

David McAdams

Professor of Business Administration and Economics
Duke Fuqua School of Business and Department of Economics
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Degrees

BS 1996, Applied Mathematics, Harvard University.

MS 2001, Statistics, Stanford University.

PhD 2001, Business, Stanford University.

Dissertation: “Essays in Multi-Unit Auction Theory”.

co-Advisors: Professors Paul Milgrom and Robert Wilson.

Experience

Duke Fuqua School of Business (primary).

Professor, since 2013

Associate Professor (with tenure), 2008-2013

Affiliated Faculty, Health Sector Management Program, since 2013

Affiliated Faculty, Duke Margolis Center for Health Policy, since 2018

Duke Economics Department (secondary).

Professor, since 2013

Associate Professor (with tenure), 2008-2013

MIT Sloan School of Management, Applied Economics

Associate Professor (without tenure), 2007-2008

Cecil and Ida Green Career Development Professor, 2006-2008

Assistant Professor, 2001-2007

Federal Trade Commission

Special Assistant to the Director, Bureau of Economics, May – December 1999

Honors

National Science Foundation, Economics Program, Research Grant #SES-0820051 for
“Endogenous Exit from a Stochastic Partnership”, 2008-2011.

National Science Foundation, Economics Program, Research Grant #SES-0241468 for
“Ordinal Structure in Multi-Unit Auctions”, 2003-2006.

Stanford Institute for Economic Policy Research, Olin Dissertation Fellowship, 2001.

State Farm Dissertation Award in Business, 2001.

Jaedicke Scholar, Stanford Graduate School of Business, 1997.

Harvard National Scholar, 1992.

Eagle Scout, 1989

Books

“Game-Changer: Game Theory and the Art of Transforming Strategic Situations”,
W.W. Norton, January 2014.

Articles

Economic Epidemiology (incl. antibiotic resistance)

“Resistance diagnostics as a public health tool to combat antibiotic resistance: A model-based evaluation”, lead author with Sam Brown and Kristofer Wollein Waldetoft (Sam Brown Lab, Georgia Tech Biological Sciences) and Marc Lipsitch and Christine Tedijanto (Center for Communicable Disease Dynamics, Harvard Chan School of Public Health), *PLoS Biology*, 17(5): e3000250, May 2019.

“Analysis of the potential for point-of-care test to enable individualised treatment of infections caused by antimicrobial-resistant and susceptible strains of *Neisseria gonorrhoeae*: a modelling study” with Katy Turner (lead author), Hannah Christensen, Elisabeth Adams, Helen Fifer (Public Health England), Anthony McDonnell (O’Neill Review on Antimicrobial Resistance), and Neil Woodford (Public Health England), *BMJ Open*, July 2017, 7:e015447.

Commissioned by the O’Neill Review and featured as a supporting document to their final report (“Tackling Drug-Resistant Infections Globally: final report and recommendations”, May 19, 2016).

“Resistance Diagnosis and the Changing Economics of Antibiotic Discovery”,
Antimicrobial Therapeutics Reviews (Annals of New York Academy of Sciences), 1388(1), January 2017, 18-25.

“Resistance Diagnosis and the Changing Epidemiology of Antibiotic Resistance”,
Antimicrobial Therapeutics Reviews (Annals of New York Academy of Sciences), 1388(1), 5-17, January 2017, lead article.

Presented in 2013 at Duke Infectious Diseases Grand Rounds, in 2015 at Collegio Carlo Alberto (Turin, Economics) and CSEF (Naples, Economics), in 2016 at CDC NCEZID DHQP (Atlanta), in 2017 at Georgia Tech Biological Sciences, in 2018 at Harvard Chan School of Public Health

Auctions

“Empirical Work on Auctions of Multiple Objects” with Ali Hortacsu, *Journal of Economic Literature*, 56, March 2018, 157-184

“On the Benefits of Dynamic Bidding when Participation is Costly”, *Journal of Economic Theory*, May 2015, 959-972. [Previous version titled “Dynamic bidding.”]

Presented in 2013 at MilgromFest (a conference honoring Paul Milgrom); in 2014 at Columbia Economics, Stanford GSB, UT Austin Economics, WUSTL Economics; and in 2015 at Econometric Society Annual Winter Meetings.

“Identification of First-Price Auction Models with Non-Separable Unobserved Heterogeneity” with Yingyao Hu and Matthew Shum, *Journal of Econometrics*, June 2013, 186-193.

Presented in 2011 at Econometric Society Annual Winter Meetings, INFORMS Annual Meeting.

“Strategic Ignorance in the Second-Price Auction”, *Economics Letters*, January 2012, 83-85.

“Carbon Allowance Auction Design: An Assessment of Options for the U.S.” with Giuseppe Lopomo, Leslie Marx, and Brian Murray, *Review of Environmental Economics and Policy*, Winter 2011, 5(1), 25-43.

