BENJAMIN F. JONES

Kellogg School of Management

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PRINCIPAL APPOINTMENT

2014 - Gordon and Llura Gund Family Professor in Entrepreneurship Professor of Strategy, Kellogg School of Management

OTHER CURRENT POSITIONS

2013-	Faculty Director, Kellogg Innovation and Entrepreneurship Initiative (KIEI)
2012 -	Research Associate, National Bureau of Economic Research (NBER)
2010 -	Associate Editor, Journal of Development Economics
2005 -	Department of Political Science, Northwestern University (by courtesy)
	Faculty Affiliate, Northwestern Institute of Complex Systems (NICO), Institute for
	Policy Research (IPR) and Buffett Institute

PRIOR POSITIONS

2017 - 2018	Associate Dean, Innovation and Impact, Kellogg School of Management
2010 - 2011	Senior Economist for Macroeconomics, White House Council of Economic Advisers
2009 - 2014	Associate Professor with tenure, Kellogg School of Management
2003 - 2009	Assistant and Associate Professor, Kellogg School of Management
2005 - 2012	Faculty Research Fellow, National Bureau of Economic Research (NBER)
1997 - 1998	Special Assistant to Lawrence H. Summers, U.S. Department of the Treasury
1996	Lecturer, Kazakhstan Institute for Management and Economic Prognoses

EDUCATION

1999 - 2003	Ph.D. in Economics, MIT
1995 - 1997	M.Phil. in Economics, Oxford University
1991 - 1995	B.S.E. in Aerospace Engineering, Princeton University, summa cum laude

SELECTED AWARDS

2018	Minerva Research Initiative Grant (2019-2023)
2015	Alfred P. Sloan Foundation Grant (2015-2018)
2006-08, 2017	Finalist, L.G. Lavengood Outstanding Professor of the Year Award
2009, 2018	Excellence in Refereeing Award, American Economic Review
2015	Best African Business Case, EFMD
2011	Stanley Reiter Best Paper Award
2007	Templeton Foundation Grant
2001	SSRC Program in Applied Economics Fellowship
1995	Rhodes Scholarship
1995	Princeton University's Pyne Prize & Palmer Prize in Engineering

BOOKS

The Changing Frontier: Rethinking Science and Innovation Policy University of Chicago Press, 2015 (editor, with Adam Jaffe)

REFEREED JOURNAL ARTICLES

"Age and High-Growth Entrepreneurship"

American Economic Review: Insights, forthcoming (with Pierre Azoulay, Daniel Kim, and Javier Miranda)

"Early Career Setback and Future Career Impact"

Nature Communications, October 2019 (with Dashun Wang and Yang Wang)

"The Reverse Matthew Effect: The Consequences of Retraction in Scientific Teams" *Review of Economics and Statistics*, July 2019 (with Ginger Jin, Susan Lu, and Brian Uzzi)

"Decoding Team and Individual Impact in Science and Invention"

Proceedings of the National Academy of Sciences, June 2019 (with Mohammad Ahmadpoor)

"The Human Capital Stock: A Generalized Approach. Reply" *American Economic Review*, March 2019

"University Innovation and the Professor's Privilege" *American Economic Review*, 108(7), July 2018 (with Hans Hvide)

"The Dual Frontier: Patentable Inventions and Prior Scientific Advance" *Science*, 357, August 2017 (with Mohammad Ahmadpoor)

"The Nearly Universal Link between the Age of Past Knowledge and Tomorrow's Breakthroughs in Science and Technology: The Hotspot"

Science Advances, 3, April 2017 (with Brian Uzzi, Satyam Mukherjee, and Dan Romero)

"The Human Capital Stock: A Generalized Approach" *American Economic Review*, 104 (11), November 2014

"What Do We Learn from the Weather? The New Climate-Economy Literature" *Journal of Economic Literature*, 52 (3), September 2014 (with Melissa Dell and Ben Olken)

"The Retraction Penalty: Evidence from the Web of Science" *Scientific Reports*, 3, November 2013 (with Ginger Jin, Susan Lu, and Brian Uzzi)

"Atypical Combinations and Scientific Impact" *Science*, 342, October 2013 (with Satyam Mukherjee, Mike Stringer, and Brian Uzzi)

"Temperature Shocks and Economic Growth: Evidence from the Last Half Century" *American Economic Journal: Macroeconomics*, 4 (3), July 2012 (with Melissa Dell and Ben Olken)

"Age Dynamics in Scientific Creativity"

Proceedings of the National Academy of Sciences, 108 (47), November 2011 (with Bruce Weinberg)

"Age and Great Invention"

Review of Economics and Statistics, 99 (1), February 2010

"Hit or Miss? The Effect of Assassinations on Institutions and War" *American Economic Journal: Macroeconomics*, 1 (2), July 2009 (with Ben Olken)

