

Buyun Li

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EDUCATION

Indiana University

PhD in Operation Management and Decision Sciences; Kelley School of Business

Bloomington, Indiana

Expected May 2026

- **Dissertation Title:** Compounding Feedback Between Capacity Decisions and Patient Demand in Healthcare Operations
- **Committee:** Co-Chairs: Jonathan Helm and Kurt Bretthauer; **Member:** Owen Wu, Xiaoshan Peng, and Zekun Liu

Cornell University

Master of Science; SC Johnson College of Business

Ithaca, New York

May 2018 - May 2020

University of Queensland

Bachelor of Administration; School of Business, Economics and Law

Queensland, Australia

Sep 2015 - Dec 2017

Beijing International Studies University

Bachelor of Science

Beijing, China

Sep 2013 - May 2015

PAPERS UNDER REVIEW OR REVISION

[A1] Does Early Pain Management Pay Off? Evidence on Utilization, Costs, and Surgeries

Indiana

Co-Authors: Mohammad Zhalechian, Christopher Chen, Henry Lee (DO), Nick Vaughn (MD)

Resubmission Invited – Management Science

- **Selected to present:** 2025 Midwest Health Economics Conference
- **Pre-print:** <https://buyunli.github.io/files/Non-blindPM.pdf>
- **Grant Under Review:** Research Grant – National Institute of Health Care Management (NIHCM)

[A2] Infection Aware Nurse Staffing Using Random Graphs with Hidden Health Status

Indiana

Co-Authors: Jonathan Helm, Kurt Bretthauer

Under Review–M&SOM

- **Selected to present:** 2025 Life sciences and Healthcare Research Conference
- **Pre-print:** https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5325481

[A3] Dynamic Scheduling with Bayesian Updating of Customer Characteristics

Indiana

Co-Authors: Xiaoshan Peng, Owen Wu

Under Review – POM

- **Pre-print:** https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5126115

[A4] Capacity Planning for Resource Turnaround Operations

New York

Co-Author: Vince Slaugh

Minor Revision —M&SOM

- **Pre-print:** https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4862239

WORK IN PROGRESS PAPERS

[W1] Maximizing Early Pain Management Intervention Effectiveness via Heterogeneous Treatment Effects

Indiana

Co-Authors: Mohammad Zhalechian, Christopher Chen

Work in Progress

[W2] Optimal Nurse Staffing with Infection Awareness: A Random Graph and ML Approach

Indiana

Co-Authors: Jonathan Helm, Kurt Bretthauer

Work in Process

CONFERENCE PRESENTATIONS

Does Early Pain Management Pay Off? Evidence on Utilization, Costs, and Surgeries Li, B.; Zhalechian, M.; Chen, C.; Lee, H.; Vaughn, N.

- **2025:** POMS Annual Conference, Atlanta, GA
- **2025:** Midwest Health Economics Conference, Notre Dame, IN (scheduled)
- **2025:** INFORMS Annual Meeting, Atlanta, GA (scheduled)

Infection Aware Nurse Staffing Using Random Graphs with Hidden Health Status

Li, B.; Helm, J.; Bretthauer, K.

- **2025:** POMS Annual Conference, Atlanta, GA
- **2024:** INFORMS Annual Meeting, Seattle, WA
- **2023:** INFORMS Annual Meeting, Phoenix (Flash Session), AZ
- **2023:** POMS Annual Conference, Orlando, FL

Dynamic Scheduling with Bayesian Updating of Customer Characteristic

Li, B.; Peng, X.; Wu, O.

- **2023:** INFORMS Annual Meeting, Phoenix, AZ
- **2023:** Purdue Operations Conference, Lafayette, IN

Capacity Planning for Resource Turnaround Operations

Li, B. & Slaugh, V.

- **2022:** POMS Annual Conference, Online
- **2021:** INFORMS Annual Meeting, Anaheim, CA

TEACHING EXPERIENCES

BUS-K303 Technology & Business Analytics

Indiana

Instructor

FA 2023, SP 2024, FA 2025 (Two Sections)

- **Course Organization:** Refined course materials, assignments, exams, and reading list; managed course delivery through Canvas. Organized TA and Peer Tutor orientation and coordinated task assignments.
- **Evaluations:** **6.9/7** for overall instructor evaluation, **6.8/7** for support offered to students, **6.9/7** for the material preparation.

HADM 6070 Hospitality Operations and Consulting

New York

Teaching Assistant

FA 2018

- **Evaluation:** 8.9/10 for overall Teaching Assistant evaluation.

EDITORIAL SERVICES

- **Production and Operation Management:** Reviewer
- **Manufacture and Service Operation Management:** Reviewer
- **Health Care Management Science:** Reviewer
- **Management Science:** Reviewer

VOLUNTEER EXPERIENCE AND ENTREPRENEURSHIP

Earlybirds (Revenue Management)

New York, USA

Co-founder, Chief Operation Officer

Aug 2018 - Sep 2019

Stars and Rain

Beijing, China

Palliative Care Volunteer

Aug 2013 - May 2014

FELLOWSHIP & AWARDS

- Finals list, 2025 Midwest Health Economics Conference
- Finals list, 2025 Life sciences and Healthcare Research Conference
- **Ashok and Sarita Soni Fellowship (2023, 2024, 2025)**, Kelley School of Business, Indiana University
- **Academic Excellence Scholarship**, SC Johnson College of Business, Cornell University
- **The McLennan Howes Outstanding Honours Scholarship**, School of Business, Economics and Law, University of Queensland
- **Academic Distinction Award**, Beijing International Studies University

REFERENCES

Prof. Jonathan Helm

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Prof. Kurt Bretthauer

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Prof. Mohammad Zhalechian

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Prof. Vince Slauch

Assistant Professor of Applied Services, SC Johnson College of Business

Cornell University

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