

Zhili Tian

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EDUCATION

- ❑ Ph.D. in Supply Chain, Operations, and Technology, Washington Univ. in St. Louis (WUSTL), St. Louis, MO
- ❑ M.S. in Management, UCLA Anderson School of Management, Los Angeles, CA
- ❑ M.S. in Transportation, Massachusetts Institute of Technology, Cambridge, MA
- ❑ B.E. in Civil Engineering, Tsinghua University, Beijing, P.R. China

AWARDS AND HONORS

- ❑ Excellent research Awards Marilyn Davies College of Business, Univ. of Houston
- ❑ Colonel Lindsey V. Vereen Endowed Professorship Wall College of Business, Coastal Carolina Univ.
- ❑ Summer research grants Florida International Univ. 2014 – 2016 (three consecutive years)
- ❑ IISE Transaction 2011 Best Applied Paper Prize in Scheduling and Logistics for paper “Buffer Location and Sizing to Optimize Cost and Quality in Semi-Continuous Manufacturing Processes: Methodology and Application”
- ❑ Fellowship Olin Business School, WUSTL, 2007-2011
- ❑ Fellowship UCLA Anderson School of Management, 2004-2006
- ❑ Fellowship MIT, 2000-2001

RESEARCH AND SCHOLARLY PRODUCTIVITY

- ❑ Published multiple articles in premier peer-reviewed journals, including *MSOM*, *POM*, *Decision Sciences*, *EJOR*, *Omega*, *IISE Transactions*, and *Journal of the Academy of Marketing Science*.
- ❑ Maintains an active research agenda with articles accepted, under revision, and under review at journals including *POM*, *MSOM*, *Management Science*, *Strategic Management Journal*, *the International Journal of Research in Marketing*, and *Research Policy*.

RESEARCH INTERESTS

- ❑ Supply Chain Management
- ❑ Logistics
- ❑ Healthcare Operations
- ❑ Pharmaceutical Innovation
- ❑ New Product Development
- ❑ Data Analytics
- ❑ Reinforcement Learning

PUBLICATION

Selected Peer-Reviewed Publications

- Z. **Tian**, Moon, S., and Cai, Y. Examining Direct and Spillover Effects of Multiple Promotion Approaches on Prescription Drug Adoptions: Agency Theory. Published online in December 2025: *Journal of the Academy of Marketing Science (JAMS)* (FT-50 and ADBC list – A*)
- J Jianga, K Liu, Z. Tian, G Zhu. Joint Single and Multi-Trip Delivery of Consumable and Non-consumable Relief Supplies with Integrated Deprivation Costs. *The International Journal of Management Science (OMEGA)*, Accepted in 2026 (ADBC list – A)
- Z. **Tian**, G. Hazen, H. Li. (2023) Optimal Enrollment in Late-Stage New Drug Development with Learning of Drug's Efficacy for Group-Sequential Clinical Trials, *Manufacturing and Service Operations Management (MSOM)*, Vol. 25, No. 1, January, 2023 (FT-50 and ADBC list – A*). Link: <https://pubsonline.informs.org/doi/10.1287/msom.2022.1162>
- Liu, K., Liu, C., Xiang, X., and **Tian**, Z. (2023) Testing facility location and dynamic capacity planning for pandemics with demand uncertainty. *Eur J Oper Res. (EJOR)*, Vol. 304, No. 1, 150-168). (ADBC list – A*)
- Z. **Tian**, W. Han, W. Powell. (2022). Adaptive Learning of Drug Quality and Optimization of Patient Recruitment for Clinical Trials with Dropouts. *Manufacturing and Service Operations Management (MSOM)*, Vol. 24, No. 1, 2022. (FT-50 and ADBC list – A*). Link: <https://pubsonline.informs.org/doi/abs/10.1287/msom.2020.0936>
- Z. **Tian**, H. Gurnani and Y. Xu. (2021) Collaboration in the Development of New Drugs. *POM Journal*, Vol. 30, No. 11, 3841-4333. (FT-50 and ADBC list – A*). Link: <https://onlinelibrary.wiley.com/doi/abs/10.1111/poms.13377>
- Z. **Tian**, Y. Tang, P. Kouvelis (2019). Managing Soft Orders in Supply Chains: Roles of Penalties and Rationing Rules. *Decision Sciences*, 340-373. (ADBC list – A*)
- P. Kouvelis, J. Milner, Z. **Tian** (2017). Clinical Trials and New Drug Development: Optimal Investment Policies and Application. *Manufacturing and Service Operations Management (MSOM)*, Volume 19, No. 3, 437-452. (FT-50 and ADBC list – A*). Link: <https://pubsonline.informs.org/doi/10.1287/msom.2017.0616>
- Z. **Tian**. Optimization of the logistics network of a multinational firm under uncertainty. *International Journal of Revenue Management*, Vol. 9, No. 4, 2016.
- Z. **Tian**, P. Kouvelis, and C. L. Munson (2015). Understanding and Management of Product Line Complexity: Applying sensitivity analysis to a large-scale MILP model to price and schedule new customer orders. *IIE Transaction*. 47, 1-22. (ADBC list – A)
- Rajaram, K. and **Tian**, Z. (2009). Buffer Location and Sizing to Optimize Cost and Quality in Semi Continuous Manufacturing Processes: Methodology and Application. *IIE Transactions*. (2009) 41, 1–14. The paper won the IIE Transaction 2011 Best Applied Paper Prize in Scheduling and Logistics. (ADBC list – A)
- **Tian**, Z., Yang, H., and Lam, W. (1997). Transit Assignment Under Crowded Conditions. *Journal of Advanced Transportation*. 31(1). (ADBC list – A)
- Kawakami, S. and **Tian**, Z. (1996). An Equilibrium Model of Motorists' Parking Choice Behavior and Parking Demand in Central Area. *Studies in Regional Science*. 26 (2), 53-66.
- **Tian**, Z. and Zhou, H. (1996) Application of Modified Gravity Model of Traffic Distribution. *Journal of Highway and Transportation Research and Development*. 13 (1), 48-53.