"The Burden of Knowledge and the Death of the Renaissance Man: Is Innovation Getting Harder?" *Review of Economic Studies*, 76 (1), January 2009

"Multi-University Research Teams: Shifting Impact, Geography and Stratification in Science" *Science*, 322, November 2008 (with Brian Uzzi and Stefan Wuchty)

"The Anatomy of Start-Stop Growth"

Review of Economics and Statistics, 90 (3), August 2008 (with Ben Olken)

"The Increasing Dominance of Teams in the Production of Knowledge" *Science*, 316, May 2007 (with Brian Uzzi and Stefan Wuchty)

"Do Leaders Matter? National Leadership and Growth since World War II" *Quarterly Journal of Economics*, 120 (3), August 2005 (with Ben Olken)

OTHER JOURNAL ARTICLES

"Science across the Ages" in "Toward a More Scientific Science" *Science*, September 2018

"Opportunities for Advances in Climate Change Economics" *Science*, April 2016 (with Marshall Burke, Charlie Kolstad et al.)

"Climate Shocks and Exports"

American Economic Review Papers & Proceedings, 100 (2), May 2010 (with Ben Olken)

"Temperature and Income: Reconciling New Cross-Sectional and Panel Estimates"

American Economic Review Papers & Proceedings, 99 (2), May 2009 (with Melissa Dell and Ben Olken)

POLICY PAPERS AND BOOK CHAPTERS

"Artificial Intelligence and Economic Growth"

The Economics of Artificial Intelligence: An Agenda, University of Chicago Press, 2019 (with Philippe Aghion and Chad Jones)

"Learning What Works in Educational Technology with a Case Study of EDUSTAR" *Hamilton Project Discussion Paper*, Brookings Institution, March 2016 (with Ronnie Chatterji)

"Age and Scientific Genius"

Handbook of Genius, June 2014 (with E.J. Reedy and Bruce Weinberg)

"Harnessing Technology to Improve K-12 Education"

Hamilton Project Discussion Paper, Brookings Institution, September 2012 (with Ronnie Chatterji)

"As Science Evolves, How Can Science Policy?" NBER *Innovation Policy and the Economy*, 11, 2010

"National Leadership and Economic Growth"

The New Palgrave Dictionary of Economics, September 2009

WORKING PAPERS

"China: An Institutional View of an Unusual Macroeconomy" NBER Working Paper #19662, November 2013 (with David Dollar)

"The Knowledge Trap: Human Capital and Development Reconsidered" July 2014

SELECTED COMMENTS

"When Losing Out on a Big Opportunity Helps Your Career" *Harvard Business Review*, October 2019 (with Dashun Wang)

"The Average Age of a Successful Startup Founder Is 45" *Harvard Business Review*, July 2018 (with Pierre Azoulay, J. Daniel Kim, and Javier Miranda)

"Eureka" *Science*, July 2015

"Do Assassins Really Change History?"

The New York Times, Sunday Review, April 2015 (with Ben Olken)

"Make Randomized, Controlled Cuts" *Nature*, July 2013

Comment on "Generality, Recombination, and Re-Use" The Rate and Direction of Inventive Activity Revisited, Josh Lerner and Scott Stern eds., 2011

"Why Science Needs a Nudge from Washington, D.C." *Newsweek*, June 2010

"Why Do Team-Authored Papers Get Cited More?" *Science*, 317, September 2007 (with Brian Uzzi and Stefan Wuchty)

CASES

"Mobile Telecommunications: Two Entrepreneurs Enter Africa"
Kellogg School of Management (Case: 5-413-758; Teaching Note: 5-413-758TN)
September 2014 (with Dan Campbell), Winner: Best African Business Case, EFMD, 2015

"Supercell"

Harvard Business School (Case: 9-817-052; Teaching Note: 5-817-055)

October 2016 (with Bill Kerr and Alexis Brownell)

"Innovation and Access: New Cancer Drugs Come to India" Kellogg School of Management (Case: 5-416-750) October 2016 (with Anna Maitland, Ameet Morjaria, and Juliet Sorensen)

