JULIAN KOLEV

https://people.smu.edu/jkolev/
[Link to Most Recent CV: bit.ly/KolevCV]

Contact Information
6212 Bishop Blvd #116F
Dallas, TX 75275

jkolev@smu.edu
Office: 214-768-3178
Mobile: 617-752-1143

Employment

August 2013 – present:
Assistant Professor — Cox School of Business
Dept. of Strategy and Entrepreneurship — Southern Methodist University

August 2018 – June 2019:
Visiting Assistant Professor — Sloan School of Management
Dept. of Technological Innovation, Entrepreneurship, and Strategic Management — Massachusetts Institute of Technology

References

Professor Philippe Aghion
College de France & London School of Econ.
331-44-271706, paghion@fas.harvard.edu

Professor Fiona Murray
MIT Sloan School of Management
617-253-3681, fmurray@mit.edu

Professor Josh Lerner
Harvard Business School
617-495-6065, jlerner@hbs.edu

Professor Scott Stern
MIT Sloan School of Management
617-253-3053, sstern@mit.edu

Education

Undergraduate:
B.A., Economics, Harvard University, *summa cum laude*, 2006.

Graduate:
Ph.D., Business Economics, Harvard University and Harvard Business School, 2012.
Thesis Title: "Essays in Finance and Innovation." Committee: Philippe Aghion (chair), Josh Lerner, and Jeremy Stein.

Post-Doctoral Fellowship
MIT Sloan School of Management, June 2012 to June 2013.
Research Focus: The Economics of Knowledge Contribution and Distribution
Advisors: Fiona Murray (fmurray@mit.edu) and Joshua Gans (joshua.gans@rotman.utoronto.ca)

Teaching

Summer, 2018	Strategy 6201: Strategic Management (MBA), teaching ~40 students over 7 weeks of condensed instruction.
Summer, 2018	Strategy 6201: Strategic Management (MBA), teaching ~30 students over 7 weeks of condensed instruction.
Spring, 2018	Strategy 5370: Strategic Management (undergraduate), teaching ~155 students over 3 sections and 14 weeks of instruction.
Fall, 2016	Strategy 5370: Strategic Management (undergraduate), teaching ~120 students over 3 sections and 14 weeks of instruction.
Spring, 2016	Strategy 5370: Strategic Management (undergraduate), teaching ~150 students over 3 sections and 14 weeks of instruction.
Spring, 2015	Strategy 5370: Strategic Management (undergraduate), teaching ~130 students over 3 sections and 14 weeks of instruction.
Spring, 2014	Strategy 5370: Strategic Management (undergraduate), teaching ~135 students over 3 sections and 14 weeks of instruction.

Spring, 2011	Economics 1030: Psychology and Economics (undergraduate), teaching fellow for Professors David Laibson and Andrei Shleifer
Spring 2010	Economics 1056: Market Design (undergraduate), teaching fellow for Professor Susan Athey
Spring 2009	Economics 2725: Corporate Finance (graduate), teaching fellow for Professors Efraim Benmelech and David Scharfstein

Research Fields

Primary: Entrepreneurial Strategy, Technology and Innovation Management, Intellectual Property, Commercialization, Organizational Economics

Secondary: Entrepreneurial and Corporate Finance, Technology Transfer, Contract Theory

Peer-Reviewed Publications

Murray, Fiona, Philippe Aghion, Mathias Dewatripont, Julian Kolev, and Scott Stern. 2016. "Of Mice and Academics: Examining the Effect of Openness on Innovation." *American Economic Journal: Economic Policy,* 8(1): 212-52.

This paper argues that openness, by lowering costs to access existing research, can enhance both early and late stage innovation through greater exploration of novel research directions. We examine a natural experiment in openness: late-1990s NIH agreements that reduced academics' access costs regarding certain genetically engineered mice. Implementing difference-in-differences estimators, we find that increased openness encourages entry by new researchers and exploration of more diverse research paths, and does not reduce the creation of new genetically engineered mice. Our findings highlight a neglected cost of strong intellectual property restrictions: lower levels of exploration leading to reduced diversity of research output.

