Olin faculty members in Supply Chain, Operations & Technology (SCOT) are distinguished by strong analytical backgrounds in operations research, management science, industrial engineering and economics. The program emphasizes the use of modeling techniques and empirical methodologies to understand manufacturing and service environments in areas of research ranging from supply chain management, operations strategy and revenue management to supply contracts and effective uses of information technology for process reengineering. Research frequently focuses on areas with strategic and tactical implications, and involves mathematical models and data analytics that help analyze problems and provide insight into complex scenarios. Emerging research areas of interest are digitalization of supply chains, machine learning applications and sustainable supply chains.

The Boeing Center for Supply Chain Innovation (BCSCI) creates value through collaborative research in technology, information and supply chain management. The focus is on the proprietary challenges member companies face. BCSCI undertakes a number of custom projects annually for members. Teams of PhD and other Olin students tackle these projects, working closely with Olin faculty to find solutions that build a competitive advantage through strategic supply chain management and technology-based process reengineering.

Collaborative Research—SCOT Faculty and PhD Students

Working Papers:
• Bai, B.*, Clyde, N.* and Zhang, D.J. Learning in Crowdfunding: Evidence from Field Experiments on Kickstarter.
• Jiang, P., Xu, S.* and Dong, L. Upgrading Random Lead Time on Asset Selling Platforms.
• Kouvelis, P. Liu, Y.* and Turic, D. Optimal Hog Farm Finishing Stage Management via Deep Reinforcement Learning.
• Liu, Y.*, Kouvelis, P. and Turic, D. Deep Hedging Strategies for a Hog Farm.
• Xu, S.* and Kouvelis, P. Financing Newsvendors with Platform and Trade Credit.

Published Papers:

*Indicates current or former student

“What we know is a drop; what we don’t know is an ocean.”
—Dennis Zhang, Associate Professor of Supply Chain, Operations & Technology

PhD in Supply Chain, Operations & Technology (SCOT)
Supply Chain, Operations & Technology (SCOT) Faculty

CO-CHAIR: Lingxiu Dong
Professor of Supply Chain, Operations & Technology (SCOT); Frahm Family Chair of Supply Chain, Operations & Technology
PhD, Stanford University
Research interests: operations management, production and distribution systems, supply chain management, information in supply chains

CO-CHAIR: Fuqiang Zhang
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Deniz Akturk
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PhD, University of Chicago
Research interests: sharing economy, intervention strategies, policy

Naveed Chehrazi
Assistant Professor of Supply Chain, Operations & Technology
PhD 2013, Stanford University
Research interests: data-driven modeling and optimization, applied probability and optimal control, consumer lending and retail banking, inventory management and retail operations, drug resistance and healthcare operations

Kaitlin Daniels
Assistant Professor of Supply Chain, Operations & Technology
PhD, University of Pennsylvania
Research interests: gig/sharing economy, self-scheduling capacity, platform operations, contract design, service operations

Jake Feldman
Associate Professor of Supply Chain, Operations & Technology
PhD, Cornell University
Research interests: assortment optimization, customer choice models, revenue management, approximation algorithms, machine learning

Panos Kouvelis
Emerson Distinguished Professor of Supply Chain, Operations & Technology, and Director of the Boeing Center for Supply Chain Innovation
PhD, Stanford University
Research interests: global supply chain management, operations and finance interfaces, risk management in supply chains, commodity risk management, operations strategy, managing the innovation process, marketing/manufacturing interfaces, product line design, lean manufacturing, inventory control, operations planning, project management, cyclic scheduling, manufacturing system design, management science and optimization

Iva Rashkova
Assistant Professor of Supply Chain, Operations & Technology
PhD, London Business School
Research interests: financial considerations for inventory management, medical shortages, developing countries

Dennis Zhang
Associate Professor of Supply Chain, Operations & Technology
PhD, Northwestern University
Research interests: service operations, healthcare operations, social interaction and operations, interface of econometrics, machine learning

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