefit Trust v. Sutter Health and People of the State of California v. Sutter Health, Superior Court of the State of California for the City and County of San Francisco, Declaration (October 29, 2018), Deposition (December 17 and 18, 2018), and Addendum to Declaration (March 27, 2019) in support of defendants.
- In the Matter of Tribune Media Company and Sinclair Broadcast Group, Inc.
 Consolidated Applications for Consent to Transfer Control, FCC MB Docket No. 17179, Applicants' Consolidated Opposition to Petitions to Deny, Declaration (August 22, 2017) in support of Sinclair Broadcast Group, Inc.
- Grasso v. Electrolux Home Products, Inc., United States District Court for the Middle District of Florida, Initial Expert Report (October 3, 2016), Supplemental Export Report (November 4, 2016), and Deposition (December 9, 2016) in support of defendant.
- USA v. Cabell Huntington Hospital Inc. and St. Mary's Medical Center Inc., Expert Report (March 2, 2016) in support of defendants.
- Efficient Pricing of ADSL Wholesale Services, joint with Jeffrey MacKie Mason, Australian Competition and Consumer Commission, Export Report (August 23, 2012) in support of Telstra Corporation Limited.
- In Re: TFT-LCD (Flat Panel) MDL1827 (State of Missouri et al. v. AU Optronics et al. and State of Florida et al. v. AU Optronics et al.), United States District Court for the Northern District of California, Expert Report (January 17, 2012) and Deposition (March 7, 2012) in support of plaintiffs.
- Comes v. Microsoft CL82311, Iowa District Court, Export Report (June 2, 2006), Supplemental Expert Report (June 19, 2006), and Deposition (July 26, 2006) in support of plaintiffs.

Conference organization:

- Co-organizer, Annual Center for European Economic Research (ZEW) Energy Conference, Mannheim, Germany, 2012–21
- Co-organizer, Annual HEC Montreal/CIRPÉE Conference on Industrial Organization, 2012–20
- Program chair for competition in health care markets area, 2019 American Society of

- Health Economists Conference (ASHEcon)
- Co-organizer, Workshop on Healthcare and Industrial Organization. University of Chile, 2017
- Co-organizer, 2012 Econometric Society Summer Meetings
- Co-organizer, 2005, 2006 and 2007 International Industrial Organization Conference
- Co-organizer, 2004 and 2005 Washington University CRES Industrial Organization Conference

PH.D. STUDENT ADVISING:

- Advisor for Kelli Marquardt, Ph.D., University of Arizona, 2021, first position, Research Economist, Federal Reserve Bank of Chicago
- Advisor for Arundhati Tillu, Ph.D., University of Arizona, 2019, first position, E2e Energy Policy Fellow, University of Chicago
- Advisor for Sebastian Fleitas, Ph.D., University of Arizona, 2017, first position, Assistant Professor of Economics, University of Leuven
- Advisor for Anatolii Kokoza, Ph.D., University of Arizona, 2017, first position, Data Scientist, USAA
- Co-advisor for Nedko Yordanov, Ph.D., University of Arizona, 2016, first position, Associate, EconOne Consulting
- Advisor for Jianjing Lin, Ph.D., University of Arizona, 2015, first position, Postdoctoral Fellow, Tulane University
- Advisor for Chuan (Charles) He, Ph.D., University of Arizona, 2015, first position, Senior Economist, Amazon.com
- Advisor for Leila Asgari, Ph.D., University of Arizona, 2014, first position, Associate Vice President, J.P. Morgan Chase
- Advisor for T.N. (Subra) Subramaniam, Ph.D., University of Arizona, 2014, first position, Senior Associate in Modeling, Discover Card
- Advisor for Chrystie Burr, Ph.D., University of Arizona 2013, first position, Assistant Professor, Department of Economics, University of Colorado Boulder
- Advisor for Kathleen Nosal, Ph.D., University of Arizona 2012, first position: Assistant Professor, Department of Economics, University of Mannheim
- Advisor for Mario Samano, Ph.D., University of Arizona 2012, first position: Assistant Professor, Institute of Applied Economics, HEC Montreal Business School
- Advisor for Joseph Cullen, Ph.D. University of Arizona 2009, first position: Harvard University Center for the Environment Postdoctoral Fellowship, Assistant Professor, Olin Business School, Washington University in St. Louis
- Advisor for Ivan Maryanchyk, Ph.D. University of Arizona 2009, first position: Senior Analyst, Bates White Economic Consulting
- Advisor for Oleksandr Shcherbakov, Ph.D. University of Arizona 2008, first position: Cowles Postdoctoral Fellowship, Yale University
- Co-advisor for Fumiko Hayashi, Ph.D. University of Minnesota 2001, first position: Federal Reserve Bank of Kansas City

