Sharon Belenzon

Duke University, Fuqua School of Business 100 Fuqua Drive, Durham, NC 27708, USA July 2023 sharon.belenzon@duke.edu (1) 919 564 6701

APPOINTMENTS

Fundación Damm Distinguished Professor of Business Administration Duke University, Fuqua School of Business	2023-present
Professor Duke University, Fuqua School of Business	2020-2023
Associate professor with tenure Duke University, Fuqua School of Business	2016-2020
Associate professor without tenure Duke University, Fuqua School of Business	2013-2016
Assistant professor Duke University, Fuqua School of Business	2008-2013
Research Associate National Bureau of Economic Research	2017-present

EDUCATION

Postdoctoral research in Economics	2005-2008
Nuffield College, University of Oxford (mentors: Steve Bond and Paul Gompers)	
PhD in Economics	2003-2005

London School of Economics and Political Science

Dissertation: "Endogenous Knowledge Flow and Sequential Innovation: Implications for Technology Diffusion, R&D and Firm Performance" (advisors: Mark Schankerman and John Van Reenen).

M.A. in Economics
Tel Aviv University

1999-2000

B.A. in Economics and Business Administration Tel Aviv University

1997-2000

RESEARCH (authors alphabetically)

Journal Publications:

- (1) Ashish Arora, Sharon Belenzon, and Bernardo Dionisi, "First mover advantage and the private value of public science", accepted in *Research Policy*.
- (2) Arora Ashish, Belenzon Sharon, Matt Marx and Dror Shvadron, "How does patent scope affect corporate research? The role of commercialization capabilities and the market" forthcoming in *Journal of Law, Economics and Organization*.
- (3) Belenzon, Sharon, Lee, Honggi, and Patacconi, Andrea, "Managing risk in corporate groups: Limited liability, asset partitioning, and risk compartmentalization," Forthcoming in Strategic Management Journal.
- (4) Arora Ashish, Belenzon Sharon, and Suh JK, "Science and the Market for Technology," Management Science 2021, Volume 68(10): 7065-7791.
- (5) Arora Ashish, Belenzon Sharon, and Sheer Lia, "Matching Patents to Compustat Firms, 1980-2015: Dynamic Reassignment, Name Changes and Ownership Structures", Research Policy, Volume 50(5), 2021.
- (6) Arora Ashish, Belenzon Sharon, and Sheer Lia, "Knowledge spillovers and corporate investment in scientific research", *American Economic Review* 2021 111 (3): 871-988.