Selected Manuscripts under Review and Revision

- ❑ Z. **Tian**, H. Gurnani and Y. Xu. Timing of Collaboration in Development of New Drugs with Learning of Efficacy. **Major revision** decision from *POM Journal*
- ❑ Z. **Tian**, Hanssens, D., and Cai, Y. New Drug Launch Optimization: Modeling Adoption and Advertising for New Prescription Drugs with Repeat Purchases. **Major revision** decision from *International Journal of Research in Marketing*)
- ❑ Ahmada, M., Liu, K., and Z. **Tian**. Multi-Objective Deep Reinforcement Learning for Relief Delivery considering Dynamic Facility Relocation/Closure and Disruptions (under review by *EJOR*)
- ❑ Z. **Tian**. Optimal Resource Allocation between Marketing Communication and Development of New Drug Product (under review by *Management Science*)
- ❑ Z. **Tian** and H. Li. Applying adoption theory for predicting patient enrollment in clinical trials accurately (under review by *POM Journal*)
- ❑ Z. **Tian**, G. Hazen, H. Li. Optimal investment and the value of interim analyses in late-stage new drug development with the learning of drug's efficacy for risk-averse firms (under review by *MSOM*)
- ❑ Z. **Tian**, R. Siebert. Dynamic Mergers Effects on R&D Investments and Drug Development across Research Phases in the Pharmaceutical Industry (under review by *Research Policy*)

Note: Investigate the direct and indirect effects of mergers on firms' product development capabilities

- ❑ Z. **Tian**, R. Siebert. Dynamic Effects of Licensing and Knowledge Transfer Across Research Phases: Evidence from the Pharmaceutical Industry (under review by *Strategic Management Journal*)
- ❑ Naik, P. and Z. Tian, Optimal Breakeven Analysis of a New Product Launch (under review by *Journal of Marketing Research*)

INVITED PRESENTATION AT UNIVERSITIES AND PHARMACEUTICAL INDUSTRY

- ❑ New drug development project management, product development collaboration, marketing strategies, Servier Pharmaceuticals, July 2024
- ❑ Adaptive Learning of Drug Quality and Optimization of Patient Recruitment for Trials with Dropout, McMaster University, June 2024
- ❑ Optimal investment strategies in new drug development, University of Nottingham, May 2013
- ❑ Optimal investment in new product development in the pharmaceutical industry, DuPont Chemical, June 2011
- ❑ Product line complexity management, Solutia, July 2008

INVITED PRESENTATION AND ORGANIZER AND SESSION CHAIR AT CONFERENCE

- ❑ Influence of Patient Reviews on Repeat-Purchase Drug Prescriptions: Evidence from High Blood Pressure Drugs and Insights at 2025 ISMS conference
- ❑ Clinical Trials for New Drug Development: Optimal Investment and Application, presented at 2025 Joint Statistical Meetings
- ❑ Optimal Enrollment in Late-Stage New Drug Development with Learning of Drug's Efficacy for Group Sequential Clinical Trials at 2025 INFORMS annual meeting
- ❑ Humanitarian Logistics and Socially Responsible Operations at 2024 INFORMS annual meeting
- ❑ Product and Process Innovation in Healthcare at 2024 INFORMS annual meeting
- ❑ Adaptive Learning of Drug Quality and Optimization of Patient Recruitment for Trials with Dropout, presented at 2024 Joint Statistical Meetings
- ❑ Optimal Enrollment in New Drug Development with Learning of Drug' Efficacy for Clinical Trials, presented at POMS 2024 Conference

