

HEIDI L. WILLIAMS

Department of Economics
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Dartmouth College
Hanover, NH 03755

Education

- 2005 – 2010 PhD, Economics, Harvard University
Dissertation: “Essays on technological change in health care markets”
Advisors: David Cutler, Amy Finkelstein, Lawrence Katz
- 2003 – 2004 MSc, Economics for Development, University of Oxford
- 1999 – 2003 AB, Mathematics, Dartmouth College

Employment

- 2023 – Professor of Economics, Dartmouth College
- 2019 – 2023 Charles R. Schwab Professor of Economics, Stanford Department of Economics
- 2019 – 2023 Professor, by courtesy, of Law; Stanford Law School
- 2019 Professor of Economics, Stanford Department of Economics
- 2018 – 2019 Trione Visiting Associate Professor, Stanford Institute for Economic Policy Research
- 2017 – 2019 Associate Professor (with tenure), MIT Department of Economics
- 2016 – 2017 Class of 1957 Career Development Associate Professor (with tenure), MIT Department of Economics
- 2014 – 2016 Class of 1957 Career Development Assistant Professor, MIT Department of Economics
- 2013 – 2014 Visiting Assistant Professor, Stanford, Stanford Institute for Economic Policy Research
- 2011 – 2014 Assistant Professor, MIT Department of Economics
- 2010 – 2011 Visiting Fellow in Aging Research, National Bureau of Economic Research (NBER)
- 2004 – 2005 Research Assistant to Professors Amy Finkelstein and Michael Kremer, NBER

Professional activities

- 2023 – Visiting Scholar, Entrepreneurial Management unit, Harvard Business School
- 2022 – Director of Science Policy, Institute for Progress
- 2022 – Co-Chair, J-PAL Science for Progress Initiative (with Paul Niehaus)
- 2021 – Co-Director, NBER Innovation Policy Working Group (with Ben Jones)
- 2021 – Editor, *Journal of Economic Perspectives*
- 2020 – 2023 Senior Fellow, Stanford Institute for Economic Policy Research
- 2020 – 2022 Co-Director, Health Care Program, NBER (with Amy Finkelstein)
- 2019 – 2020 Co-Editor, *Journal of Economic Perspectives*
- 2017 – 2020 Board of Editors, *American Economic Journal: Economic Policy*
- 2016 – Research Associate, NBER (Aging, Health Care, and Productivity)
- 2016 – 2020 Associate, Toulouse Network for Information Technology
- 2013 – 2019 Associate Member, Broad Institute of MIT and Harvard
- 2013 – 2018 Associate Editor, *International Journal of Industrial Organization*
- 2012 – 2018 Associate Editor, *Review of Economics and Statistics*
- 2010 – 2016 Faculty Research Fellow, NBER (Aging, Health Care, and Productivity)

Honors

- 2023 Fellow, American Academy of Arts and Sciences
- 2021 ASHEcon Medal, American Society of Health Economists
- 2020 Fellow, Econometric Society
- 2016 Arrow Award for Best Paper in Health Economics, iHEA
- 2016, 2017 MIT Graduate Economics Association, Best Adviser Award
- 2016 MIT Graduate Economics Association, Best Graduate Teacher Award
- 2015 MacArthur Foundation Fellowship

2015 – 2017 Alfred P. Sloan Research Fellowship
 2014 – 2016 Kauffman Junior Faculty Fellowship in Entrepreneurship Research
 2013 Kauffman/iHEA Award for Health Care Entrepreneurship and Innovation Research
 2013 MIT Undergraduate Economics Association Teaching Award
 2012 – 2017 National Science Foundation (NSF) CAREER Award
 2011 Garfield Economic Impact Award
 2011 World Economic Forum, Young Global Shaper
 2010 Healthcare Cost & Utilization Project (HCUP) Outstanding Article of the Year Award
 2010 Association for Public Policy Analysis and Management (APPAM) Dissertation Award
 2008 – 2010 Pre-doctoral Fellow in Aging and Health Economics; NBER
 2007 Price Theory Scholar; Becker Center on Chicago Price Theory; University of Chicago
 2004 Webb-Medley Overall Prize (*proxime accessit*); University of Oxford
 2003 National Science Foundation Graduate Research Fellowship
 2003 Rhodes Scholarship
 2002 Harry S. Truman Scholarship