1

- (7) Arora Ashish, Belenzon Sharon, and Patacconi Andrea, "Knowledge Sharing in Alliances and Alliance Portfolios", *Management Science*, 2021 Volume 50(5): 1329-1992.
- (8) Belenzon Sharon, Chatterji Aaron, and Daley Brendan, "Choosing between Growth and Glory", *Management Science* 2020 66(5), 1783-2290.
- (9) Belenzon Sharon, Bennett Victor, and Patacconi Andrea, "Workers on tap? How labor flexibility fosters experimentation and business creation", *Strategy Science* 4(3), September 2019: 175-249.
- (10) Arora Ashish, Belenzon Sharon, and Patacconi Andrea, "A theory of the US innovation ecosystem: Evolution, diversity and efficiency", *Industrial and corporate change* 2019 28 (2): 289-307.
- (11) Belenzon Sharon, Hashai Niron, and Patacconi Andrea, "The architecture of attention: Group structure and subsidiary autonomy", *Strategic Management Journal* 2019 40(10): 1610-1643.
- (12) Belenzon Sharon, Shamshur Anastasiya, and Zarutskie Rebecca, "Manager's Age and the Performance of Closely Held Firms", *Strategic Management Journal* 2019 40(6), 917-944.
- (13) Arora Ashish, Belenzon Sharon, and Lee Honggi, "Reverse Citations and Localized Knowledge Spillovers", *Journal of Economic Geography* 18(3), 495–521 (2018).
- (14) Arora Ashish, Belenzon Sharon, and Patacconi Andrea, "The decline of science in corporate R&D", Strategic Management Journal 39(1), 3-32 (2018).
- (15) Belenzon Sharon, Chatterji Aaron, and Daly Brendan, "Eponymous Entrepreneurs", American Economic Review 107(6), 1638-55 (2017).
- (16) Belenzon Sharon and Tsolmon Ulya, "Market Frictions and the Competitive Advantage of Internal Labor Markets", *Strategic Management Journal* 37, 1280–1303 (2016).
- (17) Belenzon Sharon, Patacconi Andrea, and Zarutskie Rebecca, "Married to the firm? A large-scale investigation of the social context of ownership", *Strategic Management Journal* 37(13), 2611-2638 (2015).
- (18) Belenzon, Sharon, and Schankerman, Mark, "Motivation and Sorting of Human Capital in Open Innovation", Strategic Management Journal 36, 795–820 (2015).
- (19) Belenzon, Sharon, and Patacconi, Andrea, "How does firm size mediate firms' ability to benefit from invention? Evidence from patents and scientific publications", European Management Review 11(1), 21-45 (2014).
- (20) Arora Ashish, Belenzon Sharon, and Rios Luis, "Make, Buy, Organize: The Interplay Between R&D, External Knowledge, and Firm Structure", *Strategic Management Journal* 35, 317–337 (2014).
- (21) Belenzon, Sharon, and Patacconi, Andrea, "Innovation and firm value: An investigation of the changing role of patents", Research policy 42(8), 1496-1510 (2013).
- (22) Belenzon, Sharon, Berkovitz, Tomer, and Rios Luis, "Capital markets and firm organization: How financial development shapes European corporate groups", *Management Science* 59, 1326-1343 (2013).
- (23) Belenzon, Sharon, and Schankerman, Mark, "Spreading the Word: Geography, Policy, and Knowledge Spillovers", *Review of Economics and Statistics* 95(3), 884-903 (2013).
- (24) Belenzon, Sharon, "Cumulative Innovation and Market Value: Evidence from Patent Citations", Economic Journal 559(122), 265-285 (2012).
- (25) Belenzon, Sharon, and Berkovitz, Tomer, "Innovation in Business Groups", Management Science 56(3), 519-535 (2010).
- (26) Belenzon Sharon and Schankerman Mark, "University Knowledge Transfer: Private Ownership, Incentives and Local Development Objectives", *Journal of Law and Economics* 52(1), 111-144 (2009).

Working Papers (in-progress):

(27) Belenzon Sharon and Cioaca Larisa, "Buyers of First Resort: Guaranteed Markets and Corporate Scientific Research"

2

- (28) Ashish Arora, Sharon Belenzon, Konstantin Kosenko, JK Suh and Yishay Yafeh, "The Rise of Scientific Research in Corporate America" NBER Working Paper 29260.
- (29) Ashish Arora, Sharon Belenzon, Larisa Cioaca, Lia Sheer and Hansen Zhang, "The Effect of Public Science on Corporate R&D".
- (30) Sharon Belenzon, Larisa Cioaca and Elia Ferracuti, "The Private Value of Government R&D Contracts".
- (31) Sharon Belenzon, Honggi Lee and Andrea Patacconi, "An asset partitioning perspective on corporate groups".
- (32) Sharon Belenzon, Larisa Cioaca, Lia Sheer, John Shin and Dror Shvadron, "DISCERN 2.0: Econometric Implications of Fixed Effect Models with Miss-classified Patent Owners"
- (33) Sharon Belenzon and Joyce Ma, "The Effect of Corporate Research on Startup Formation and Growth"
- (34) Sharon Belenzon, Larisa Cioaca, JK Suh and Honggi Lee, "The Co-Evolution of 'Pull' Innovation Policies and Corporate R&D"
- (35) Sharon Belenzon, Larisa Cioaca and Joyce Ma, "Startups Participation in Government Technology Procurement"
- (36) Ashish Arora, Sharon Belenzon, JK SUh and Hansen Zhang, "The Golden Age of Corporate Scientific Research: 1940-1980"
- (37) Belenzon Sharon, Berkovitz Tomer and Patrick Bolton, "Intracompany governance and innovation", NBER Working Paper 15304 (unpublished).