- ❑ Innovative approaches to enhance benefit-risk assessments with advanced data analytics and predictive modeling techniques, presented at the 2024 International Society of Biopharmaceutical Statistics Symposium (ISBS)
- ❑ Optimal Enrollment In New Drug Development with Learning of Drug' Efficacy for Clinical Trials, presented at 2024 INFORMS annual conference
- ❑ Optimal Enrollment in Late-Stage New Drug Development with Learning of Drug's Efficacy for Group Sequential Clinical Trials, presented at 2023 AMA Summer Academic Conference
- ❑ Optimal Enrollment in Late-Stage New Drug Development with Learning of Drug's Efficacy for Group Sequential Clinical Trials, presented at 2023 POMS Annual Conference (Session chair and invited presenter)
- ❑ Optimal enrollment policy for late-stage group sequential trials with learning drug's efficacy, presented at 2023 Joint Statistical Meetings
- ❑ Product development, technology management, and process innovation in healthcare in the track of Technology, Innovation Management and Entrepreneurship at INFORMS annual meeting in 2023 (Session chair and invited presenter)
- ❑ Optimal Enrollment in Late-Stage New Drug Development with Learning of Drug's Efficacy For Group Sequential Clinical Trials, presented at 2023 INFORMS annual conference
- ❑ Product development, technology management, and process innovation in healthcare in the track of Technology, Innovation Management and Entrepreneurship at INFORMS annual meeting in 2022 (Chair and invited presenter)
- ❑ Adaptive Investment in New Product Development Project with Learning Product Quality, presented at INFORMS annual meeting in 2022 (Chair and invited presenter)
- ❑ Product development, technology management, and process innovation in healthcare at POMS annual meeting in 2022 (Chair and invited presenter)
- ❑ Adaptive Learning of Drug Quality and Optimization of Patient Recruitment for Clinical Trial with Dropouts, presented at 2022 DSI Annual Conference (invited presenter)
- ❑ Dynamic Mergers Effects on R&D Investments and Drug Development across Research Phases in the Pharmaceutical Industry at 14th Annual Conference on Innovation Economics organized by USPTO/ Kellogg School of Management (invited presenter)
- ❑ Product development, technology management, and process innovation in healthcare at POMS annual meeting in 2021 (invited session chair)
- ❑ Adaptive Learning of Drug Quality and Optimization of Patient Recruitment for Clinical Trial with Dropouts, presented at 2021 POMS Annual Conference
- ❑ Collaboration in New Drug Development at INFORMS annual meeting in 2021
- ❑ Product development, technology management, and process innovation in healthcare in the track of Technology, Innovation Management and Entrepreneurship at INFORMS annual meeting in 2020 (Chair and invited presenter)
- ❑ Adaptive Learning of Drug Quality and Optimization of Patient Recruitment, presented at Annual INFORMS in 2020
- ❑ Product development, technology management, and process innovation in healthcare at POMS annual meeting in 2019 (Chair and invited presenter)
- ❑ Optimal Investment in New Drug Development under Uncertainties, presented at POMS annual meeting in 2019
- ❑ Product and process innovation in healthcare at INFORMS annual meeting in 2019

