



**DUKE UNIVERSITY
FUQUA SCHOOL OF BUSINESS
STRATEGY PH.D. PROGRAM**

ADMISSIONS

The Fuqua Strategy PhD program recruits students from a variety of backgrounds who are deeply interested in studying topics related to firm strategy, technological change, innovation, and entrepreneurship. In addition to rigorous academic preparation, the admissions committee values and looks for the demonstration of characteristics such as independence, motivation, creativity, hard work, as well as a critical eye for ideas.

In recent years we have admitted students from a variety of backgrounds including in economics, business administration, engineering, as well as from the sciences. Over the years, our students have come from all over the United States and the world.

The PhD application deadline for the 2022-2023 academic year is 01/04/2022 (Jan 4, 2022). However, if you are interested in our program we would like to hear from you early. We encourage you to reach out to Prof. Sharique Hasan at sharique.hasan@duke.edu, the current PhD Program coordinator for Strategy, if you have any questions.

We will also be hosting an information session on our program in October 2021. If you would like to receive details, please complete the following short form: <https://forms.gle/czcP2epQGyFvxP8x5>

PROGRAM OVERVIEW

The purpose of the Fuqua Strategy Ph.D. program is to train students to do independent scholarly research on firm strategy, with a particular emphasis on innovation and entrepreneurship. All students receive rigorous theoretical and empirical training through coursework at Fuqua as well as other units across the university, including in economics, statistics, public policy, and computer science.

A core thesis of our program is that training the next generation of scholars requires hands-on mentorship. Students will begin working on collaborative research with faculty in their first year, within the framework of a multi-year apprenticeship model. This apprenticeship culminates in a complete working paper at the end of the second year and a publishable paper by the end of a student's third year. In recent

years, students have gone on to publish these papers in journals including Management Science, Strategic Management Journal, American Economic Review, and Research Policy among others.

This hands-on training culminates in an independent dissertation and job market paper that is at the cutting-edge of research in strategy, innovation or entrepreneurship.

Over the five years it typically takes to complete the program, students are expected to fulfill the following requirements:

- Successfully complete coursework that develops your theoretical and empirical skills, including in microeconomics, econometrics as well as various advanced methods.
- Successfully complete coursework in several topical areas including firm strategy, the economics of innovation, entrepreneurship, and organizational theory.
- Attend and participate in the Strategy Area's seminar series, where leading scholars from around the world present their latest research.
- Complete and successfully defend to the Strategy Area faculty:
 - A **second year paper** co-authored with a faculty member and presented to Strategy Area faculty. This paper will likely still be work-in-progress.
 - A **third year paper**, which is typically a more advanced version of the second-year paper, but is judged to be of publishable quality. A defense of this paper constitutes the comprehensive examination that will determine advancement to candidacy.
 - An independent research project that culminates in a **dissertation proposal (year 4)** which constitutes a contract specifying the required work for the final dissertation.
 - A **dissertation (year 5)** and job market paper, which serves as the final requirement to complete the Strategy PhD program.

Your goal as a PhD student should be to develop the knowledge, judgment, and skills to conduct independent and collaborative research that is at the cutting edge of your chosen area within the broader field of strategy. Successful students will leave the program with:

- A strong foundation in economic and social science theory.
- A modern, rigorous methodological toolkit.
- Skill in posing and answering research questions that are both important and ambitious.
 - Core skills include: being able to articulate a research question, its importance, and its relation to prior work; knowing how to attack that question (e.g., identifying data sources or modeling frameworks, collecting and preparing data); recognizing and applying high standards of evidence; and communicating results orally and in writing.
- Skill in writing independent research articles that have the potential to be marquee contributions to our field, and a familiarity with the publication process.