Refereed journal publications

- “Representation and Extrapolation: Evidence from Clinical Trials”
 With Marcella Alsan, Maya Durvasula, Harsh Gupta, and Joshua Schwartzstein
 Forthcoming, *Quarterly Journal of Economics*
- “Optimal Vaccine Subsidies for Epidemic Diseases”
 With Matthew Goodkin-Gold, Michael Kremer, and Christopher Snyder
 Forthcoming, *Review of Economics and Statistics*
 One of two companion papers derived from NBER working paper #28085
- “The NBER Orange Book Dataset: A User’s Guide”
 With Maya Durvasula, C. Scott Hemphill, Lisa Larrimore Ouellette, and Bhaven Sampat
 2023, *Research Policy* 52(7): 104791
 NBER working paper #30628
- “Optimal Vaccine Subsidies for Endemic Diseases”
 With Matthew Goodkin-Gold, Michael Kremer, and Christopher Snyder
 2022, *International Journal of Industrial Organization* 84: 102840
 One of two companion papers derived from NBER working paper #28085
- “Place-Based Drivers of Mortality: Evidence from Migration”
 With Amy Finkelstein and Matthew Gentzkow
 2021, *American Economic Review* 111(8): 2697-2735
 NBER working paper #25975
- “Screening and Selection: The Case of Mammograms”
 With Liran Einav, Amy Finkelstein, Tamar Oostrom, and Abigail Osterker
 2020, *American Economic Review* 110(12): 3836-3870
 NBER working paper #26162
- “Who Profits from Patents? Rent-Sharing at Innovative Firms”
 With Patrick Kline, Neviana Petkova, and Owen Zidar
 2019, *Quarterly Journal of Economics* 134(3): 1343-1404
 NBER working paper #25245
- “The More We Die, The More We Sell? A Simple Test of the Home-Market Effect”
 With Arnaud Costinot, Dave Donaldson, and Margaret Kyle
 2019, *Quarterly Journal of Economics* 134(2): 843-894
 NBER working paper #22538
- “How Do Patents Affect Follow-On Innovation? Evidence from the Human Genome”
 With Bhaven Sampat
 2019, *American Economic Review* 109(1): 203-236

NBER working paper #21666

“How Do Patents Affect Research Investments?”

2017, *Annual Reviews of Economics* 9: 441-469

NBER working paper #23088

“Adjusting Risk Adjustment: Accounting for Variation in Diagnostic Intensity”

With Amy Finkelstein, Matthew Gentzkow, and Peter Hull

2017, *New England Journal of Medicine* 376(7): 608-610

“Sources of Geographic Variation in Health Care: Evidence from Patient Migration”

With Amy Finkelstein and Matthew Gentzkow

2016, *Quarterly Journal of Economics* 131(4): 1681-1726

NBER working paper #20789

“Why is Infant Mortality in the US Higher Than in Europe?”

With Alice Chen and Emily Oster

2016, *American Economic Journal: Economic Policy* 8(2): 89-124

NBER working paper #20525

“Paying on the Margin for Medical Care: Evidence from Breast Cancer Treatments”

With Liran Einav and Amy Finkelstein

2016, *American Economic Journal: Economic Policy* 8(1): 52-79

NBER working paper #20226

“Do Firms Underinvest in Long-Term Research? Evidence from Cancer Clinical Trials”

With Eric Budish and Benjamin Roin

2015, *American Economic Review* 105(7): 2044-2085

NBER working paper #19430

- Awarded the 2013 Kauffman/iHEA Award for Health Care Entrepreneurship and Innovation Research for “best original research paper on health care entrepreneurship”
- Awarded the 24th iHEA Arrow Award for “best health economics paper published in 2015”

“Intellectual Property Rights and Innovation: Evidence from the Human Genome”

2013, *Journal of Political Economy* 121(1): 1-27

NBER working paper #16213

“Estimating Marginal Returns to Medical Care: Evidence from At-Risk Newborns”

With Douglas Almond, Joseph Doyle, and Amanda Kowalski

2010, *Quarterly Journal of Economics* 125(2): 591-634

NBER working paper #14522

- Subsequent rejoinder: 2011, *Quarterly Journal of Economics* 126(4): 2125-2131
- Awarded the 2010 Healthcare Cost & Utilization Project (HCUP) Outstanding Article of the Year Award for “innovative and inspiring perspective on health, the health care field, public health policy, or research”
- Awarded the 2011 Garfield Economic Impact Award for “outstanding research that illustrates how medical or health research impacts the economy”