“Mechanism Choice and Strategic Bidding in Divisible Good Auctions: An Empirical Analysis of the Turkish Treasury Auction Market” with Ali Hortacsu, *Journal of Political Economy*, October 2010, 118(5), 833-865 (lead article).

Presented in 2007 at MIT Economics (IO Lunch). An earlier version was Ali Hortacsu’s job-market paper in 2001.

“Partial Identification and Testable Restrictions in Multi-Unit Auctions”, *Journal of Econometrics*, September 2008, 146(1), 74-85.

Job-market paper #2 on tenure market. Presented in 2004 at U. Chicago Economics, MIT / Harvard Economics, Northwestern Kellogg School of Management; in 2005 at UC Berkeley Economics, CIREQ Conference on Auctions, Penn State Economics; in 2007 at Duke / U. North Carolina Economics.

“On the Failure of Monotonicity in Uniform-Price Auctions”, *Journal of Economic Theory*, November 2007, 137, 729-732.

Presented in 2003 at International IO Conference.

“Who Pays When Auction Rules are Bent?” with Michael Schwarz, *International Journal of Industrial Organization*, October 2007, 25(5), 1144-1157.

Presented in 2006 at Yahoo! Research.

“Uniqueness in Symmetric First-Price Auctions with Affiliation”, *Journal of Economic Theory*, September 2007, 136, 144-166.

Presented in 2004 at U. Arizona Economics, U. Illinois Economics, Pitt Economics, Rutgers Economics, WBZ Berlin Advances in Auction Theory Conference.

“Bounding Revenue Comparisons across Multi-Unit Auction Formats under epsilon-Best Response” with James Chapman and Harry Paarsch, *American Economic Review, Papers and Proceedings*, May 2007, 97(2), 455-458.

Presented in 2007 at American Economic Association Annual Winter Meetings (by co-author). “Adjustable Supply in Uniform Price Auctions: Non-Commitment as a Strategic Tool”, *Economics Letters*, April 2007, 95(1) 48-53.

Presented in 1999 at Federal Energy Regulatory Commission, U. Maryland Economics; in 2002 at Society of Economic Design Conference; in 2003 at UC Energy Institute; in 2004 at Northwestern Economics; in 2006 at Econometric Society Annual Winter Meetings.

“Credible Sales Mechanisms and Intermediaries” with Michael Schwarz, *American Economic Review*, March 2007, 97(1), 260-276.

Presented in 2005 at U. Chicago GSB, Columbia Economics / GSB, Penn Economics, Stanford Economics / GSB; in 2006 at Econometric Society Annual Summer Meetings (by co-author), U. Maryland Economics, NYU Stern School of Management, U. Texas Economics, U. Wisconsin Economics.

“Monotonicity in Asymmetric First-Price Auctions with Affiliation”, *International Journal of Game Theory*, February 2007, 35(3), 427-453

Presented in 2002 at MIT / Harvard Economics; in 2003 at UC Berkeley Economics, CalTech Economics, Northwestern Economics, Princeton Economics.

“Monotone Equilibrium in Multi-Unit Auctions”, *Review of Economic Studies* October 2006, 73(4), 1039 - 1056.

Job-market paper on junior market. Presented in 2001 at Carnegie-Mellon GSIA, Harvard Kennedy School of Government, MIT Sloan School of Management, Northwestern Economics, NYU Stern School of Management, Washington U. St. Louis Olin School of Management, Yale Economics / School of Management; in 2002 at Caltech Economics, Duke / U. North Carolina Economics, U. Iowa Tippie College of Business, U. Maryland Economics, U. Michigan Economics, Penn State Economics, Stony Brook Game Theory Conference; in 2003 at U. Chicago Economics, Ohio State Economics, Stanford Institute for Theoretical Economics; in 2004 at Econometric Society Annual Summer Meetings.

“Isotone Equilibrium in Games of Incomplete Information”, *Econometrica*, August 2003, 71(4), 1191-1214.

Presented in 2001 at MIT / Harvard Economics; in 2002 at U. Chicago Economics, IO Theory Conference, Midwest Theory Conference, American Mathematics Society Annual Meetings; in 2003 at Econometric Society Annual Winter Meetings.

“Speeding Up the Ascending-Bid Auction” with Yuzo Fujishima and Yoav Shoham. *International Journal Conference in Artificial Intelligence (IJCAI) Proceedings 1999*, pp. 554-559.

Presented in 1999 at International Journal Conference in Artificial Intelligence.

Other

“Supply, Demand, and Uncertainty: Implications for Prelisting Conservation Policy” with Christopher Galik, *Ecological Economics*, 137, July 2017, 91-98.

“Performance and Turnover in a Stochastic Partnership”, *American Economic Journal: Microeconomics*, November 2011, 107-42.