Additional Publications

Aghion, Philippe, Mathias Dewatripont, Julian Kolev, Fiona Murray, and Scott Stern. 2010. "The Public and Private Sectors in the Process of Innovation: Theory and Evidence from the Mouse Genetics Revolution." *American Economic Review*, 100(2): 153–58.

Murray, Fiona, and Julian Kolev. 2015. "An Entrepreneur's Guide to the University," in Albert N. Link, Donald S. Siegel, & Mike Wright (Eds.), *The Chicago Handbook of Technology Transfer and Academic Entrepreneurship.* (pp. 97-137). University of Chicago Press.

Papers Under Review or Undergoing Revision:

"Funding, Innovation, and Firm Formation: How Entrepreneurs Respond to Investment Booms"

Sole-Authored

2nd R&R at *Strategic Management Journal*

This paper examines how the local funding environment impacts entrepreneurs' entry decisions and innovative output. I analyze patent filings of a panel of potential entrepreneurs: life-science inventors linked to top US universities. Using venture-backed IPOs in the same location but different industries, I find the causal impact of greater funding to be a 10-15% increase in inventor transitions from academia to the private sector, associated with a 70% increase in post-transition patenting. Greater funding also leads to a 19% reduction in patent citations, reflecting lower scientific value, as well as reductions in the scope of innovation and the time horizon of its impact. These findings highlight the critical role of funding availability in driving the tradeoff between short-term payoffs and long-term value in innovative industries.

"Is Blinded Review Enough? How Gendered Outcomes Arise Even Under Anonymous Evaluation"

with Yuly Fuentes-Medel and Fiona Murray

Previously submitted to *Org. Science*; revising for submission to *Academy of Management Journal*

Working Paper: https://www.nber.org/papers/w25759

For organizations focused on scientific research and innovation, diversity is a key driver of organizational success. This diversity depends crucially on the design of processes that identify and select innovative projects and people. Unfortunately, evidence suggests that selection processes can suffer from numerous sources of bias, thereby undermining diversity and inclusion. Blinded review is a direct and increasingly popular approach to reducing the impact of bias, yet its effectiveness is not fully understood. We explore the impact of the blinded-review process on

gender inclusion in a unique setting: innovative research grant proposals submitted to the Gates Foundation from 2008-2017. Despite blinded review, we find that female applicants receive significantly lower scores, which cannot be explained by reviewer characteristics, proposal topics, or ex-ante measures of applicant quality. By contrast, we show that the gender score gap is no longer significant after controlling for text-based measures of proposals' titles and descriptions. Specifically, we find strong gender differences in the usage of broad and narrow words, suggesting that differing communication styles are a key driver of the gender score gap. Importantly, the text-based measures that predict higher reviewer scores do not also predict higher ex-post innovative performance. Instead, female applicants exhibit a greater response after an accepted proposal than their male counterparts, in terms of generating follow-on success in other scientific activities. Our results reveal that gender differences in writing and communication (rather than ascriptive bias) are a significant contributor to gender disparities in the evaluation and development of science and innovation.

Working Papers:

"Expert Evaluation in Innovation: The Role of Distance and Consensus in Project Selection"
with Pierre Azoulay, Yuly Fuentes-Medel, and Fiona Murray
Preparing for Submission to *Management Science*

