

MICHAEL D. FRAKES
Duke Law School
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CURRENT APPOINTMENTS

DUKE LAW SCHOOL, Durham, NC	
A. Kenneth Pye Professor of Law and Professor of Economics	2020-present
Professor of Law and Economics	2016-2020
NATIONAL BUREAU OF ECONOMIC RESEARCH	
Research Associate, Health Care Group	2017-
Faculty Research Fellow, Health Care Group	2014-2017

VISITING APPOINTMENTS

HARVARD LAW SCHOOL, CAMBRIDGE, MA	Spring 2018
Visiting Professor of Law	

PREVIOUS APPOINTMENTS AND PROFESSIONAL EXPERIENCE

NORTHWESTERN UNIVERSITY SCHOOL OF LAW, Chicago, IL	
Associate Professor of Law	2014-2016
Faculty Fellow, Institute for Policy Research	
CORNELL LAW SCHOOL, Ithaca, NY	2011-2014
Assistant Professor of Law	
Jia Jonathan Zhu and Ruyin Ruby Ye Sesquicentennial Faculty Fellow	
Director, Law and Economics Program	
Member, Graduate Field of Economics	
HARVARD LAW SCHOOL, THE PETRIE-FLOM CENTER FOR HEALTH LAW POLICY, BIOTECHNOLOGY AND BIOETHICS, Cambridge, MA	2009-2011
Academic Fellow & Lecturer on Law	
SKADDEN, ARPS, SLATE, MEAGHER & FLOM, LLP, Wilmington, DE	2005-2007
Associate, Mergers & Acquisitions	
FISH & RICHARDSON, P.C., Boston, MA and Wilmington, DE	Summers 2002, 2003 and 2004
Summer Associate	

TEACHING

Recent and upcoming courses: Torts (Fall 2018, Fall 2019, Spring 2021), Health Law (Spring 2018, Spring 2020), Medical Malpractice Seminar (Spring 2018), Health Law Colloquium (Fall 2018), Analytical Methods (Spring 2019), Law and Economics Colloquium (Spring 2019, Spring 2020)

EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Ph.D., Economics, 2009

Thesis: *Essays on Malpractice Law and Physician Behavior*

Committee: Professors Jonathan Gruber, Amy Finkelstein, and Joseph Doyle

General Exams: Public Finance and Econometrics

HARVARD LAW SCHOOL, J.D., *cum laude*, 2005

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, B.S., Economics, 2001

GPA: 5.0 / 5.0

AWARDS, HONORS, AND FELLOWSHIPS

Phi Beta Kappa	2001
Sigma Xi	2001
National Science Foundation Graduate Research Fellowship	2001-2005
Best Brief Award (1L), Harvard Law School	2002
MIT Presidential Graduate Fellowship	2002-2003
John M. Olin Fellow	2002-2005
John M. Olin Prize for Outstanding Paper in Law and Economics	2005
NBER Aging and Health Economics Pre-Doctoral Fellowship	2007-2009
NIHCM Foundation Annual Health Care Research Award Finalist	2020

GRANTS

The Impact of Exempting Medical Providers from Malpractice Protection, National Institutes of Health, National Institute on Aging, R01AG049898, Principal Investigator, 2015-2019 (\$1,264,172).

Statutory Rape Laws and the Incidence of Teenage Pregnancy and Sexually Transmitted Diseases, Robert Wood Johnson Foundation, Public Health Law Research Program, Project Director / Co-Principal Investigator, 2010-2011 (\$112,959).

Does the U.S Patent & Trademark Office Grant Too Many Patents?: Evidence from a Quasi-Experiment, Cornell University Institute for the Social Sciences Small Grant Program, Co-Principal Investigator, 2013-2014 (\$7,750).

PUBLICATIONS

Peer-Reviewed Economics and Law & Economics Publications

Knowledge Spillovers and Learning in the Workplace: Evidence from the U.S .Patent Office (with Melissa Wasserman), **JOURNAL OF PUBLIC ECONOMICS**, *forthcoming*.

Is Great Information Good Enough? Evidence from Physicians as Patients (with Jonathan Gruber and Anupam Babu Jena), 75 **JOURNAL OF HEALTH ECONOMICS** (2021): 1-20.

The Effect of Malpractice Law on Physician Supply: Evidence from Negligence-Standard Reforms (with Matthew Frank and Seth Seabury), 70 **JOURNAL OF HEALTH ECONOMICS** (2020): 1-16.

