Yiqing Zheng
Department of Economics, Duke University
yiqing.zheng@duke.edu
(+1) 773-808-9583

February 12th, 2026

Dear Members of the Selection Committee,

I am writing to apply for the fifth NBER Innovation Research Boot Camp. I am a third-year PhD student in Economics at Duke University working in Industrial Organization and Health Economics, with a focus on innovation in pharmaceutical markets. My recommendation letter writer is Professor Daniel Yi Xu (daniel.xu@duke.edu).

My research examines how policy and market structure shape firms' incentives to invest in drug development, with particular attention to pricing regulation and global market interactions. I am especially interested in using structural models to understand how differences in reimbursement and pricing environments affect the direction, quality, and sustainability of pharmaceutical innovation.

I am excited about the opportunity to participate in the Boot Camp, as it provides theoretical insights and empirical evidence on innovation that would offer valuable guidance as I develop my research agenda, particularly in the context of pharmaceutical innovation.

My contact information is provided above. Thank you very much for your time and consideration.

Sincerely,



Yiqing Zheng

Yiqing Zheng

yiqing.zheng@duke.edu | https://github.com/Yiqing-Zh

Education

- **Duke University** — NC, U.S.
  Ph.D. in Economics — *2023-2029 (expected)*

  Fields of interest: IO, Health Economics

- **The University of Chicago** — IL, U.S.
  M.A. in Computational Social Science, Economics Concentration; GPA: 3.88/4.00 — *2019-2021*

  Selected courses: Price Theory I - III (Ph.D. core)

- **Nankai University** — Tianjin, China
  Bachelor of Economics, Social Science Boling Class; GPA: 90.51/100 — *2015-2019*

Employment

- **Department of Economics, Columbia University** — NY, U.S.
  Pre-doc fellow; Supervisor: Prof. Pietro Tebaldi — *2021-2023*
- **China Center for Health Economic Research, Peking University** — Beijing, China
  Research fellow; Supervisor: Prof. Gordon G. Liu — *2018-2019*

Publication

- "Long-term care expenditures and the Red Herring Hypothesis: evidence from the Oldest-old in China." (with Lu Chen, Wan Wen, and Lanlan Chu.) **Journal of Population Ageing** 16, no. 3 (2023): 619-637.

  Abstract: This research used the two-part model to evaluate the red herring hypothesis and explore whether age, time-to-death (TTD), or disability level affects the long-term care expenditures (LTCE) for adults aged 80 years and older in China. We found that age had no significant impact on the LTCE of the whole sample after including TTD and disability levels in the model, suggesting that TTD and disability are factors significantly associated with the growth of LTCE in China.

Working in Progress

- Drug Pricing and Pharmaceutical Innovation

  Abstract: The paper studies how international price regulation shapes drug firms' innovation incentives when both pharmaceutical firms' R&D decisions and countries' pricing policies are endogenous. The theoretical framework predicts that even when other regulators (e.g., the UK) are considered strategic and respond to policies in the US, reference pricing can improve US consumer welfare, and that the magnitude of this gain depends on the size and willingness to pay of the referenced market.

Teaching Experience

- **2024 Fall:** TA for Microeconomic Analysis I (Ph.D. core)
- **2025 Spring:** TA for Microeconomic Analysis II (Ph.D. core)

Honors and Awards

- Summer Research Fellowship from Duke University *Sep 2024, Sep 2025*
- University Scholarship (2/3 tuition) from the University of Chicago *Sep 2020*
- $30,000 Maroon Scholar Research Award from the University of Chicago *Sep 2019*
- Peking University Young Health Economics Fellowship *Nov 2018*
- Tianjin Municipal People's Government Scholarship *Dec 2017*
- The National Southwest Associated University Scholarship from Nankai University *Oct 2016*
- The 1st Prize in Mathematics Competition for Undergraduate Students in Tianjin *Jul 2016*

Skills and Other

- **Programming:** Python, STATA, Snowflake (SQL), R, LaTeX
- **Language:** English (fluent), Mandarin (native)