Working papers and work-in-progress

“Missing Markets for Innovation: Evidence from New Uses of Old Drugs”

With Eric Budish, Maya Durvasula, and Benjamin Roin

“The Wandering Scholars: Understanding the Heterogeneity of University Commercialization”

With Josh Lerner, Henry Manley, and Carolyn Stein

Published conference proceedings

“Private and Public Investments in Biomedical Research”

With Maya Durvasula and Lisa Larrimore Ouellette

2021, *AEA Papers & Proceedings* 111: 341-345

NBER working paper #28349

“Internalizing Externalities: Designing Effective Data Policies”

With Ryan Hill and Carolyn Stein

2020, *AEA Papers & Proceedings* 110: 49-54

“Is American Health Care Uniquely Inefficient? Evidence from Prescription Drugs”

With Margaret Kyle

2017, *American Economic Review Papers & Proceedings* 107(5): 486-90

NBER working paper #23068

“Patents and Research Investments: Assessing the Empirical Evidence”

With Eric Budish and Benjamin Roin

2016, *American Economic Review Papers & Proceedings* 106(5): 183-187

NBER working paper #21889

Non-technical writing

“A Serious Case for Dynamic Scoring.”

With Doug Elmendorf

2023, guest post on Matthew Yglesias’s Slow Boring

“To Speed Scientific Progress, Understand How Science Policy Works.”

With Matt Clancy, Dan Correa, Jordan Dworkin, Paul Niehaus, and Caleb Watney

2023, *Nature* 620 (24 August): 724-726

“To Speed Scientific Progress, Do Away with Funding Delays”

2023, *Washington Post*

“Drug pricing reforms can hurt innovation. Here are 3 ways to prevent that.”

With Caleb Watney

2022, *Washington Post*

“Breaking America’s patent stalemate.”

With Lisa Larrimore Ouellette

2020, *Project Syndicate*

“Reforming the Patent System”

With Lisa Larrimore Ouellette

2020, *The Hamilton Project Policy Proposal* 2020-12

“A Toolkit of Policies to Promote Innovation”

With Nicholas Bloom and John Van Reenen

2019, *Journal of Economic Perspectives* 33(3): 163-184

Public comments

“Comments on proposed Circular A-4”

With David Autor and many others

2022, Regulations.gov Docket No. OMB-2022-0014

“Comments on Patent Eligibility Jurisprudence Study”

With Maya Durvasula and Lisa Larrimore Ouellette

2021, Regulations.gov Docket No. PTO-P-2021-0032

Other writing

“Accelerating Innovation Ecosystems: The Promise and Challenges of Regional Innovation Engines”

With Jorge Guzman, Fiona Murray, and Scott Stern

Forthcoming, in Ben Jones and Josh Lerner (editors), *Entrepreneurship and Innovation Policy and the Economy*

NBER working paper #31541

“Innovation: Market Failures and Public Policies”

With Kevin Bryan
2021, Chapter 13 in Kate Ho, Ali Hortacsu, and Alessandro Lizzeri (editors)
Handbook of Industrial Organization 5(1): 281-388
NBER working paper #29173

“On Shoulders of Giants”

2018, *Science* 361(6408): 1195

“Standing on the Shoulders of Scotchmer: The Empirical Economics of Cumulative Innovation”

With Jeffrey Furman, Fiona Murray, and Scott Stern

2017, Chapter 27 in Stephen Maurer (editor), *On the Shoulders of Giants*: 350-357

“Intellectual Property Rights and Innovation: Evidence from Health Care Markets”

2016, in Josh Lerner and Scott Stern (editors), *Innovation Policy and the Economy Volume 16*: 53-87

NBER working paper #21246

“Innovation Inducement Prizes: Connecting Research to Policy”

2012, *Journal of Policy Analysis and Management* 31(3): 752-776

“Incentivizing Innovation: Adding to the Toolkit”

With Michael Kremer

2010, in Josh Lerner and Scott Stern (editors), *Innovation Policy and the Economy Volume 10*: 1-17