Procrastination at the Patent Office? (with Melissa Wasserman), 183 **JOURNAL OF PUBLIC ECONOMICS** (2020): 1-12.

Defensive Medicine and Obstetric Practices: Evidence from the Military Health System (with Jonathan Gruber), 17 **JOURNAL OF EMPIRICAL LEGAL STUDIES** 1 (2020).

Defensive Medicine: Evidence from Military Immunity (with Jonathan Gruber), 11 **AMERICAN ECONOMIC JOURNAL: ECONOMIC POLICY** 3 (2019): 197-231.

Is the Time Allocated to Review Patent Applications Inducing Examiners to Grant Invalid Patents?: Evidence from Micro-Level Application Data (with Melissa Wasserman), 99 **REVIEW OF ECONOMICS AND STATISTICS** 3 (2017): 550-563.

Does Medical Malpractice Law Improve Health Care Quality? (with Anupam B. Jena), 143 **JOURNAL OF PUBLIC ECONOMICS** (2016): 142-158.

The Effect of Statutory Rape Laws on Teen Birth Rates (with Matthew Harding), 17 **AMERICAN LAW AND ECONOMICS REVIEW** 2 (2015): 409-461.

Do Physicians Respond to Liability Standards? (with Matthew Frank and Seth Seabury), 171 **JOURNAL OF INSTITUTIONAL AND THEORETICAL ECONOMICS** 1 (2015): 58-77.

The Failed Promise of User Fees: Empirical Evidence from the U.S. Patent and Trademark Office (with Melissa Wasserman), 11 **JOURNAL OF EMPIRICAL LEGAL STUDIES** 4 (2014): 602-636.

The Impact of Medical Liability Standards on Regional Variations in Physician Behavior: Evidence from the Adoption of National-Standard Rules, 103 **AMERICAN ECONOMIC REVIEW** 1 (2013): 257-276.

Defensive Medicine and Obstetric Practices, 9 **JOURNAL OF EMPIRICAL LEGAL STUDIES** 457 (2012): 457-481.

The Deterrent Effect of Death Penalty Eligibility: Evidence from the Adoption of Child Murder Eligibility Factors (with Matthew Harding), 11 **AMERICAN LAW AND ECONOMICS REVIEW** 451 (2009): 451-497.

Does Falling Smoking Lead to Rising Obesity? (with Jonathan Gruber), 25 **JOURNAL OF HEALTH ECONOMICS** 183 (2006):183-197.

Law Review Publications

Are Constitutional Rights Enough? An Empirical Assessment of Racial Bias in Police Stops (with Rohit Asirvatham), **NORTHWESTERN UNIVERSITY LAW REVIEW** (forthcoming).

Are There as Many Trademark Offices as Trademark Examiners? (with Melissa Wasserman), 69 **DUKE LAW JOURNAL** (forthcoming 2020).

Irrational Ignorance at the Patent Office (with Melissa Wasserman), 72 **VANDERBILT LAW REVIEW** 975 (2019): 975-1030.

PTAB's Consistency Enhancing Function (with Melissa Wasserman), 104 **IOWA LAW REVIEW** 2417 (2019, invited contribution to the Administrating Patent Law Symposium): 2417-2446.

Patent Office Cohorts (with Melissa Wasserman), 65 **DUKE LAW JOURNAL** 1601 (2016): 1601-1655.

Does the U.S. Patent and Trademark Office Grant Too Many Bad Patents?: Evidence from a Quasi-Experiment (with Melissa Wasserman), 67 **STANFORD LAW REVIEW** 613 (2015): 613-676.

The Surprising Relevance of Medical Malpractice Law, 82 **UNIVERSITY OF CHICAGO LAW REVIEW** 317 (2015): 317-391.

Does Agency Funding Affect Decisionmaking?: An Empirical Assessment of the PTO's Granting Patterns (with Melissa Wasserman), 66 **VANDERBILT LAW REVIEW** 67 (2013): 67-125.

Classified Boards and Firm Value, 32 **DELAWARE JOURNAL OF CORPORATE LAW** 113 (2007): 113-157.

Peer-Reviewed Medical and Health Policy Publications

Malpractice Liability and Health Care Quality, 323 **JAMA** 4 (2020) (with Michelle Mello, Erik Blumenkranz and David Studdert): 352-366.