Table 1: List of All Current and Completed PhD Courses

Course	Title	Grade
ECON 701D	Microeconomic Analysis I	A
ECON 702D	Macroeconomic Analysis I	A+
ECON 703D	Econometrics I	A-
ECON 704	1st Year Intro to Research	A
ECON 705D	Microeconomic Analysis II	A+
ECON 706D	Macroeconomic Analysis II	A
ECON 707D	Econometrics II	A
BIOSTAT 915	High-Dimensional Statistics	A
ECON 825	Industrial Organization	A
ECON 883	Econometrics III – Part 1	A
ECON 883	Econometrics III – Part 2	A
ECON 801	Writing/Presenting in Economics	A
ECON 881	Dynamic Discrete Choice	A
ECON 881	Health and IO	A+
ECON 883	Machine Learning in Economics	A
COMPSCI 671D	Theory & Algorithmic Machine Learning	A+
ECON 801	Writing/Presenting in Economics	A
ECON 826	Partial Identification	Auditing

Research Statement

Yiqing Zheng
February 12th, 2026

My research studies how pharmaceutical price regulation affects global innovation incentives when both firms and governments act strategically. While drug pricing policies are typically implemented in a domestic context, pharmaceutical innovation is financed globally: firms recover R&D costs across markets that differ in willingness to pay, size, and regulatory institutions. As a result, pricing policies implemented by one country can reshape innovation incentives through their effects on its demestic market and on the policy responses of other countries.

The existing literature primarily studies how pricing regulation affects innovation in theoretical settings, or how cross-country pricing differentials can sustain second-best outcomes that allow firms to recover R&D costs. However, there are relatively few structural models that jointly endogenize pharmaceutical firms' innovation decisions and governments' pricing policies. As a result, the literature lacks quantitative frameworks capable of evaluating how specific pricing regulations in drug markets influence R&D incentives and, in turn, welfare outcomes.

My current work develops a theoretical framework to analyze how price regulation in the United States market, such as external reference pricing (e.g., Most-Favored-Nation (MFN)), interacts with strategic policy choices in other markets and how these interactions shape innovation and welfare. The model highlights that even when other regulators, such as the United Kingdom, are considered as strategic, external reference pricing can increase U.S. consumer welfare. Moreover, the magnitude of this welfare gain depends on the size and willingness to pay of the referenced market: when the external market is larger and has higher willingness to pay, U.S. consumers benefit more from reference pricing, even when they still need to bear part of the R&D costs.

Besides the implications from the theoretical model, I am working on developing an empirical structural model in which firms' innovation investments and countries' pricing regulations are jointly determined. Estimates from such a framework would allow for counterfactual evaluation of policies like MFN pricing in a setting where governments respond strategically and firms adjust innovation incentives accordingly. In addition to studying the relationship between pricing and innovation, I am also interested in how patents and exclusivity shape the dynamics of drug quality.

I am interested in attending the NBER Innovation Research Boot Camp because it provides theoretical and empirical insights into the determinants of innovation that are directly relevant to my structural research agenda. The Boot Camp's focus on how policy and market structure shape innovation would help refine the empirical design of my model and strengthen its ability to evaluate how pricing regulations influence innovation and welfare in globally interconnected markets.

February 9, 2026

To Whom It May Concern,

Subject: Recommendation for Yiqing Zheng—NBER Innovation Research Boot Camp 2026

I am writing to recommend Ms. Yiqing Zheng for the fifth NBER Innovation Research Boot Camp. Yiqing is currently a third-year Ph.D. student in the Department of Economics at Duke University and has been serving as my graduate research assistant.

Yiqing is currently working on a project that investigates cross-country pricing differentials of pharmaceutical firms and examines how price regulations affect firms' incentives for R&D investment. Yiqing's work fills an important gap in the literature by providing a structural model that quantifies the share of R&D costs effectively covered by the U.S. market and is closely related to recent policy discussions on pharmaceutical pricing regulation. As my research assistant, she has efficiently constructed and analyzed large-scale trade datasets and implemented event-study designs to study the effects of U.S. tariff changes.

Yiqing is a hardworking and self-motivated researcher, and she performed well in the Industrial Organization field course that I taught. I believe the NBER Innovation Research Boot Camp would be an excellent fit for her research interests and would provide valuable training as she continues to develop her work at the intersection of innovation, regulation, and firm behavior.

Please feel free to contact me if additional information would be helpful.

Sincerely,

Daniel Yi Xu

Daniel Yi Xu
David Rubenstein Distinguished Professor of Economics
Duke University