RESEARCH PRESENTATIONS (with most recent title):

Invited seminar presentations since October, 2001:

A Computable Dynamic Oligopoly Model of Capacity Investment

University of Chile, September, 2013 Bank of Canada, July, 2013

A Hospital System's Wellness Program Linked To Health Plan Enrollment Cut Hospitalizations But Not Overall Costs

University of California, Riverside, February, 2012 Duke University, October, 2010 Northwestern University, May, 2009

Bayesian Inference For Hospital Quality in a Selection Model

Agency for Healthcare Quality and Research, October, 2003

University of Montreal, November, 2002

Queen's University, October, 2002

UC Davis, May, 2002

Duke University, January, 2002

Yale University, December, 2001

Federal Reserve Bank of Chicago, November, 2001

Causality and the Volume-Outcome Relationship in Surgery

University of Chicago, Health Economics Seminar, April, 2005

Syracuse University, April, 2005

Computing Price-Cost Margins in a Durable Goods Environment

Cornell University, November, 2015

Discharge Fees, Pollution Mitigation, and Productivity: Evidence from Chinese Power Plants

University of Delaware, October, 2021

Does Health IT Adoption to Better Information or Worse Incentives?

UCLA Anderson School, May 2017

University of Chicago, May, 2016

Emory University, March, 2016

Dynamics of Consumer Demand for New Durable Goods

École Polytechnique/CREST (Paris), October, 2011

INSEAD Business School, April, 2011

Katholieke Universiteit Leuven, April, 2011

University of Texas, September, 2010

U.S. Bureau of Labor Statistics, December, 2009

U.S. Bureau of Economic Analysis, September, 2009

University of Helsinki, August, 2009

Harvard University, December, 2008

University of Southern California, October, 2008

Bristol University, May, 2008

University of Toronto Rotman School, March, 2008

Federal Trade Commission, December, 2007

University College London, May, 2007

London School of Economics, April, 2007

University of Minnesota Marketing Department, February, 2007

Drexel University, December, 2006

Arizona State University, November, 2006

University of California Los Angeles, May, 2006

Stanford University, May, 2006

Johns Hopkins University, May, 2006

Purdue University, March, 2006

University of Arizona, February, 2006

Duke University, September, 2005

Federal Reserve Bank of San Francisco, June, 2005

University of Missouri, April, 2005

Northwestern University Kellogg School of Management, April, 2005

Escalation of Scrutiny: The Gains from Dynamic Enforcement of Environmental Regulations

Boston University, January, 2020

Columbia University, November, 2019

Indiana University, September, 2019

New York University Stern School of Business (joint with Columbia University), April 2019

University of Technology, Sydney, March 2019

University of Queensland, March, 2019

University of California, Los Angeles, February, 2019

University of Michigan, November, 2018

Universidad Carlos III de Madrid, April, 2018 École Polytechnique/CREST (Paris), April, 2018

University of Rochester, Simon School of Business, April, 2018

Information Feedback and Long-Term Electricity Conservation: Evidence from the Tapestry Building

