## Ishan Phadke

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#### Education

# **University of North Carolina – Chapel Hill**

July 2019 - Present (Expected May 2025)

• Concentration: PhD in Economics – Industrial Organization/Health; Master's earned May 2022

### The Pennsylvania State University – Main Campus

June 2015 - May 2019

• Schreyer Honors College, Millennium Scholars Program & Paterno Fellows Program

G.P.A. 3.94/4.00

• Major: Mathematics (BS) and Economics (BS) & Minor: Statistics

Skills - Advanced: R, Matlab, Excel, STATA, Word & PowerPoint; Proficient: Python & LaTeX; Novice: Julia & SQL

## **Work/Research Experience**

#### **Graduate Research**

## **University of North Carolina-Chapel Hill**

Advisors: Dr. Brian McManus & Dr. Luca Maini

June 2022-Present

Topics of Interest: Industrial Organization, Regulation, Pharmaceuticals and Health Economics Current Work: Rewarding Incremental Innovation: Pharmaceutical Line-Extensions

Existing work, on welfare implications of policy fixes for pharmaceutical line-extension exclusivity rewards, neglects to model the firm's timing incentives, which are directly affected in alternate policies.
 I solve the firm's launch decision using a dynamic structural model, akin to an optimal stopping problem, and estimate a dynamic demand system. Together, these components allow me to study the welfare effects of counterfactual policies, accounting for firm responses.

Prior Work: Estimating Costs and Welfare Effects of Removing Exclusivity for Pharmaceutical Line-Extensions

• Using a structural model, I calculated forgone revenues for firms that didn't launch line-extensions and relative additional revenues for those that did. I found the cost distribution, using simulated maximum likelihood, to conduct counterfactuals of removing the exclusivity period to study welfare implications.

# Graduate Research Assistant - Dr. Luca Maini and Dr. Josh Feng

**University of North Carolina-Chapel Hill** 

Current Work: Analyzing the Effects of PBM's Drug Tiers on Insulin

Jan 2022-Present

 Cleaned and prepared large nationwide claims data for demand estimation. I am currently conducting demand estimation with individual-level data to study the effect PBM Drug Tiers have on demand.

#### **Cornerstone Research – Summer Associate**

Boston, MA

- Performed initial data analysis for promotional case and provided weekly updates.
- Conducted demand analysis for a client on a life-sciences matter, collaborated with analysts for data work, and created deliverables to provide client updates.
- Compared arguments and allegations between complaints for expected upcoming class-action.
- Collaborated on initial promotional merger review and arguments for early stage proposed merger.

## Shea Lab – Undergraduate Research Assistant

The Pennsylvania State University

Advisor: Dr. Katriona Shea – Infectious Disease Lab, work with Dr. Jessica M. Conway January 2016-June 2019

• Conducted an independent project analyzing how changes in the health status of health care workers impacts epidemic burdens. This doubled as my honors thesis.

#### S.M.A.L.L. REU - Undergraduate Researcher

Williams College

Advisor: Dr. Julie Blackwood

Summer 2018

• Studied the impact of dispersal on the spread of white nose syndrome in bats. Explored optimal governance scenarios for disease management in two states through utilizing mathematical models.

## The Odum Institute for Research in Social Science - Data Verifier

Chapel Hill, NC

Conduct replication and data verification on R and Stata files for May 2022-Dec 2023
manuscripts accepted in the American Journal of Political Science and State Politics and Policy.

#### Lincoln Financial Group – Actuarial Intern in Life-Inforce Optimization

Greensboro, NC

Used VBA to improve efficiency of intensive processes from hours to minutes.

Summer 2017

• Adapted Retention Basis Calculator to work with new sets of policy data.

#### **Publications/Working Papers**

Analysing How Changes in the Health Status of Healthcare Workers Affects Epidemic Outcomes

• Epidemiology and Infection (2021)

## Management Efficacy in a Metapopulation Model of White-Nose Syndrome

Natural Resource Modeling (2021)

## **Governance Structure Affects Transboundary Disease Management Under Alternative Objectives**

BMC Public Health (2021)

Rewarding Incremental Innovation: Pharmaceutical Line-Extensions - Working Paper

#### **Teaching Experience**

#### Course Instructor - ECON 101 & ECON 445

## University of North Carolina – Chapel Hill

- Taught course lessons, recitations and held office hours each week. Summer 2022 & Spring 2023
- Prepared a variety of course materials including lectures, problem sets and exams for the course.
- Organized course site with recorded lectures, to ensure students could easily utilize materials.

## **Teaching Assistant – Various Economic Courses**

#### **University of North Carolina – Chapel Hill**

- Courses: Intro to Economics (x3), Industrial Organization, Intro Econometrics, Fall 2020-Present Labor (x2), Entrepreneurship, Advanced Micro
- Taught weekly recitations reviewing concepts for students and was an occasional substitute instructor.
- Responsible for holding office hours, grading, and writing problem sets and keys for various assignments.

### **Conferences**

## **Southern Economics Association (SEA)**

New Orleans, LA

Presented early work of Job Market Paper and served as discussant

November 2023

Joint Mathematics Meeting (JMM)

Baltimore, MD

Abstract of a Williams SMALL REU project accepted for an open session

January 2019

**Annual Biomedical Research Conference for Minority Students (ABRCMS)** 

Phoenix, AZ

Awarded a top presentation award in the category of Computational Biology

November 2017

## **Leadership and Extracurricular**

#### **Graduate Professional Student Government**

## University of North Carolina - Chapel Hill

Representing the Economics program as a student senator

August 2021-August 2023

 Serving as Appropriations Chair (2021-Present), lead meetings to determine which organizations are approved for event funding. As part of the GPSG Stipend Taskforce (Fall 2022), assisted with data collection to strengthen the case for an increase in stipends for UNC Graduate Students.

#### **Cohort Council President - Millennium Scholars Program (2017-2018)**

The Pennsylvania State University

- MSP is a highly selective program for high achieving STEM students September 2015-June 2019 pursuing higher education accompanied with a \$15,000 per year scholarship for 4 years.
- Served with deans on a search committee to select a new program director. Also, helped admins with scholarship fundraising and created an organization for scholars to participate in community events.

#### **THON Dancer Relations Committee Member**

The Pennsylvania State University

Volunteer for THON 2016, 2017 & 2018: Yearlong fundraiser for pediatric cancer.

2016-2019

Supervised Boy Scouts in Troop 60 during various outings.

Allentown, PA Aug 2015-2019

## **Honors/Awards**

**Assistant Scoutmaster** 

Eagle Scout

Millennium Scholars Scholarship Award

Schreyer Academic Excellence Award

Pennsylvania State University Outstanding Student in Economics Award

UNC Economics Best Undergraduate Course TA Award

August 2015

August 2015