One third of all R&D expenditures in the U.S. are funded by government agencies and non-profit institutions, with the bulk of this funding distributed through systems of expert evaluation for the awarding of competitive grants. The dominant model of peer review makes funding decisions by consensus, using groups of experts in a particular field. However, this approach has been criticized on the grounds that it screens out highly novel projects and projects from unconventional sources. To address these concerns, the Bill and Melinda Gates Foundation's Global Challenges Exploration (GCE) Program replaces the traditional model of peer review with champion-based decision-making by diverse sets of reviewers. We evaluate this alternative institution for the funding of scientific research using the first four rounds of the GCE Program dating from 2008 to 2018. We find that the optimal evaluation process depends crucially on the desired outcome of the organization. For incremental outcomes such as academic publications, consensus-based decisions from a panel of experts near the proposal's topic generate the best outcomes. By contrast, for more significant measures of innovation, such as clinical trials, more distant reviewers generate the best evaluations, and champion-based aggregation is no worse than consensus. Our findings highlight important tradeoffs inherent in the evaluation of innovation, and offer guidance to organizations in matching their process to their strategy.

"Can Piracy Increase Innovation? The Software Industry's Response to Online File Sharing"
with Wendy Bradley

We analyze the impact of digital piracy on innovation in the software industry by focusing on the natural experiment of file sharing tools developed and released in the early 2000's. Using difference-in-differences estimators, we find that the introduction of file sharing led to an increase in subsequent R&D spending, patents, trademarks, and copyrights by software-focused firms relative to hardware-focused firms in the same industry. We also evaluate the rate of new product introductions using survival analysis methods and find that software firms decrease their rate of new product releases following the rise in digital piracy. Our findings suggest that weakened intellectual property protection resulting from piracy can sometimes increase the rate of corporate innovation: firms seek to introduce new products that are superior to those available through piracy, but this innovation may reach the public at a slower pace.

"Strategic Corporate Layoffs"
with Ruchir Agarwal
Working Paper: http://www.imf.org/external/pubs/cat/longres.aspx?sk=44504

Firms in the S&P 500 often announce layoffs within days of one another, despite the fact that the average S&P 500 constituent announces layoffs once every 5 years. This paper provides evidence that such clustering behavior is largely due to the reputational concerns of CEOs and top managers, particularly in relation to financial markets. We identify a subsample of firms that engage in layoffs immediately following the layoff announcements of large firms ("followers"), and compare them to firms that announce layoffs without such clustering. We find that followers have younger CEOs, less coverage by stock analysts, and use more market-based executive compensation. In addition, we find that the firms that cluster layoff announcements at daily frequencies are also the ones that are more likely to engage in mass layoffs during recessions. These effects are not driven by leverage, lifecycle differences, or other observable criteria. Our findings suggest that reputation management is an important driver of layoff policies both at daily frequencies and over the business cycle, and can have significant macroeconomic consequences.

Selected Presentations

MIT Sloan, Department of Technological Innovation, Entrepreneurship, and Strategic Management (TIES), December 2018
Rethinking Peer Review: Evidence from the Gates Foundation
Georgia Tech Roundtable for Engineering and Entrepreneurship Research (REER), November 2018
Is Blinded Review Enough to Overcome Gender Bias?
NBER Productivity Seminar, October 2018
Is Blinded Review Enough to Overcome Gender Bias?
American Economic Association Annual Meeting, January 2018
Rethinking Peer Review: Evidence from the Gates Foundation
Strategic Management Society Annual Meeting, October 2017
Rethinking Peer Review: Evidence from the Gates Foundation
DRUID 16 Annual Conference, June 2016
Funding, innovation, and firm formation: How entrepreneurs respond to investment booms
NBER Productivity Seminar, March 2014
Rethinking Peer Review: Evidence from the Gates Foundation
NBER Productivity Seminar, April 2013
Credit Constraints and their Impact on Innovation: Evidence from Venture Capital Exits

Service Highlights

Reviewer for: Management Science, The Review of Economics and Statistics, and The Economics of Transition, 2012-present
Member, SMU Cox School of Business Dean Search Committee, Sept. 2016-April 2017
Board Member and Cox School of Business Representative, SMU Faculty Club, 2015-present
Organizing Member and Invited Lecturer, BPIAS Summer School in Economics, 2015-present
Faculty Mentor, SMU Business Plan Competition and Southwest Venture Forum, 2015-present