Job-market paper #1 on tenure market. Presented in 2007 at CalTech Economics, UCLA Economics, MIT / Harvard Economics, IO Theory Conference, Johns Hopkins Economics, U. Michigan Economics, Northwestern Kellogg School of Management, NYU Economics, Penn State Economics; in 2008 at GAMES 2008, Third World Congress of Game Theory Society (talk canceled for personal reasons); in 2009 at Econometric Society Annual Winter Meetings, NBER Conference on Relational Contracts, Washington U. St. Louis Economics; in 2010 at Utah Winter Business Economics Conference, Northwestern Economics, USC Marshall School of Business.

“Perverse Incentives in the Medicare Prescription Drug Benefit” with Michael Schwarz, *Inquiry*, Summer 2007, 44(2), 157-166.

Working papers

“Social Networks and the Market for News” with Rachel Kranton

“Viral Social Learning” with Yangbo Song

“Learning Through the Grapevine: The Impact of Message Mutation, Transmission Failure, and Deliberate Bias” with Matthew Jackson and Suraj Malladi

Inactive working papers

“Discounts for Qualified Buyers Only”. [Previous version titled “Endogenous Monopoly Market Segmentation”].

Presented in 2009 at UCLA Economics; in 2010 at Ohio State Economics; in 2011 at Econometric Society Annual Winter Meetings.

“Secrecy in the First-Price Auction”.

Presented in 2011 at U. British Columbia Economics.

“Bounding Best-Response Violations in Discriminatory Auctions with Private Values”
with James Chapman and Harry Paarsch.

Presented in 2012 at Bank of Canada.

Other public remarks

“Changing the Game of Antibody Validation”. Keynote address at GBSI’s *Workshop on Antibody Validation: Standards, Policies, and Practices*, September 2016.

“Taming Superbugs”. Keynote address at *Duke Forward: Dallas* on how we can avoid a “post-antibiotic future,” January 2015.

“Changing the Game of Patient Experience: Insights from Game Theory”. Presentation to Duke Fuqua Health Sector Advisory Board, November 2014.

“The Future of Pest-Resistant Crops”. Thomas C. Sorensen seminar at U. Nebraska Lincoln, October 2014.

Other writings

“Game Theory and Cooperation: How Putting Others First Can Help Everyone”.
Frontiers for Young Minds 5:66, November 30, 2017. doi: 10.3389/frym.2017.00066.

“Applying Game Theory to the Supreme Court Confirmation Fight” with Avinash Dixit.
Harvard Business Review, September 27, 2016.

“The Right Way to Pay Ransoms to Terrorists”. *New York Times* op-ed, February 3, 2015.

“The Economics of On-Premise Signs” (prepared for the US Sign Council Foundation), 2015.

“Beating Amazon at Its Own Game”. *Pittsburgh Post-Gazette* op-ed, July 4th, 2014.

“Making a Market for Overdose-Halting Drugs”. *New Jersey Star Ledger* op-ed, March 25th, 2014.

“NFL Coaches Are Too Chicken for Their Own Good”. *TIME.com*, February, 2nd 2014.

“Soap’s Dirty Little Secret”. *Tampa Bay Times* op-ed, January 23rd, 2014.

“Changing the Debt-Ceiling Game”. *New York Times* op-ed, October 15th, 2013.

Public comment and testimony

Panel participant, “Collaborating for Innovation: Can Public-Private Partnerships Change the Game,” TEDMED Great Challenges Series, November 2014.

Panel participant, “Prescription Drug Overdose in North Carolina”, WUNC State of Things (NPR), August 2014.

Public Comment on Competitive Bidding Procedures, FCC Mobility Fund Phase I Auction (Proceeding 12-25), March 2012.

Testimony on behalf of New England Power Generators Association, in FERC Proceeding on New England’s Forward Capacity Market: ISO New England Inc. and New England Power Pool: Testimony on Alternative Price Rule (July 1, 2010); Testimony on Bilateral Contracts (Sept. 1, 2010); Testimony on Benchmarks (Sept. 29, 2010).

Service and Professional Activities

Member, Bass Connections Faculty Advisory Committee, since 2019

Member, Steering Committee for “Driving health progress during disease, demographic, domestic finance, and donor transitions (the ‘4Ds’)”, Duke Center for Policy Impact in Global Health, since 2019

Member, Faculty Governance Committee, Duke Initiative for Science & Society, since 2015

Associate Editor, *International Journal of Industrial Organization*, since 2006.

Co-chair, Fuqua Honor Committee, 2013-2018

Member, Academic Programs Committee (advisory to provost), 2014-2017

Associate Editor, *International Journal of Game Theory*, 2013-2015.

Associate Editor, *Journal of Economic Literature*, 2012-2014.

Associate Editor, *Review of Economic Design*, 2008-2013.

Referee for *American Economic Review*, *Econometrica*, *Games and Economic Behavior*, *International Economic Review*, *International Journal of Industrial Organization*, *Journal of Economic Literature*, *Journal of Economic Theory*, *Journal of the European Economic Association*, *Journal of Finance*, *Management Science*, *National Science Foundation*, *PLoS Biology*, *RAND Journal of Economics*, *Review of Economic Design*, *Review of Economic Studies*, *Theoretical Economics*