HEC Montreal, July, 2013

Intermittency and the Value of Renewable Energy:

Imperial College, London, June, 2015

Universidad de los Andes, Santiago, Chile, May, 2015

University of Michigan, October, 2014

Texas A&M University, April, 2012

University of Texas at Austin, February, 2012

Carnegie Mellon University, November, 2011

Harvard University, September, 2011

University of Gothenburg, May, 2011

University of Mannheim, April, 2011

New York University, March, 2011

Yale University, March, 2011 University of Arizona, March 2011 UC Berkeley, November, 2010

Learning and the Value of Information: The Case of Health Plan Report Cards

Washington State University, April, 2007

University of Toronto, October, 2002

UC San Diego, April, 2002

UC Berkeley, April, 2002

Brown University, April, 2002

Dartmouth College, April, 2002

Stanford University GSB, March, 2002

Columbia University, December, 2001

UC Davis, Agricultural and Resource Economics, November, 2001

UC Berkeley, Agricultural and Resource Economics, October, 2001

Managed Care, Drug Benefits, and Mortality: An Analysis of the Elderly

Medical University of South Carolina, March, 2007

University of Pennsylvania Health Care Management, December, 2006

HEC – Montréal (University of Montreal Business School), March, 2005

University of North Carolina, Department of Health Policy and Administration,

Triangle Health Economics Workshop (long-distance format), September, 2004

Washington University in St. Louis, April, 2004

Yale University, June, 2003

Boston University (joint with Harvard and MIT), April, 2003

Mergers When Prices Are Negotiated: Evidence from the Hospital Industry

University of Alabama – Birmingham, April, 2014

University of Colorado, Boulder, February, 2014

Vanderbilt University, February, 2014

U.S. Department of Justice, November, 2013

Charles River Associates, June, 2013

Stanford University GSB Marketing, May, 2013

University of Tilburg, May, 2013

Toulouse School of Economics, May, 2013

Universidad de los Andes, Santiago, Chile, April, 2013

University of East Anglia, December, 2012

Vanderbilt University, December, 2012

Indiana University, September, 2012

Clemson University, April, 2012

Ohio State University, April, 2012

Columbia University, December, 2011

Johns Hopkins University, October, 2011

"Nash-in-Nash" Bargaining: A Microfoundation for Empirical Work Nanjing University, May, 2015 Network Externalities and Technology Adoption: Lessons from Electronic Payments Federal Reserve Bank of New York, December, 2001 New York University Stern School of Business, October, 2001

Policy and the Dynamics of Market Structure: The Critical Access Hospital Program

University of Minnesota, May, 2010

University of Wisconsin, March, 2010

Bates White Economic Consulting, December, 2009

Princeton University, November, 2009

Boston College, November, 2009

Bank of Canada, June, 2009

University of California, Davis, April, 2009

University of California, Irvine, April, 2009

University of California Los Angeles, October, 2008

Federal Reserve Bank of Kansas City, October, 2008

Boston University, June, 2008

University of Cyprus, May, 2008

Policy Uncertainty in the Market for Coal Electricity: The Case of Air Toxics Standards

University of North Carolina (joint with Duke University), October 2022

Carnegie Mellon University, October 2022

Stony Brook University, September 2022

Northwestern University, April 2022

Princeton University, March 2022

UC Berkeley, November 2021

Yale University, November 2021

Productivity, Safety, and Regulation in Coal Mining: Evidence from Disasters and Fatalities

Hong Kong University, March, 2017

Policy Uncertainty in the Market for Coal Electricity: The Case of Air Toxics Standards