Program Requirements

The Strategy PhD program requires you to complete:

1. Area Specific Requirements
 - a. Course requirements as outlined below
 - b. Teaching Assistantships - Year 2+
 - c. Second year paper - End of year 2
2. Comprehensive Exam (third year paper) - End of year 3
3. Dissertation Proposal - End of year 4
4. Final Dissertation Defense - End of year 5

1. Area Specific Requirements

a. Course requirements

The Fuqua Strategy PhD program stresses the development of research excellence. Our curriculum allows you to design a program of coursework in consultation with your faculty advisors that will meet your specific research goals. You are required to take a minimum of 9 PhD level courses or course equivalents.

Required Courses:

Theory and Methods

- (1 course) Microeconomic Theory
- (2 courses) Econometrics sequence (e.g., Advanced Econometrics I and II)
- (2 courses) Advanced quantitative courses (e.g., Machine Learning)

Strategy Courses

There is typically one PhD course offered by Fuqua Strategy Area faculty each semester. The faculty teaching this course and the content vary from year to year. In the first and second years of the PhD program, students are required to take all Fuqua Strategy topics courses that are offered. Students in years three and beyond are recommended to take any topics courses that they have not previously taken.

Examples courses include:

- Strategy
- Economics of Innovation
- Organizational Theory
- Entrepreneurship

Electives:

In addition, you are encouraged to select electives that match your research interests offered in other areas, by other departments at Duke, or at the University of North Carolina at Chapel Hill.

For example, in past years, Strategy students have taken:

- Industrial Organization (ECON 825)
- Behavioral Decision Theory (BA 925)

b. Teaching assistantships and research

A critical part of the program is collaborating with faculty members as well as learning about the research and teaching processes. All students are expected to work as teaching assistants for faculty as needed. Assignments are made by the PhD program coordinator in consultation with faculty. Teaching assistantship above the required hours as specified in Chapter 1 is eligible for additional compensation at

the school's pre-set hourly rate. Students must email their timecards that show completion of the 180-hour requirement to the PhD program coordinator with the certification and approval of the faculty PhD coordinator.

Students are encouraged to seek research opportunities from faculty with whom they wish to work. Such research assistantship can qualify for additional compensation pending funding availability of individual faculty as specified in Chapter 1. Research assistantship on projects on which students are expected to become coauthors is not eligible for additional compensation. The student and faculty member should email the PhD program coordinator to begin the approval process for RA work.

Pursuant to Duke University and The Graduate School policies, students cannot work more than 19.9 hours per week for combined TA, RA, and other departmental work.

c. Second year paper

At the end of the second year, students are required to produce a research paper in collaboration with a faculty member. The student will present the paper in the Strategy seminar series at the end of the **Spring Term 2 of the Fuqua Academic Calendar in the second year (typically in May)** and no later than the **end of Fall Term 1 of the Fuqua Academic Calendar in the third year**. Each student will have a primary advisor, and with input from the rest of the Strategy faculty, this advisor will evaluate both the presentation and the paper.

2. Comprehensive Exam (third year paper)

At the end of the third year, students should produce a comprehensive research paper (typically, a further development of the second year paper). The student will present the paper in the Strategy seminar series at the end of the **Spring Term 2 of the Fuqua Academic Calendar in the third year (typically in May)**. Each student will have a committee, and with input from the rest of the Strategy faculty, this committee will evaluate both the presentation and the paper. Students will be assessed on the following criteria:

- Skill in *identifying* and *structuring* for analysis an important research question that has yet to be structured and analyzed in the literature.
- Demonstrating a *deep understanding* of the state of the literature that allows the student to motivate the importance of the research question in the context of existing knowledge.
- *Research competence* in theory and methods, as demonstrated by the quality and rigor of the logic and evidence used to answer the posed research question.

These will be assessed through the written paper, the oral presentation, and the student's performance in the question and answer component of the oral examination.

3. Dissertation Proposal

Students will form a dissertation committee in the fall of their fourth year. A formal dissertation proposal will be made in the spring of the fourth year. Students have until the end of the summer of the fourth year

to complete this requirement. The committee, with input from the rest of the Strategy faculty, will participate in the examination of the proposal defense.