Review of Neurosurgery Medical Professional Liability Claims in the United States, 83 **NEUROSURGERY** 5 (2018) (with Aladine Elsamadicy, Amanda R Sergesketter, and Shivanand P Lad): 997-1006.

Challenges To Reducing Discrimination And Health Inequity Through Existing Civil Rights Laws, 36 **HEALTH AFFAIRS** 6 (2017) (with Amitabh Chandra and Anup Malani): 1041-1047.

Book Chapters

Do Patent Law Suits Target Invalid Patents?, in **SELECTION AND DECISION IN JUDICIAL PROCESS AROUND THE WORLD: EMPIRICAL INQUIRIES**, ed. Yun-chien Chang, Cambridge University Press (2019) (with Melissa Wasserman).

Empirical Scholarship on the Prosecution Process at the U.S. Patent Office, in **RESEARCH HANDBOOK ON THE ECONOMICS OF INTELLECTUAL PROPERTY LAW (VOL. II—ANALYTICAL METHODS)**, eds. Peter S. Menell and David L. Schwartz (2019) (with Melissa Wasserman).

The Economics of Health Care Rationing, in **OXFORD HANDBOOK OF AMERICAN HEALTH LAW**, eds I. Glenn Cohen, Allison Hoffman, and William Sage (2017) (with Matthew Frank and Kyle Rozema).

Policy Papers

Decreasing the Patent Office's Incentive to Grant Invalid Patents, **THE HAMILTON PROJECT** (2017) (with Melissa Wasserman).

WORKING PAPERS

A Prescription for Rising Drug Prices: Enhanced Patent Examination (with Melissa Wasserman), revision requested, **AMERICAN ECONOMIC JOURNAL: ECONOMIC POLICY**.

Public and Private Options in Practice: The Military Health System (with Jonathan Gruber and Timothy Simmons), under review.

WORKS IN PROGRESS

Racial Disparities in Health Care: Geographic Causes and the Impact of Geographic Standardization in Malpractice Standard of Care Rules.

COMMENTARY & SHORTER WORKS

Do as the doctor says, not as he or she does, **STAT** (July 2019), <https://www.statnews.com/2019/07/22/doctors-information-personal-health-decisions/> (with Jonathan Gruber and Anupam Jena).

Reducing Patent Application Backlog to Improve Patent Quality, **BERKELEY TECHNOLOGY LAW JOURNAL, COMMENTARIES** (March 2016), <http://btlj.org/2016/03/reducing-patent-application-backlog-improvepatent-quality> (with Melissa Wasserman).

Revising Patent Examiner's Time Allocations, **BERKELEY TECHNOLOGY LAW JOURNAL, COMMENTARIES** (March 2016), <http://btlj.org/2016/03/revising-patent-examiners-time-allocations> (with Melissa Wasserman)

Improving Patent Quality by Reducing the Patent Office's Backlog of Applications, Penn Program on Regulation, **REGBLOG** (April 2015), <http://www.regblog.org/2015/04/13/frakes-wasserman-patent-backlog> (with Melissa Wasserman).

Evaluating the PTO's Proposed Fee Structure, Penn Program on Regulation, **REGBLOG** (September 2012), <https://www.law.upenn.edu/blogs/regblog/2012/09/10-wasserman-frakes.html> (with Melissa Wasserman).

Can New Fees Fix the Patent System?: Don't Rely so Heavily on 'Post-allowance' Fees to Fund USPTO Operations, **WIRED** (September 2012), <http://www.wired.com/opinion/2012/09/can-new-fees-fix-the-patent-system> (with Melissa Wasserman).

SELECTED PRESENTATIONS

Uniformed Services University Workshop; ASLME Annual Health Law

2021

Professors Conference; ASHEcon Conference; Duke Law School Summer Faculty Workshop; Intellectual Property Scholars Conference; University of Texas Law and Economics Seminar (upcoming); George Mason Law and Economics Seminar (upcoming); Georgetown Law and Economics Seminar (upcoming); Washington University Law and Economics Seminar (upcoming)

Erasmus University Rotterdam Workshop on the Crossroads of Law and Economics; Max Planck Institute for Innovation and Competition Workshop; Duke Center for Science and Justice Workshop; UVA Law and Economics Colloquium; Tulane Economics Seminar; Florida, UVA and Michigan Virtual Law and Economics Workshop; University of Toronto Health Sector Strategy Workshop (postponed); University of Pennsylvania LDI Workshop (postponed); USC Schaeffer Center Workshop; Indiana University O'Neill Public Affairs and Public Finance Speaker Series. 2020