UC Berkeley, November, 2021

Yale University, November, 2021

Quantifying Equilibrium Network Externalities in the ACH Banking Industry

Yale University, March, 2003

University of Montreal, January, 2003

Washington University in St. Louis, December, 2002

Harvard University, September, 2002

Reclassification Risk in the Small Group Health Insurance Market

University of Wisconsin, March, 2020

École Polytechnique/CREST (Paris), May, 2019

University of California, Los Angeles, May, 2019

Board of Governors of the Federal Reserve, May, 2019

University of Nevada, Reno, February, 2019

University of Toronto, Rotman School, January, 2019

University of Kansas, November, 2018

University of North Carolina (joint with Duke University), November, 2018

University of South Florida, November, 2018

University of Illinois Gies School of Business, April, 2018

Toulouse School of Economics, March, 2018

University at Albany, October, 2017

University of British Columbia, Sauder School of Business, October, 2016

Princeton University, September, 2016

Ohio State University, September, 2016

Singapore Management University, August, 2016

Salience, Myopia and Complex Dynamic Incentives: Evidence from Medicare Part D

Boston University, November, 2017

UC Irvine, May, 2017

Chinese University of Hong Kong, March, 2017

Universitat Autonoma de Barcelona, November, 2016

National University of Singapore, August, 2016

Peking University, National School of Development, June, 2016

Federal Trade Commission, December, 2015

Miami University of Ohio, September, 2015

University of Helsinki, August, 2015

Shanghai University of Finance and Economics, May, 2015

University of Chile, May, 2015

University of Southern California, May, 2015

University of California, Los Angeles, April, 2015

University of Toronto, December, 2014

University of North Carolina at Chapel Hill, November, 2014

Johns Hopkins University, April, 2014

Northwestern University, April, 2014

University of Iowa, April, 2014

Soaking Up the Sun: Battery Investment, Renewable Energy, and Market Equilibrium

Cornell University, September, 2021

Imperial College, June, 2021 (virtual)

Harvard University, February, 2021 (virtual)

Florida State University, January, 2021 (virtual)

Queen's University, December, 2020 (virtual)

Georgetown University, November, 2020 (virtual)

Ohio State University, October, 2020 (virtual)

The Welfare Consequences of ATM Surcharges: Evidence From a Structural Entry Model

Federal Reserve Bank of New York, June, 2004

University of Minnesota, May, 2004

Competition Bureau of Canada, May, 2004

University of Pennsylvania, March, 2004

University of Chicago Graduate School of Business, Marketing Seminar, April, 2004

Trinity College Dublin, Dublin (Ireland) Economics Workshop, March, 2004

Board of Governors of the Federal Reserve, November, 2003

University of Maryland, October, 2003

Pennsylvania State University, September, 2003

Columbia University, September, 2003

University of Wisconsin, September, 2003

Why Do Incumbent Senators Win? Evidence from a Dynamic Selection Model

American Enterprise Institute, November, 2005

Washington University in St. Louis, Political Economy Seminar, May, 2004

Invited or refereed conference presentations since October. 2001:

Countervailing Market Power and Hospital Competition

Allied Social Sciences Association Winter Meetings, Chicago, IL, January, 2017

Bayesian Inference For Hospital Quality in a Selection Model

Indiana University Conference on Simulation-Based Econometric Methods, February, 2003

Causality and the Volume-Outcome Relationship in Surgery

Conference on Evaluating Health Policy, Imperial College, UK, May, 2008

International Health Economics Association Meetings, Barcelona, Spain, July, 2005

Consumers, Information and the Evolving Healthcare Marketplace Conference,

Cornell University, April, 2005

Computing Price-Cost Margins in a Durable Goods Environment

Empirical Models of Differentiated Products Conference, University College London, June, 2015

Ninth Annual Cowles Conference on Theory-Based Econometric Modeling, Yale University, June, 2015

Discharge Fees, Pollution Mitigation, and Productivity: Evidence from Chinese Power Plants

Javeriana University Structural I.O. Conference, Bogotá, Colombia, October, 2017

Does Health IT Adoption to Better Information or Worse Incentives?