“Advance Market Commitments for Vaccines Against Neglected Diseases: Estimating Costs and Effectiveness”

With Ernst Berndt, Rachel Glennerster, Michael Kremer, Jean Lee, Ruth Levine, and Georg Weizsäcker

2007, *Health Economics* 16(3): 491-511

NBER working paper #11288

“Creating Markets for Vaccines”

With Rachel Glennerster and Michael Kremer

2006, *Innovations: Technology | Governance | Globalization* 1(1): 67-79

“Advance Market Commitments: A Policy to Stimulate Investments in Vaccines for Neglected Diseases”

With Owen Barder and Michael Kremer

2006, *The Economists' Voice* 3(3): article 1

“The Price of Life”

With Rachel Glennerster and Michael Kremer

2005, *Foreign Policy* May/June: 26-27

Invited presentations

2023 – 2024: Harvard Kennedy School

2021 – 2022: UC-Santa Barbara; UC-Berkeley; UCL; Dartmouth College

2020 – 2021: Northwestern Kellogg Innovation Speaker Series

2019 – 2020: ASSA annual meeting; Brookings/Hamilton Project

2018 – 2019: Stanford; Stanford GSB Finance; LSE; Princeton

2017 – 2018: NBER Spring Productivity meeting, Washington Center for Equitable Growth

2016 – 2017: Williams College; MIT; Council of Economic Advisers; ASSA annual meeting; UC-Berkeley Haas; Harvard; BU/Harvard/MIT Health Economics seminar; HBS; U-Chicago; Northwestern

2015 – 2016: HBS; Brown; Wellesley; Harvard; Koch Institute Cancer Symposium; NBER Summer Institute Law and Economics meeting

2014 – 2015: Federal Reserve Board; Harvard; MIT; U-Michigan; NBER Fall Public Economics meeting; Clemson; NYC health economics seminar; ASSA annual meeting; Chicago Booth; Dartmouth; HBS; US Patent and Trademark Office (USPTO); Maryland; BU School of Law; Analysis Group; MIT Sloan; UC-Berkeley Haas; NBER Innovation Policy and the Economy meeting; BU/Harvard/MIT Health

- Economics seminar; Harvard (“Innovation, regulation, and diffusion of medical technologies” workshop)
- 2013 – 2014: UCSD; UC-Berkeley Haas; Stanford; U-Arizona; Chicago Booth; UCLA Anderson; UC-Berkeley; ETH-Zurich; UT-Austin; UCLA; LSE; ASSA annual meeting; UC-Santa Barbara; Bryant; Duke Fuqua; FTC; U-Penn Wharton; Northwestern Kellogg; Princeton; NBER Summer Institute Productivity meeting; NBER Summer Institute Aging meeting; NBER Summer Institute Health Care meeting
- 2012 – 2013: Wellesley; Cornell Law School Empirical Patent Law Conference; U-Illinois at Urbana-Champaign; Office of Health Economics; Toulouse; UC-Berkeley Haas; Harvard Law School; Georgia Tech; MIT; NBER-NCAER-ICRIER Neemrana Conference; Yale Law School; 116th meeting of the National Advisory Council on Aging; U-Virginia; Carnegie Mellon; NBER Spring Productivity meeting; NBER Spring Public Economics meeting; Northwestern Kellogg (“Healthcare markets” conference); Bureau of Economic Analysis; Congressional Budget Office; NBER Summer Institute Industrial Organization meeting; NBER Summer Institute Law and Economics meeting
- 2011 – 2012: Brookings; NYU Law School
- 2010 – 2011: U-Illinois Chicago IGPA; U-Toronto Rotman; Notre Dame; Brown; NSTC (“Science of science measurement” workshop); ASSA annual meeting; Northeastern; NBER Economics of Digitization meeting; U-Maryland College Park; UC-Davis; Ohio State; RAND; UCLA; Southern California Conference in Applied Microeconomics; BU/Harvard/MIT Health Economics seminar; U-Warwick
- 2009 – 2010: NBER Fall Productivity meeting; U-Penn Wharton; Northwestern Kellogg; Northwestern; Columbia SIPA; Chicago Booth; Harvard Kennedy School; LSE, joint Department of Economics and Department of Management; Stanford, joint Department of Economics and GSB; MIT, joint Department of Economics and Sloan; HBS; UC-Berkeley Haas; Yale SOM; Broad Institute; Wellesley; Sciences Po (“Innovation without patents” conference); BU Law School (“Communicating technical knowledge” conference); WEAI meeting; NBER Summer Institute Aging meeting; IFPRI
- 2008 – 2009: Middlebury; NBER Summer Institute Health Care meeting
- 2007 – 2008: OECD (“Medicines for neglected and emerging infectious diseases” forum); ASSA annual meeting
- 2006 – 2007: NIH MIDAS meeting; Yale School of Medicine