INVITED PRESENTATIONS

Seminars

- 2009- Princeton, Northwestern, Stanford, Yale SOM, University of Pennsylvania, Chicago Harris, Harvard Business School (3), Brigham Young, MIT Sloan (2), NYU (2), Yale, Berkeley Haas (2), UCLA Anderson, Harvard/MIT, Chicago Booth, LSE, London Business School, Norwegian School of Economics, University of Bergen, Brown, Arizona State, Georgia Tech, Kellogg MEDS, Columbia GSB, Indian School of Business, National University of Singapore, Sogang University, USC, MIT, Duke, UCSD, Carnegie Mellon (2), Collegio Carlo Alberto, IMF, Wharton, Chicago Economics, HEC, Stockholm, Georgia Tech, Bureau of Economic Analysis, LSE, Munich, NYU Stern, MIT Sloan, UCLA, Zurich (scheduled). Munich (scheduled)
- 2002-8 International Monetary Fund (2), World Bank (2), LSE (3), NYU Stern, Dartmouth, Harvard/MIT, Cornell, Kellogg, Boston University, Georgetown, Washington University Olin, Columbia GSB, University of Michigan, Northwestern (2), NYU Political Science, RPI, IUPUI, Wisconsin (2), University of Houston/Rice, University of Illinois Urbana, Stanford GSB, Yale, Philadelphia Fed, Chicago Harris, UBC, Kellogg, DePaul, Chicago Econ, Berkeley Haas, Northwestern, Chicago GSB, University of Toronto Rotman, UCLA Anderson, Wharton, University of Illinois Chicago, Ohio State, Penn State, Washington University Olin

Conferences

- Economics in Networks Symposium, Kaufmann-OECD Workshop, NBER Economic Fluctuations and Growth Meeting, Stanford SITE Conference, AEA Meetings, NBER Innovation Policy and Economy Spring Workshop, Central Bank of Guatemala, NBER China Meeting, Chicago Political Economy Conference, Science of Team Science Conference Opening Keynote, NSF Knowledge Conference (Wharton), NSF Knowledge Conference (Michigan), NBER Entrepreneurship Workshop, Stanford Climate Change Conference; Organisation, Economics and Policy of Scientific Research Workshop; National Center for Women and Information Technology Conference; European Policy for Intellectual Property Conference Opening Keynote, AEA Meetings 2017, NBER Entrepreneurship Workshop, NBER/AIEA Conference on Innovation and Entrepreneurship, NBER Artificial Intelligence Conference, SIEPR Working Longer and Retirement Conference, CHLR 10th International Symposium on Human Capital and Labor Markets, AEA Meetings 2020
- 2002-8 NBER Economic Fluctuations & Growth Conference, NBER Innovation Policy & the Economy Workshop (3), Northwestern University Africa Conference, Social Science Research Council, Toulouse IDEI/CSIO Conference, Technology Transfer Society Conference, Tsinghua University/World Bank Conference, San Francisco Federal Reserve Productivity Conference, NBER New Ideas about New Ideas Conference, NBER Africa Conference, Harvard Business School Strategy Conference, Tinbergen Institute Conference on Innovation and Early Stage Ideas, AEA Meetings, World Bank Commission on Growth and Development, BREAD Conference, NBER Political Economy Meeting, Northwestern Conflict and Cooperation Conference, AEA meetings, Midwest Economics Association meetings, Chicago Political Economy Conference, NBER Climate Change Conference, Canadian Conference on the Economics of Innovation and Entrepreneurship, World Bank Microeconomics of Growth Conference, NBER Economic Growth Workshop, CEPR Conflicts Globalization and Development Conference

TEACHING

Masters' programs

Kellogg Strategic Challenges in Emerging Markets (MBA, 2004 - present)

KIMEP Introductory Microeconomics (MPA, 1996)

PhD programs

Kellogg/MIT Economics of Ideas, Innovation, and Entrepreneurship (Ph.D., 2009, 2014, 2018)

NBER Economics of Artificial Intelligence (September 2018)

NBER Entrepreneurship Boot Camp (July 2012)

MIT/Harvard Development Economics (teaching assistant, Ph.D. 2003)

Executive programs

Kellogg Strategic Challenges in Emerging Markets (Executive MBA, 2010 - 2019)

IMF Economics of Climate Change (IMF Staff Training, 2016, 2018)

Kellogg Leading High Impact Teams (2017, 2018)

Harvard Launching New Ventures (2017)

PROFESSIONAL ACTIVITIES

Conference Organization

Co-organizer (with Scott Stern and Heidi Williams) of NBER's Innovation Workshop (July 2014 - July 2019)

Co-organizer (with Nick Bloom) of NBER's Productivity, Innovation, and Entrepreneurship Plenary Workshop (July 2014 - July 2017)

Co-organizer (with Scott Stern) of NBER's Economics of Intellectual Property Workshop (July 2004 - July 2010, July 2012 - July 2013)

Co-chair (with Pierre Azoulay and Heidi Williams), National Academy of Sciences Forum on "Returns to Federal Investment in the Innovation System" (December 2016)

Program Committee, Econometric Society North American Winter Meeting (January 2016)

Co-organizer (with Javier Miranda and Scott Stern) of USPTO/Census External Experts Workshop (July 2015)

Co-organizer (with Adam Jaffe) of NBER Conference "The Changing Frontier: Rethinking Science and Innovation Policy" (October 2012, August 2013)