Workshop on Healthcare and Industrial Organization, University of Chile, September, 2017

Dynamics of Consumer Demand for New Durable Goods

Allied Social Sciences Association Winter Meetings, San Francisco, CA, January, 2009

Fifth Annual Bates White Antitrust Conference, Washington, DC, June, 2008

Ninth CEPR Conference on Applied Industrial Organization, Paris, France, May, 2008

Federal Reserve Bank of Minneapolis Applied Microeconomics Conference, October, 2007

Economics of ICT Conference, Paris, France, June, 2007

Econometric Society Summer Meetings, Minneapolis, MN, June, 2006

Escalation of Scrutiny: The Gains from Dynamic Enforcement of Environmental Regulations

2018 Econometric Society Latin American Workshop in Econometrics, Lima, Peru, August, 2018

Second International Conference on Innovation and Industrial Economics, Nanjing, China, June, 2018

How Do Hospitals Respond to Payment Incentives?

Notre Dame Health Mini-Conference, September, 2019, South Bend, IN

Intermittency and the Value of Renewable Energy

Marti Ahtisaari Institute Lecture, Oulu, Finland, August, 2015

Center for European Economic Research (ZEW) Energy Conference, Mannheim, Germany, June, 2012

Pressing Issues in World Energy Policy Conference, University of Florida, March, 2012

POWER Conference, UC Berkeley, April, 2012

Fifth Annual Cowles Conference on Theory-Based Econometric Modeling, Yale University, June, 2011

Eighth Annual Bates White Antitrust Conference, Washington, DC, June, 2011

Twelfth CEPR Conference on Applied Industrial Organization, Tel Aviv University, May, 2011

Learning and the Value of Information: The Case of Health Plan Report Cards

Econometric Society Winter Meetings, Chicago, IL, January, 2007

Quantitative Marketing and Economics Conference, Chicago, IL, October, 2003

Society for Economic Dynamics Annual Meetings, New York, NY, July 2002

National Bureau of Economic Research (NBER) Summer Institute, Cambridge, MA, July, 2002

Allied Social Sciences Association Winter Meetings, Atlanta, GA, January, 2002

Managed Care, Drug Benefits, and Mortality: An Analysis of the Elderly

National Bureau of Economic Research (NBER) Summer Institute, Cambridge, MA, August, 2004

Annual Health Economics Conference, Birmingham, AL, April, 2004

Measuring Network Effects in a Dynamic Environment

4th Annual Penn State University Conference on Auctions and Procurement, April, 2011

- Mergers When Prices Are Negotiated: Evidence from the Hospital Industry
 - First CREST Conference on Advances in the Economics of Antitrust and Consumer Protection, Paris, France, September, 2014
 - Penn State/Cornell Conference on Econometrics and Industrial Organization, State College, PA, September, 2014
 - European Association for Research in Industrial Economics Conference, Evora, Portugal, August, 2013
 - Zhejiang University Conference on Industrial Economics, Hangzhou, China, June, 2013
 - Canadian Economic Association, Montreal, Canada, May, 2013
 - Quantitative Marketing and Economics Conference, Durham, NC, October, 2012
 - National Bureau of Economic Research (NBER) Summer Institute, Cambridge, MA, July, 2012
 - Common Ground Conference, Copenhagen Business School, May, 2012 Annual Health Economics Conference, Northwestern University, October, 2011 Allied Social Sciences Association Winter Meetings, Denver, CO, January, 2011
- "Nash-in-Nash" Bargaining: A Microfoundation for Empirical Work
 Institute for Fiscal Studies Vertical Contracting Conference, London, June, 2018
- Network Externalities and Technology Adoption: Lessons from Electronic Payments Federal Reserve Bank of Philadelphia, Conference on Payment Systems, Philadelphia, PA, May, 2002
 - Center for Economic Policy and Research Conference on Productivity and Technology, Alghero, Italy, March, 2002
- Physician Practice Style and Healthcare Costs: Evidence from Emergency Departments Society for Institutional & Organizational Economics Conference, Montreal, July, 2018
- Policy and the Dynamics of Market Structure: The Critical Access Hospital Program
 Third Annual Cowles Conference on Theory-Based Econometric Modeling, Yale
 University, June, 2009
 - Penn State University Conference on Procurement and Regulated Markets, April, 2008
 - HEC Montréal Conference on the I.O. of Health, November, 2007
- Policy Uncertainty in the Market for Coal Electricity: The Case of Air Toxics Standards UCLA I.O. mini-conference, May, 2022
- *Price Setting and Negotiation in the Supermarket Industry*
 - INRA Trade, Industrial Organization, and the Food Industry Workshop, Paris, France, May 2019
- Productivity, Safety, and Regulation in Underground Coal Mining: Evidence from