Invited lectures

- 2021 Colin Clark Lecture, Australasian Meetings of the Econometric Society (ESAM)
- 2021 Keynote speaker, CEPR Public Economics Annual Symposium
- 2019 Uwe Reinhardt Distinguished Lecture, Department of Economics, Princeton University
- 2017 Seymour E. & Ruth B. Harris Lecture, Department of Economics, Harvard University
- 2016 Calderwood Lecture, Department of Economics, Wellesley College

Invited discussions

- 2019 – 2020: Junior Faculty Forum for Law and STEM
NBER Conference, The Role of Innovation and Entrepreneurship in Economic Growth
- 2018 – 2019: SIEPR Postdoctoral Fellows Conference
- 2017 – 2018: NBER Summer Institute Productivity meeting
NBER Summer Institute Industrial Organization meeting
- 2016 – 2017: ASSA annual meeting
- 2015 – 2016: NBER Summer Institute Productivity meeting
- 2014 – 2015: USPTO/Chicago-Kent Empirical Intellectual Property roundtable
NYU Law Engelberg Center Empirical IP Research Conference
- 2013 – 2014: SIEPR Young Scholars Conference
NBER Public Economics Fall meeting
ASSA annual meeting
Yrjo Jahnsson Foundation Conference

- 2012 – 2013: NBER Conference on the Economics of Digitization
National Tax Association 2012 Annual Conference on Taxation
Harvard Business School (HBS) Strategy Conference
NBER Summer Institute Innovation Policy and the Economy meeting
NBER Summer Institute Entrepreneurship meeting
- 2011 – 2012: USPTO/Kauffman Foundation, Patents, Entrepreneurship, and Innovation conference
UC-Berkeley, Science, Intellectual Property, and Innovation All UC conference
NBER Technological Progress and Productivity Measurement Spring meeting
ASSA annual meeting
NBER Organizational Economics Working Group Fall meeting
NBER Summer Institute Innovation Policy and the Economy meeting
U-Chicago, Individuals and Institutions in the Health Care Sector conference
NBER Law and Economics Spring meeting
- 2010 – 2011: U-Michigan, CCC Doctoral Student conference
- 2009 – 2010: Harvard Law; Pharmaceutical Research, Development, and Markets conference

Other professional service activities

Conference organization:

- Co-organizer (with James Evans and Dashun Wang), Int'l Conference on Science of Science and Innovation
- Co-organizer (with Adam Jaffe and Ben Jones), NBER Summer Institute Innovation meeting, 2020 –
- Co-organizer (with Ben Jones and Scott Stern), NBER Summer Institute Innovation meeting, 2014 – 2019
- Program Committee, Winter Meetings of the Econometric Society, 2016
- Program Committee, International Society for New Institutional Economics, 2015
- Area co-organizer (with Barak Richman), American Law and Economics Association meeting, 2014

American Economic Association (AEA) Continuing Education Program (with Kevin Bryan), 2021

Referee:

American Economic Journal: Applied Economics; American Economic Journal: Economic Policy; American Economic Review; American Economic Review: Insights; Econometrica; Economic Journal; Explorations in Economic History; Health Affairs; International Economic Review; International Journal of Industrial Organization; Israel Science Foundation; Journal of Finance; 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; Journal of Public Economics; Management Science; Mathematical Biosciences; National Science Foundation; Proceedings of the National Academy of Sciences; Quarterly Journal of Economics; RAND Journal of Economics; Review of Economic Studies; Review of Economics and Statistics; Science

Excellence in Refereeing Award, *American Economic Review*, 2014, 2016, 2017

Excellence in Refereeing Award, *Quarterly Journal of Economics*, 2011

Selection Committee Member, Harry S. Truman Scholarship, 2008 – present

Updated: August 2023