4. Final Dissertation Defense

We expect students to defend their dissertation by the end of their fifth year in the program. The dissertation typically consists of three papers, one of which is a marquee contribution to the field of strategy, which will be used as the student's job market paper.

Strategy Area Sample Program Schedule

With a subset of coursework tailored to your research interests, there is not a uniform course schedule in the Strategy PhD program. An example schedule is as follows.

Year	Fall	Spring	Summer
1	<u>Coursework:</u> -Microeconomic Theory (CMU 90-903 / ECON 701) -Econometrics I (ECON 703D or PUBPOL 822)	<u>Coursework:</u> -Strategy Topics Seminar (all) -Advanced Econometrics II (PUBPOL 823)	Research
2	<u>Coursework:</u> - Advanced Stats & Econometrics (PUBPOL 890) -Advanced Methods course (Theory & Alg Machine Learning STA 671D) -Elective (e.g., Behavioral Economics, Organizational Behavior, Industrial Economics) Teaching Assistantship	<u>Coursework:</u> -Strategy Topics Seminar (all) -Advanced Methods courses Teaching Assistantship <i>Second year paper defense</i>	Research
3	Coursework (Optional) Research Teaching Assistantship	Coursework (Optional) Research Teaching Assistantship <i>Third year paper defense (Comprehensive exam)</i>	Research
4	Research Teaching Assistantship Dissertation committee formation	Research Teaching Assistantship <i>Dissertation Proposal Defense</i>	Research
5	Research Teaching Assistantship	Research Teaching Assistantship <i>Final Dissertation Defense</i>	

FACULTY

Ashish Arora, *Rex D. Adams Professor*

<https://go.fuqua.duke.edu/fuquaworld/biography.jsp?fid=1213891724349>

Sharon Belenzon, *Professor*

<https://go.fuqua.duke.edu/fuquaworld/biography.jsp?fid=1216644358061>

Ines Black, *Assistant Professor*

<https://go.fuqua.duke.edu/fuquaworld/biography.jsp?fid=1527076191142008>

**Aaron Chatterji, *Mark Burgess & Lisa Benson-Burgess Distinguished Professor
Chief Economist, US Department of Commerce***

<https://go.fuqua.duke.edu/fuquaworld/biography.jsp?fid=1149092939391>

Wesley Cohen, *Snow Family Professor*

<https://go.fuqua.duke.edu/fuquaworld/biography.jsp?fid=1028318482525>

**Jon Fjeld, *Professor of the Practice, Professor of Philosophy;
Director, Innovation & Entrepreneurship Initiative***

<https://go.fuqua.duke.edu/fuquaworld/biography.jsp?fid=1096570450748>

Daniel Gross, *Assistant Professor*

<https://go.fuqua.duke.edu/fuquaworld/biography.jsp?fid=1045379>

Sharique Hasan, *Associate Professor*

<https://go.fuqua.duke.edu/fuquaworld/biography.jsp?fid=1497274872756>

David Ridley

Dr. and Mrs. Frank A. Riddick Professor of the Practice

<https://go.fuqua.duke.edu/fuquaworld/biography.jsp?fid=978708766113>

Scott Rockart

Associate Professor of the Practice

2019-2021 - RECENT REPRESENTATIVE PUBLICATIONS (Fuqua scholars bolded)

Arora, Ashish, Sharon Belenzon, and Lia Sheer. "Knowledge spillovers and corporate investment in scientific research." *American Economic Review* 111.3 (2021): 871-98.

Arora, Ashish, Andrea Fosfuri, and Thomas Rønde. "Waiting for the payday? The market for startups and the timing of entrepreneurial exit." *Management Science* 67.3 (2021): 1453-1467.

Arora, Ashish, Sharon Belenzon, and Andrea Pataconi. "Knowledge sharing in alliances and alliance portfolios." *Management Science* 67.3 (2021): 1569-1585.