NYU Law and Economics Workshop; Vanderbilt Law and Economics / Applied-Microeconomics Workshop; Duke Law and Economics Colloquium; NBER Productivity Seminar; Intellectual Property Scholars Conference; EPIP Conference at ETH Zurich; IP Day at Boston University School of Law; Conference on Empirical Legal Studies; Florida State University College of Law Faculty Speaker Series; Empirical Patent Conference at Georgetown University; NPE Litigation Symposium at Stanford Law School; PatCon Conference. 2019

Columbia Law and Economics Workshop; Toronto Law and Economics Workshop; Northwestern University Law and Economics Workshop; University of Zurich Law and Economics Workshop; ETH Zurich Law and Economics Workshop; Intellectual Property Scholars Conference; Conference on Empirical Legal Studies; Munich Summer Institute; Empirical Health Law Conference (Organizer, Discussant); Empirical Patent Law Conference (Organizer, Discussant, Presenter); Duke Law Faculty Workshop; Harvard Law and Economics Seminar, NBER Law and Economics Spring Meeting; Harvard Health Law Society Meeting; Harvard American Constitution Society Meeting. 2018

Behavioral Economics Annual Meeting (BEAM, Berkeley); Munich Summer Institute (Keynote Speaker); PatCon (Presenter and Discussant, Northwestern Law); WIPIP Conference (Boston University); American Law and Economics Association Annual Meeting; Conference on Empirical Legal Studies (Presenter and Discussant, Cornell Law School); GMU Law and Economics Workshop; Georgetown Law and Economics Workshop; Intellectual Property Statistics for Decision Makers Conference; Hamilton Project Authors' Conference; Intellectual Property Scholars Conference (Cardozo Law School); Margolis Center Workshop; Duke Faculty Workshop; Empirical Health Law Conference (Organizer, Discussant); Empirical Patent Law Conference (Organizer, Discussant) 2017

Yale Law, Economics & Organization Workshop; Duke Law, Economics and Politics Colloquium; Intellectual Property Scholars Conference (Stanford Law School); Northwestern Law and Economics Colloquium; Workshop on the Law 2016

and Economics of Health Care (Keynote Speaker, School of Economics in Prague); Empirical IP Roundtable, United States Patent and Trademark Office (Presenter and Discussant); Harvard Law School Petrie-Flom Center Workshop; Patent Quality Conference (Santa Clara Law School); Conference on Empirical Legal Studies (Discussant); Empirical Health Law Conference (Organizer)

Workshop and Lecture Series on the Law & Economics of Innovation (ETH Zurich and University of Zurich); Intellectual Property Statistics for Decision Makers Conference; Conference on Empirical Legal Studies; Midwestern Law and Economics Association Annual Meeting; Intellectual Property Scholars Conference (DePaul Law School); UCLA Law and Economics Seminar; Harvard Stanford Yale Junior Faculty Forum; 8th Annual Searle Conference on Innovation Economics (Northwestern University School of Law); University of Illinois College of Law, IP Law Colloquium; Northwestern School of Law Faculty Colloquium; Washington University School of Law Regional Junior Faculty Workshop; Duke Law School Faculty Colloquium; Northwestern University Performance Measurement & Rewards Workshop; DePaul Law School Health Law Workshop; Boston University School of Law Faculty Workshop; WIPIP Conference (George Washington University); Empirical Patent Law Conference (Organizer, Discussant); JELS Junior Conference (Discussant, Cornell Law School); American Law and Economics Association Annual Meeting (Discussant); Empirical Health Law Conference (Organizer, Discussant); Searle Center, Third Annual Research Roundtable on Innovation Economics: Patents and Technology Standards: The Data Sets (Discussant, Northwestern University)

2015

Intellectual Property Statistics for Decision Makers; Northwestern University Institute for Policy Research Workshop; Big Ten Junior Law Professors Conference (Indiana University); NBER Summer Institute, Law and Economics Workshop; 32nd Seminar on the New Institutional Economics (Max Planck Institute); 7th Annual Junior Scholars in Intellectual Property Workshop (Michigan State University College of Law); Intellectual Property Scholars Conference (Berkeley School of Law); American Law and Economics Association Annual Meeting; Conference on Empirical Legal Studies (Discussant); Empirical Patent Law Conference (Organizer, Discussant); CESIP/USPTO Empirical IP Roundtable (Discussant); 7th Annual Searle Conference on Innovation Economics (Discussant, Northwestern University); Texas Law Review Symposium (Discussant)