Disasters and Fatalities

New Directions in Commodities Research Conference, University of Colorado, Denver, August, 2017

Third Annual IZA Conference on Labor Market Effects of Environmental Policies, Berlin, Germany, August, 2015

Quality and Employers' Choice of Health Plan

Allied Social Sciences Association Winter Meetings, Washington, DC, January, 2003

Quantifying Equilibrium Network Externalities in the ACH Banking Industry

NET Institute 2005 Conference, New York, NY, April, 2005

Kiel – Munich Workshop on the Economics of Information and Network Industries, Munich, Germany, August, 2004

CEPR Conference on Two-Sided Markets, Toulouse, France, January, 2004 Society for Economic Dynamics Annual Meetings, Paris, France, June, 2003 University of Iowa Clarence Tow Conference on Industrial Organization, May, 2003 International Industrial Organization Society Conference, Boston, MA, April, 2003 Stanford Institute for Theoretical Economics (SITE), July, 2002

Reclassification Risk in the Small Group Health Insurance Market

National Bureau of Economic Research (NBER) Winter Health Care Meetings, Cambridge, MA, November, 2018

Bates White Life Sciences Symposium, June, 2018

Eleventh Annual Cowles Conference on Theory-Based Econometric Modeling, Yale University, June, 2017

Marketing Science Conference on Marketing and Health, St. Louis, MO, November, 2016

Lancaster University Management School Conference on Auctions, Competition, Regulation, and Public Policy, May, 2016

Salience, Myopia and Complex Dynamic Incentives: Evidence from Medicare Part D
Tel Aviv University / IDC Summer Conference, Herzliya, Israel, July, 2017
Colombian Association of Health Economics, Cali, Colombia, February, 2015
National Bureau of Economic Research (NBER) Winter Industrial Organization
Meetings, Stanford, CA, February, 2015

Latin American Meetings of the Econometric Society, Sao Paulo, Brazil, November, 2014

Penn State/Cornell Economics on Economics and Industrial Organization, University Park, PA, September, 2014

Eleventh Annual Bates White Antitrust Conference, Washington, DC, June, 2014 Northwestern/Toulouse Industrial Organization Conference, Evanston, IL, May, 2014

Selection, Subsidies, and Welfare in Health Insurance: Employer Sponsored Health Insurance Versus the ACA Marketplaces

Interdisciplinary Choice Workshop, Santiago, Chile, August, 2018

The Welfare Consequences of ATM Surcharges: Evidence From a Structural Entry Model Recent Developments in Consumer Credit and Payments, Federal Reserve Bank of Philadelphia, Philadelphia, PA, September, 2005

National Bureau of Economic Research (NBER) Winter Industrial Organization Meetings, Menlo Park, CA, February, 2005

Allied Social Sciences Association Winter Meetings, Philadelphia, PA, January, 2005 University of British Columbia Summer Industrial Organization Conference, July, 2003

You Can Keep Your Health Plan But At What Cost?

Caribbean Health Economics Symposium, Tortola, BVI, December, 2021