- ❑ Adaptive Learning of Drug Quality and Optimization of Patient Recruitment for Clinical Trial with Dropouts, presented at 2019 INFORMS conference
 - ❑ Product Development and Process Innovation at POMS annual meeting in 2018 (Chair and invited presenter)
 - ❑ Optimal resource allocation between R&D and advertising, presented at POMS annual meeting in 2018
 - ❑ Product and Process Innovation in Healthcare and Energy Industries in the track of Technology, Innovation Management and Entrepreneurship at INFORMS annual meeting in 2018 (Chair and invited presenter)
 - ❑ Optimal investment in product development and marketing communication in pharmaceuticals, presented at INFORMS annual meeting in 2018
 - ❑ Product and Manufacturing Process Development and Innovation in Healthcare in the track of Technology, Innovation Management and Entrepreneurship at INFORMS annual meeting in 2017 (Chair and invited presenter)
 - ❑ Optimal Investment in Support of Current Drug and Development of New Drug, presented at INFORMS annual meeting in 2017
 - ❑ Understanding Product Line Complexity through Stochastic Lot Sizing Analysis, POMS 2015 (Chair and invited presenter)
 - ❑ Optimal Investment in Late-Stage New Drug Development, POMS 2015 (Chair and invited presenter)
 - ❑ Product Development and Process Development in Pharmaceutical Industry in the track of Technology, Innovation Management and Entrepreneurship at INFORMS 2014 (Chair and invited presenter)
 - ❑ Product Development and Generic Drug Shortage in the Pharmaceutical Industry, Capacity Planning and Logistics Management, POMS 2014 (Chair and invited presenter)
 - ❑ Capacity Planning, Product Layout, and Production Scheduling under Uncertainty, POMS 2013 (Chair and invited presenter)
 - ❑ Joint Optimization of Investment in Phase II and III New Drug Development, and Investment to Accelerate the Adoption of New Medical Devices, POMS 2012 (invited presenter)
 - ❑ Optimal Investment in Product Support and New Product Development in Pharmaceutical Industry, and Joint Optimization of Investment in Phase II and III New Drug Development in the track of Technology, Innovation Management and Entrepreneurship at INFORMS 2011 (invited presenters)
 - ❑ Award Winning Presentation: IIE Transaction 2011 Best Applied Paper Prize in Scheduling and Logistics: Buffer Location and Sizing to Optimize Cost and Quality in Semi-Continuous Manufacturing Processes: Methodology and Application
 - ❑ Optimal investment in new product development in the pharmaceutical industry in the track of Technology, Innovation Management and Entrepreneurship at INFORMS 2010 (invited presenter)
- Invited session of Editor's Favorite papers at INFORMS 2010: Buffer Location and Sizing to Optimize Cost and Quality in Semi-Continuous Manufacturing Processes: Methodology and Application

GRADUATE STUDENT AND JUNIOR FACULTY MENTORING

- ❑ Served on PhD dissertation committees at multiple institutions.
- ❑ Advised master's students and supervised graduate research projects at multiple institutions.
- ❑ Mentored junior faculty and graduate students in research design, publication development, and scholarly writing.

TEACHING EXPERIENCE

- ❑ Business Statistics (undergraduate courses, face-to-face)

- ❑ Decision Analysis (undergraduate courses, face-to-face)
- ❑ Business Analytics in Practices (undergraduate courses, face-to-face)
- ❑ Business Intelligence and Analytics in Healthcare (MBA courses, online)
- ❑ Quality Assessment and Outcome in Healthcare (MBA courses, face-to-face, hybrid)
- ❑ Healthcare Quality Management (MBA course, face-to-face, hybrid)
- ❑ Healthcare Operations Management (MBA courses, face-to-face, hybrid)
- ❑ Process Improvement Tools & Techniques (MBA courses, face-to-face, hybrid)
- ❑ Process Improvement Application (MBA courses, face-to-face, hybrid)
- ❑ Operations Management (undergraduate courses, face-to-face)
- ❑ Supply Chain Management (undergraduate courses, online)
- ❑ Project Management Overview (MBA courses, face-to-face, hybrid)
- ❑ Project Life Cycle: Initiation, Planning, and Executing (MBA courses, face-to-face, hybrid)
- ❑ Project Life Cycle: Monitoring, Controlling, and Closing (MBA courses)
- ❑ Supply Chain Management (undergraduate courses, face-to-face)
- ❑ Materials and Inventory Management (undergraduate courses, face-to-face, online)
- ❑ Supply Chain System and Processes (undergraduate courses, face-to-face, online)

TEACHING EFFECTIVENESS

- ❑ Undergraduate: 4.4/5 on average
- ❑ Graduate: 4.5/5 on average

ACADEMIC LEADERSHIP

- ❑ Academic Leadership of the MBA Project Management and Process Improvement Program.
- ❑ Chair of the Faculty Development Committee.
- ❑ Led and supported AACSB and CAHME accreditation activities at several universities.

SERVICE TO ACADEMIC SOCIETIES

- ❑ **Editorial Service (2012-Present):** Ad hoc reviewer for
 Management Science
 Operations Research
 MSOM
 POM Journal
 Decision Sciences
 Journal of Operational Research Society
 Journal of Economics & Management Strategy
 Socio-Economic Planning Sciences
 Healthcare Management Science
 ASCE Journal of Transportation Engineering
 IMA Journal of Management Mathematics
 International Journal of Revenue Management.
- ❑ **Conference Session Chair & Organizer (2011-Present):** Actively organize sessions on technologies, innovation, entrepreneurship, and disaster response logistics at INFORMS, POMS, and DSI annual conferences.