2014

CESIP/USPTO Empirical IP Roundtable (Presenter and Discussant); Cornell Law School Faculty Colloquium; Medical Malpractice Roundtable (University of Texas School of Law); Cornell Law School Annual Faculty Retreat; Conference on Empirical Legal Studies (Presenter and Discussant); Harvard Law, Economics and Organization Seminar; Northwestern Law and Economics Seminar; Midwestern Law and Economics Association Annual Meeting; Cayuga Medical Center and Cornell Weill Medical College, Ithaca Regional Lecture Series; Empirical Patent Law Conference; Intellectual Property Scholars Conference

2013

(Cardozo Law School); American Law and Economics Association Annual Meeting; Rice University Department of Economics and University of Houston Department of Economics, Empirical Economics Workshop; WIPIP Conference (Seton Hall Law School); Conference on Empirical Legal Studies; ASLME Health Law Professors Conference; Empirical Legal Conference at Tel Aviv University; Empirical Patent Law Conference (Organizer, Discussant); Empirical Health Law Conference (Organizer, Discussant); Manne Faculty Forum (Discussant, George Mason University School of Law)

American Law and Economics Association Annual Meeting; Patent Statistics for Decision Makers Conference; Intellectual Property Scholars Conference (Plenary Speaker, Stanford Law); 5th Annual Junior Scholars in Intellectual Property Workshop (Michigan State University College of Law); PatCon Conference (Boston College Law School); WIPIP Conference (Houston Law Center); Conference on Empirical Legal Studies (Discussant); Empirical Patent Law Conference (Organizer, Discussant); Empirical Health Law Conference (Organizer, Discussant) 2012

Cornell Law School Student Research Colloquium; Annual Public Health Law Scholars Conference (Arizona State University College of Law); Boston College Law School, Health Law Society Seminar; Empirical Health Law Conference; Harvard Law School, Health Law Policy Workshop; American Law and Economics Association Annual Meeting; Conference on Empirical Legal Studies (Presenter and Discussant); Harvard Law School, Law and Economics Seminar; Harvard School of Public Health, Health Policy and Management Seminar; Harvard Law School Panel on Racial Disparities in Health Care (Organizer) 2007-2011

OTHER

Admitted to the Delaware Bar	December 2005
Board Member, Society for Empirical Legal Studies	November 2014-present
Fellow, Society for Empirical Legal Studies	August 2015-present
Annual Co-Organizer (with Kathy Zeiler), Empirical Health Law Conference	2011-Present
Co-Founder and Annual Co-Organizer (with Melissa Wasserman), Empirical Patent Law Conference	2012-Present
Distinguished Fellow, Searle Center on Law, Regulation and Economic Growth, Northwestern University	2016-present
Faculty Associate, Duke Initiative for Science & Society	October 2017-present

Co-Editor, Journal of Empirical Legal Studies

2013-2014

Associate Editor, Journal of Empirical Legal Studies

2016-Present

Referee for American Economic Journal: Economic Policy; American Economic Review; American Journal of Health Economics; American Law and Economics Review; Annals of Internal Medicine; BMJ; Economics and Human Biology; Economic Inquiry; Economics & Philosophy; Health Affairs; Health Services Research; International Journal of Industrial Organization; International Review of Law and Economics; JAMA Internal Medicine; Journal of Empirical Legal Studies; Journal of Health Economics; Journal of Health Politics, Policy and Law; Journal of Law and Economics; Journal of Law, Economics, and Organization; Journal of Legal Studies; Journal of Policy Analysis and Management; Journal of Political Economy; Journal of Public Economics; Journal of Risk and Uncertainty; Management Science; Milbank Quarterly; New England Journal of Medicine; Review of Economics and Statistics; Review of Economic Studies; Science; Quarterly Journal of Economics; Social Science & Medicine; American Law and Economics Association Annual Meeting; Conference on Empirical Legal Studies.

Member, American Economic Association, American Law and Economics Association, Society for Empirical Legal Studies.