Other:

- (38) A new Sputnik moment? Dialogue Magazine, August 2023
- (39) The changing structure of American innovation, NBER Digest, March 2023
- (40) Protecting America's advantage, Dialogue Magazine, May 2022
- (41) American Science And Technology Leadership Under Threat: Restrictive Antitrust Legislation And Growing Global Competition (with Ashish Arora), Progressive Policy Institute, May 2022
- (42) Government Procurement: A Policy Lever to Revitalize Corporate Scientific Research (with Larisa Cioaca), Progressive Policy Institute, February 2022
- (43) Congressional briefing "American Information Technology (IT) Innovation Under Threat", November 2021
- (44) Congressional briefing "The Decline in Corporate Research: Should We Worry?" with Senator Chris Coons (D-DE), Co-chair, Senate Competitiveness Caucus, Washington, June 6, 2017
- (45) Why the U.S. Innovation Ecosystem Is Slowing Down (with Ashish Arora, Andrea Patacconi and JK Suh), Harvard Business Review (online), November 26, 2019
- (46) Patent 10,007,882, "System, Method and Apparatus to Determine Associations Among Digital Documents", 2018.
- (47) Arora Ashish, Belenzon Sharon, Patacconi Andrea, and Suh Jungkyu "Science-based entrepreneurship bridges an increasingly splintered innovative ecosystem. Can this model work for all?", *Harvard Business Review (online)* (2019).
- (48) Arora Ashish, Belenzon Sharon, and Patacconi Andrea, "Papers to patents: The withdrawal of large US corporations from research narrows the scope of innovation", comment, *Nature* 52, S10 (2017).
- (49) Arora Ashish, Belenzon Sharon, Patacconi Andrea, and Suh Jungkyu, "The changing structure of American innovation: Cautionary remarks for economic growth", NBER Innovation Policy and the Economy (2019).
- (50) Arora Ashish, Belenzon Sharon, Wesley Cohen and Patacconi Andrea, "There is life in the pursuit of research", comment, *Nature* 569, S18–S19.

3

(51) Belenzon, Sharon, Honggi Lee, and Patacconi, Andrea, "Enterprise Liability and the Organization of Production Across Countries", *Harvard Law School Forum on Corporate Governance and Financial Regulation* (July 3 2018).

MAIN SEMINAR AND CONFERENCE PRESENTATIONS

- 2023 SIOE, Frankfurt Germany, Towards a legal theory of the firm
- 2023 Boston University, IP Day Guaranteed demand and corporate scientific research
- 2023 Columbia University (January 2023), Guaranteed demand and corporate scientific research
- 2022 UC Berkeley Haas (November 2022), Guaranteed demand and corporate scientific research
- 2022 Northwestern Pritzker School of Law, Forum for Law and STEM, Discussant (October 2022)
- National Bureau of Economic Research, productivity seminar, Guaranteed demand and corporate scientific research (with Larisa Cioaca)
- 2022 Academy of Management, Guaranteed demand and corporate scientific research (with Larisa Cioaca)
- 2022 Academy of Management, The rise of corporate science (with JK Suh)
- National Bureau of Economic Research, Guaranteed demand and corporate scientific research (with Larisa Cioaca)
- 2022 Bocconi University, Towards a legal theory of the firm
- 2022 NBER Economics of Innovation in the Energy Sector Meeting, Discussant
- 2021 Strategic Management Society, Machine learning applications for patents research
- $2021 \qquad \text{Berkeley, } \textit{Guaranteed markets and corporate scientific research}$
- 2021 AIEA-NBER Meeting, Discussant
- AIEA-NBER Meeting, Guaranteed demand and corporate scientific research (with Larisa Cioaca)
- 2021 Purdue, Guaranteed markets and corporate scientific research
- 2021 American Economic Association, The rise of corporate science (with JK Suh)
- Washington University, How does patent scope affect corporate research? The role of commercialization capabilities and the market for technology
- 2020 Boston University Technology and Declining Economic Dynamism Conference, *The Rise of Corporate Science* (with JK Suh)
- National Bureau of Economic Research, Productivity Seminar, How does patent scope affect corporate research? The role of commercialization capabilities and the market for technology (with Dror Shvadron)
- 2019 Universidad Carlos III de Madrid, Knowledge spillovers and corporate investment in scientific research
- 2019 Iowa State University, Knowledge spillovers and corporate investment in scientific research
- 2019 Hebrew University, conference on Technology, Governance and Regulation, Science and the cost of knowledge transfer (joint with Ashish Arora)
- Hebrew University, conference on Technology, Governance and Regulation, *Declining novelty* in American invention (joint with Wesley Cohen)
- 2019 Bocconi University, Knowledge spillovers and corporate investment in scientific research
- NBER, Washington DC, The changing structure of American innovation: Cautionary remarks for economic growth (joint with Ashish Arora)
- 2019 Duke University, School of Law, Do patents block follow-on innovation?
- 2018 Hebrew University of Jerusalem, Choosing between growth and glory
- 2018 IDC Herzliya, Choosing between growth and glory
- University of Connecticut, Towards a legal theory of the firm: Intra-organizational limited liability, asset partitioning, and delegation around the world
- 2018 University of Maryland, Science and technical change
- 2017 HEC Paris, Choosing between growth and glory
- 2017 University of Maryland, Knowledge spillovers and corporate investment in scientific research
- 2017 Academy of Management, Atlanta Strategy PhD panel
- Northwestern, Searle Conference, Reverse Citations and the Localization of Knowledge Spillovers
- National Bureau of Economic Research, Knowledge spillovers and corporate investment in scientific research