Program Committee, Econometric Society North American Summer Meetings (June 2012)

Co-organizer (with Joel Mokyr) of Northwestern University's Nemmers Prize Conference (May 2012)

Co-organizer (with Ajay Agrawal) of NBER's Productivity Program Meeting (December 2009)

Co-organizer(with Matthias Doepke) of NBER's Growth Meeting (February 2009)

Session co-organizer (with Ben Olken) "The Economic Impacts of Climate Change," AEA meetings (January 2009)

Session co-organizer (with Ben Olken) "Growth Transitions," AEA meetings (January 2007)

Selected Discussions & Panel Presentations

AEA Annual Meetings "Empirical Practice in Economics: Challenges and Opportunities" (January 2020)

NBER Advancing the Science of Science Funding Meeting (July 2019)

NBER Advancing the Science of Science Funding Meeting (July 2018)

AEA Annual Meetings "Economic Consequences of Artificial Intelligence and Robotics" (January 2018)

AEA Annual Meetings "Economics and Artificial Intelligence" (January 2017)

AEA Annual Meetings "R&D Agglomeration, Spillovers, and Recombination" (January 2017)

AEA Annual Meetings "Climate Change: Past, Present, and Future" (January 2017)

NBER Growth Meeting (July 2016)

University of Chicago Firm Dynamics and the Aggregate Economy Conference (April 2016)

Hamilton Project "Strengthening Student Learning through Innovation and Flexibility" (March 2016)

AEA Annual Meetings "Documenting the Costs of Climate Change" (January 2015)

AEA Annual Meetings "Entrepreneurship and Creativity" (January 2015)

NBER Environmental and Energy Economics Meeting (July 2014)

NBER Entrepreneurship Meeting (July 2014)

NSF Science of Science Policy Workshop (June 2014)

NBER Environmental and Energy Economics Meeting (January 2014)

AEA Annual Meetings "Patents, Innovation, and Growth" (January 2014)

Roundtable for Engineering Entrepreneurship Research (November 2013)

NBER Innovation Policy and Economy Day (July 2013)

NBER Economics of Digitization Conference (June 2013)

Hamilton Project "Promoting Attainment and Achievement in K-12 Education" (September 2012)

NBER Innovation Policy and the Economy Meeting (July 2012)

Silicon Flatirons Innovation Policy and National Competitiveness Conference (September 2011)

NBER Rate and Direction of Inventive Activity 50th Anniversary Conference (September 2010)

NBER Productivity Program Meeting (July 2010)

Canadian Economics of Innovation and Entrepreneurship Conference (May 2010)

Science of Team Science Conference (April 2010)

NBER Location of Biopharmaceutical Activity Conference (March 2008)

MEA Annual Meetings "Growth and Output Shocks in Asian Economies" (March 2008)

NBER Entrepreneurship Conference (September 2007)

NBER Growth Meeting (July 2007)

NBER Innovation Policy and the Economy Meeting (July 2006, July 2007)

AEA Annual Meetings "Education and Democracy" (January 2007)

IMF Economic Growth and Latin America Conference (November 2006)

NBER Africa Meeting (April 2006)

Northwestern / Toulouse Industrial Organization Conference (May 2004)

Refereeing

American Economic Review, American Economic Review: Insights, American Economic Journal: Applied Economics, American Economic Journal: Macroeconomics, American Journal of Sociology, American Political Science Review, Berkeley Electronic Press, Econometrica, Economica, Economic Journal, Economics Letters, European Economic Review, Journal of Comparative Economics, Journal of Development Economics, Journal of Economic Growth, Journal of Economic Theory, Journal of Economic Literature, Journal of Economics and Management Strategy, Journal of the European Economic Association, Journal of Human Capital, Journal of Human Resources, Journal of Industrial Economics, Journal of Labor Economics, Journal of Monetary Economics, Journal of Political Economy, Journal of Public Economics, Management Science, National Tax Journal, Nature Climate Change, Organization Science, Oxford Bulletin of Economics and Statistics, PLOS One, Proceedings of the National Academy of Sciences, Rand Journal of Economics, Review of Economics and Statistics, Review of Economic Studies, Quarterly Journal of Economics, Science, Small Group Research, World Development

Ad-hoc Reviewer

National Science Foundation Alfred P. Sloan Foundation MacArthur Foundation Social Sciences and Humanities Research Council of Canada Routledge Books

Outside Activities

Life Member, Council on Foreign Relations

Trustee, United World College – USA

Member, Oversight Panel on Productivity Measurement, Brookings Institution (2018 – present)

Member, Research Advisory Council, PowerMyLearning

Member, Committee on Transportation Investments in Response to Economic Downturns, National Research Council (2011-2014)

Consultant, Exxon Mobil, Project to improve research productivity (2018)

Updated in September 2019