Arora, A., Belenzon, S., Cohen, W., & Pataconi, A. (2019). Companies persist with biomedical papers. *Nature*, 569(7756), S18-S18.

Belenzon, Sharon, Aaron K. Chatterji, and Brendan Daley. "Choosing between growth and glory." *Management Science* 66.5 (2020): 2050-2074.

Belenzon, Sharon, Niron Hashai, and Andrea Pataconi. "The architecture of attention: Group structure and subsidiary autonomy." *Strategic Management Journal* 40.10 (2019): 1610-1643.

Belenzon, Sharon, Anastasiya Shamshur, and Rebecca Zarutskie. "CEO's age and the performance of closely held firms." *Strategic Management Journal* 40.6 (2019): 917-944.

Chatterji, Aaron K., Jiao Luo, and Robert C. Seamans. "Categorical Competition in the Wake of Crisis: Banks vs. Credit Unions." *Organization Science* (2021).

Bennett, Victor M., and **Aaron K. Chatterji.** "The entrepreneurial process: Evidence from a nationally representative survey." *Strategic Management Journal* (2019).

Chatterji, Aaron, Solene Delecourt, **Sharique Hasan** and Rembrand M. Koning. "When does advice impact startup performance?." *Strategic Management Journal* 40.3 (2019): 331-356.

Chatterji, Aaron K., Colleen M. Cunningham, and John E. Joseph. "The limits of relational governance: Sales force strategies in the US medical device industry." *Strategic Management Journal* 40.1 (2019): 55-78.

Cohen, Wesley M., Henry Sauermann, and Paula Stephan. "Not in the job description: The commercial activities of academic scientists and engineers." *Management Science* 66.9 (2020): 4108-4117.

Gross, Daniel P. "Collusive Investments in Technological Compatibility: Lessons from US Railroads in the Late 19th Century." *Management Science* 66.12 (2020): 5683-5700.

Gross, Daniel P. "Creativity under fire: The effects of competition on creative production." *Review of Economics and Statistics* 102.3 (2020): 583-599.

Gross, Daniel P. "Scale versus scope in the diffusion of new technology: evidence from the farm tractor." *The RAND Journal of Economics* 49.2 (2018): 427-452.

Gross, Daniel P. "Performance feedback in competitive product development." *The RAND Journal of Economics* 48.2 (2017): 438-466.

Hasan, Sharique, and Rembrand Koning. "Prior ties and the limits of peer effects on startup team performance." *Strategic Management Journal* 40.9 (2019): 1394-1416.

Koning, Rembrand, **Sharique Hasan**, and **Aaron Chatterji**. Experimentation and startup performance: Evidence from A/B testing. *Management Science*, 2021

Samila, Sampsa, Alexander Oettl, and **Sharique Hasan**. Helpful behavior and the durability of collaborative ties. *Organization Science*, 2021

David B. Ridley and Chung-Ying Lee. 2020. "Does Medicare Reimbursement Drive-up Drug Launch Prices?" *The Review Economics and Statistics*, 102(5): 980-993.

PhD PROGRAM - FIRST ACADEMIC PLACEMENTS OF RECENT GRADUATES

Tatiana Lluent (2021)

ESMT-Berlin

Assistant Professor of Strategy and Volkswagen Group Junior Chair for Diversity in Organizations

Lia Sheer (2021)

Coller School of Management of Tel-Aviv University

Assistant Professor of Strategy

Rahul Gupta

Georgetown University - McDonough School of Business

Assistant Professor of Strategy

Honggi Lee (2020)

University of New Hampshire

Assistant Professor of Strategic Management

Xiaoshu Bei (2020)

University of Colorado - Boulder

Assistant Professor of Strategy and Entrepreneurship

OTHER RECENT FIRST PLACEMENTS INCLUDE:

University of Pennsylvania (Wharton) - Luis Rios; London Business School - Colleen Cunningham;

University of Minnesota (Carlson) - Alex Wilson