4

- 2016 Temple University, AIBNE Conference, Keynote speaker, Reverse Citations and the Localization of Knowledge Spillovers
- 2016 Harvard University, Department of Economics, (joint with Ashish Arora) Killing the Golden Goose? The Changing Nature of Corporate Research, 1980-2007
- 2016 Berkeley, Haas School of Business, (joint with Ashish Arora) Killing the Golden Goose? The Changing Nature of Corporate Research, 1980-2007
- 2015 LMU, Munich, Killing the Golden Goose? The Changing Nature of Corporate Research, 1980-2007
- 2015 London Business School, Killing the Golden Goose? The Changing Nature of Corporate Research, 1980-2007
- National Bureau of Economic Research (joint with Ashish Arora), Summer Institute Workshop, Killing the Golden Goose? The Changing Nature of Corporate Research, 1980-2007
- National Bureau of Economic Research, productivity seminar, Killing the Golden Goose? The Changing Nature of Corporate Research, 1980-2007
- 2014 Stanford University, Killing the Golden Goose? The Changing Nature of Corporate Research, 1980-2007
- 2014 Bocconi University, Managers vs. Management: Cross Country Analysis of the Impact of Managers on Firm Performance
- 2013 MIT, Sloan, Eponymous Entrepreneurs
- 2013 National Bureau of Economic Research (joint with Ronnie Chatterji), Spring Productivity Workshop, *Eponymous Entrepreneurs*
- 2013 Copenhagen Business School, Market Frictions and the Competitive Advantage of Internal Labor Markets
- 2012 Harvard Business School, Market Frictions and the Competitive Advantage of Internal Labor Markets
- 2012 Harvard Business School, Married to the Firm? A Large-Scale Investigation of the Social Context of Ownership
- 2012 University of Maryland, Married to the Firm? A Large-Scale Investigation of the Social Context of Ownership
- National Bureau of Economic Research, Married to the Firm? A Large-Scale Investigation of the Social Context of Ownership
- 2011 Bocconi University, Married to the Firm? A Large-Scale Investigation of the Social Context of Ownership
- 2011 New York University, The Organization of Innovation across Countries and Industries
- 2010 Georgia Tech, REER conference, Spreading the Word: Geography, Policy and Knowledge Spillovers
- 2009 National Bureau of Economic Research, Summer Institute Workshop, Spreading the Word: Geography, Policy and Knowledge Spillovers
- 2009 Wharton, The Organization of Innovation across Countries and Industries
- 2009 London Business School, Make, Buy, Organize: The Interplay between Research, External Knowledge, and Firm Structure
- 2008 Columbia University, The Organization of Innovation across Countries and Industries

SERVICE

- Strategy Area Coordinator, Fuqua School of Business, Duke University (July 2022)
- Chair of Fuqua's Curriculum Committee, Duke University (2021-2022)
- Head of the Strategy PhD program, Duke University (2018-2021)
- Founder, the Fuqua Strategy Conference (2012), Innovation summer school on the management and economics of innovation (2022)
- Co-organizer, "Technology, Governance and Regulation" conference, Hebrew University of Jerusalem, Israel (2019)
- Ad hoc reviewer: Organization Science, Research Policy, European Management Review, Journal of Economics and Management Strategy, Industrial and Corporate Change, Review of Economics and Statistics, Economic Journal, American Economic Review, Rand Journal of Economics, National Science Foundation, Journal of Corporate Finance, Strategy Science, Strategic Management Journal,

Management Science, European Research Council (ERC), Journal of Law, Economics and Organization, Journal of Applied Econometrics, Journal of Political Economy, Journal of Banking and Finance, Review of Accounting Studies

