William Miles

NBER Innovation Research Boot Camp 2026: Application Packet

February 9th, 2026

Dear Kevin Bryan, Ina Ganguli, and Kyle Myers,

I am writing to apply to the NBER Innovation Research Boot Camp 2026. I am a fourth-year PhD student in the Strategy department at Duke University's Fuqua School of Business, studying the economics of innovation. My research studies how information, competition, and market structure shape firms' entry and product design choices, and how these forces influence herding versus exploration in innovation. Given my research interests, this boot camp presents a unique opportunity to engage with leading scholars in the field and to develop new skills for studying innovation.

Attending the boot camp would give me exposure to new methodologies and frameworks. Additionally, I am eager to connect with a cohort of early-career researchers who share my interest in innovation policy and firm dynamics. This experience would significantly enhance my research trajectory.

My letter of recommendation writer is Ashish Arora.

Thank you for taking the time to review my application. I look forward to hearing from you.

Yours Sincerely,

William Miles

Duke University, Fuqua School of Business

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William Miles

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Education

The Fuqua School of Business, Duke University

Ph.D. in Business Administration (Strategy) 2028 (expected)
Advisors: Ashish Arora, Wesley M. Cohen, Sharique Hasan

Rice University

B.A. Economics and Management, with Honors 2018–2022

Research

Under review

1. "Blockbusters, Sequels, and the Nature of Innovation", with W. Cohen, M. Higgins, and Y. Shibuya; NBER working paper #33957; *Revise and Resubmit,* ***Strategic Management Journal***
2. "Opinion Trumps Fact: Entrepreneurship and Competition in Political News", with A. Chatterji, S. Hasan, and D. Shvadron; SSRN; *Revise and Resubmit,* ***Management Science***
3. "If you had only one shot: Scale and herding in innovation experiments" , with A. Arora and S. Hasan; NBER working paper #33682

Journal Articles

1. "From Founders to Funders: Generalized Reciprocity, Embeddedness, and Entrepreneurs' Participation in Angel Investing", with A. Piazza; *Forthcoming at* ***Academy of Management Journal***

Awards, Fellowships, and Honors

Duke University

Doctoral Fellowship 2022–2027

Rice University

The Peter Mieszkowski Prize for Honors Program Research in Economics 2022
Honors in Economics 2022
Rice Undergraduate Scholars Program 2021–2022
International Rice Grant 2018–2022
President's Honor Roll 2020

Cases

William Miles, Caleb Walker, and Ronnie Chatterji. "Pasqal's Dilemma" 2024

Teaching Experience

Duke University

Instructor for I&E 800: Commercializing Innovation	March 2025
Teaching Assistant for People Analytics (MQM)	2025–present
Teaching Assistant for Entrepreneurial Strategy (MBA)	2025–present
Instructor for PhD Summer Bootcamp in Statistical Programming	August 2024
Teaching Assistant for Leading Business in a Complex World (MBA)	August 2024
Teaching Assistant for Strategic Implementation (MBA)	2024–present
Teaching Assistant for Business and Common Purpose (MBA)	2024–present
Teaching Assistant for Core Strategy (MBA, MMS, and EMBA)	2023–present

Rice University

Teaching Assistant for BUSI 343 Financial Management (undergraduate)	2022

Invited Presentations *(Scheduled*)*

"If you had only one shot: Scale and herding in innovation experiments"

- REER, Atlanta, November 2025
- Academy of Management (Best paper designation), Copenhagen, July 2025

"Blockbusters, Sequels, and the Nature of Innovation"

- Academy of Management, Copenhagen, July 2025
- Strategy Science Conference, IESE Business School, Barcelona, June 2025
- Munich Summer Institute, Max Planck Institute for Innovation and Competition, Munich, May 2025

"Opinion Trumps Fact: Entrepreneurship and Competition in Political News'

- Academy of Management Symposium: "Emergence and Growth Strategy of Entrepreneurial Firms: Evidence Based on Large-Scale Data", Chicago, August 2024

Relevant Positions

Jones Graduate School of Business, Rice University

Research Assistant for Prof. Kate Odziemkowska	2022
Research Assistant for Prof. Alessandro Piazza	2020-2022

Service

Ad hoc reviewer for *Organization Science*	2024–present
Ad hoc reviewer for *Management Science*	2023–present

Programming and Software Skills

Proficient: R, Python, Stata, LaTeX, Unix, SQL, Google Big Query
Novice: Git, MongoDB, Javascript, HTML, CSS

Other Awards

DipABRSM Saxophone (Distinction) 2018

List of all completed PhD courses:

- Economics of Innovation
- High-Technology Entrepreneurship
- Topics in Strategy
- Microeconomics
- Causal Inference
- Introduction to Econometrics
- Predictive Modelling
- Social Networks
- Behavioural Perspectives on Strategic Management
- Behavioural Decision Theory

Current and future research. My research studies how information, competition, and market structure shape firms' entry and product design choices, and how these forces influence herding versus exploration in innovation.

I am in the early stages of working on my solo job market paper. In this paper, I study how the public release of data shapes innovation. I develop a framework that shows how public data can simultaneously induce crowding and stimulate exploration. Data publication coordinates entry around a common hypothesis, consistent with herding. At the same time, reduced uncertainty makes smaller or riskier applications viable, expanding exploration across solutions and markets. I test this framework in drug discovery, examining changes in patenting of small molecule drugs following the release of protein structure models. Structural disclosure leads to a large increase in patenting (of compounds designed to bind on the focal protein), especially when models are precise, while shifting inventive effort toward more novel compounds and a broader set of disease applications. My current focus in this project concerns how structure publication has different effects on the innovation pursued by entrant and incumbent firms.

With Ashish Arora and Sharique Hasan, I develop a simple model to show that markets dominated by a few large-scale experimenters (firms conducting multiple experiments) explore more diverse approaches than markets with many single-shot experimenters. Single-shot experimenters tend to converge on the most promising approach, while multi-experimenters are more likely to diversify to avoid the correlation inherent in pursuing multiple experiments within the same approach. Using pharmaceutical R&D data, we show that a one unit increase in the average number of experiments corresponds to a 0.76 standard deviation increase in the diversity of therapeutic targets explored. In turn, a one-standard-deviation increase from the mean in target diversity boosts the likelihood of at least one experiment reaching Phase 1 clinical trials by 26.8 percentage points, but a 3.9 percentage point decrease in the share of projects that succeed in pre-clinical development.

With Wesley Cohen, Matthew Higgins, and Yoko Shibuya, I demonstrate that firms with particularly high-selling "blockbuster" products concentrate their development efforts on new products that target the same customer segments and are more likely to be technologically similar to existing blockbuster products. This behaviour, driven by an expectation of the stickiness of demand for existing product offerings, limits firms' incentives to invest in entirely new products targeting different customer segments. Our findings offer insights into how blockbuster products shape firms' customer segment and innovation choices, with implications for understanding the dynamics of technological change in R&D-intensive industries.

With Ronnie Chatterji, Sharique Hasan, and Dror Shvadron, I examine how entrepreneurial entrants influence the strategies of incumbents in the American political news business. We find that new entrants produced more opinionated news content, prompting incumbents to adopt similar content strategies. These shifts triggered more hate speech on social media but failed to improve website traffic, highlighting the unintended consequences of media entrepreneurship.

Reason for wanting to attend the boot camp. The boot camp offers a unique opportunity to engage with leading thinkers in the economics of innovation and to connect with like-minded early-career scholars. Exposure to new ideas and methodologies outside of my department at Duke would enrich my research.