- Dissertation co-chair: Jungkyu Suh (2016-2022)Tenure-track faculty, NYU Stern School of Business, New York University (first placement)
- Dissertation co-chair Lia Sheer (2015-2021). Tenure-track faculty, Coller School of Business, Tel-Aviv University (first placement)
- Dissertation chair: Honggi Lee (2014-2020). Tenure-track faculty, Peter T. Paul College of Business and Economics, University of New Hampshire (first placement)
- Dissertation chair: Xiaoshu Bei (2013-2019). Tenure-track faculty, University of Colorado Business School (first placement)
- Dissertation co-chair: Luis Rios (2008-2016). Tenure-track faculty, Wharton School of Business, University of Pennsylvania (first placement)
- Dissertation co-chair: Ulya Tsolmon (2009-2015). Tenure-track faculty, Olin Business School, Washington University in St. Lois (first placement)
- Dissertation chair: Larisa Cioaca (4th year, Duke)

EDITORIAL AND OTHER POSITIONS

2021-present	Member, AIEA-NBER (Asian Innovation and Entrepreneurship Association)
2020-present	Associate Editor, Journal of Economics and Management Studies
2016-present	Associate Editor, Strategic Management Journal
2016-present	Associate Editor, Management Science
2017-Present	Dean's fellow at the Hebrew University School of Business Administration
2008	Co-founder and inventor of AI Patents (integrated its patent serach technology in
	the United States Patent and Trademark Office (USPTO) in 2017, and the Mexican
	Patent Office from 2019)
2003-2007	Associate, Productivity, Innovation and Intellectual Property Rights team, Centre for
	Economic Performance, London School of Economics
2004-2006	Tutorial Fellow and course manager for Microeconomics Principles, London School of
	Economics and Political Science
2000-2003	Economic consultant (Lieutenant), The Budgetary Department of the Ministry of
	Defense/The Financial Advisor to the Chief of Staff (compulsory military service)

HONORS, SCHOLARSHIPS AND GRANTS

2023	Alfred P. Sloan Foundation: "Federal R&D support, procurement and the American innovation ecosystem" (with Ashish Arora), \$244,529
2022	Qualcomm: "Intellectual Property Rights, Start-ups and the Market for Technology in the American Innovation Ecosystem" (with Ashish Arora), \$200,000
2020	Israel Science Foundation: "Corporate Ownership, Corporate Structure and Corporate Science: Evidence from Corporate R&D in America in the Twentieth Century" (grant 963/2020), Collaborator (with Yishay Yafeh, PI)
2017	The British Academy: "The Future of the Corporation" programme (with Assaf Hamdani, Niron Hashai, Eugene Kandel and Yishay Yafeh)
2017	National Science Foundation: The co-evolution of American universities and corporate research (with Ashish Arora), \$224,142
2016	The British Academy: corporate science participation of VC-backed firms (with Andrea Patacconi and Ashish Arora)
2007-2008	National Bureau of Economic Research (NBER), recipient of Postdoctoral Kauffman Foundation fellowship (Innovation Policy and the Economy)
2006-2007	The British Academy: study of open source participation (with Mark Schankerman) Oxford University, John Fell Fund: study firm incentives for open science adoption (with Andrea Patacconi)
2005-2007	Postdoctoral fellowship, Department of Economics, University of Oxford

2003-2004	European Commission, Marie Curie Fellowship, London School of Economics
2001-2002	Israel Economic Society, Gaaton National Award; Tel-Aviv University, Rosenfeld Na-
	tional Award: Tel Aviv University, Fishelzon University Award

TEACHING

Duke University, Fuqua School of Business	2008-present
Principles of Strategy (Masters, MBA, EMBA), Emerging Markets Strategy (MBA,	_
EMBA), Economics of Innovation (PhD)	
Recent ratings: 6.6/7 6.6/7 6.3/7 6.5/7 5/5 (2022); 6.5/7 (2021); 6.3/7 6.5/7 6.5/7 (20	020)
Teaching Excellence Awards for 2013 and 2011 (core strategy course)	
University of Oxford, Department of Economics	2005-2007
Microeconomics Principles (PhD)	
London School of Economics and Political Science, Department of Economics	2003-2006
Microeconomics Principles I (postgraduate), Economics of Industry (undergraduate),	
Math camp (postgraduate), Economics of Industry for Management (postgraduate)	

Tel Aviv University, School of Economics

2000-2002

Economics Principles (undergraduate), Advanced Macroeconomics (undergraduate)

PERSONAL

Israeli/American citizenship Married to Liat, 3 kids (Hila, Ido and Nir)