

**JENNIFER K. RYAN**  
Frank L. Magee Professor  
Department Chair for Decision and Technology Analytics  
College of Business  
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**I. Academic Positions**

07/2025-present	Frank L. Magee Professor and Department Chair for Decision and Technology Analytics, College of Business, Lehigh University, Bethlehem, PA
08/2022-05/2025	Van Horne Family Endowed Chair, Professor and Department Chair for Supply Chain Management and Analytics, College of Business, University of Nebraska-Lincoln, NE
08/2016-07/2022	Ron and Carole Cope Professor and Department Chair for Supply Chain Management and Analytics, College of Business, University of Nebraska-Lincoln, NE
08/2015-07/2016	Associate Professor, Department of Management, College of Business Administration, University of Nebraska, Lincoln, NE
07/2008-06/2015	Associate Professor, Department of Industrial and Systems Engineering, Rensselaer Polytechnic Institute, Troy, NY
07/2006-06/2008	Senior Lecturer, Management Department, UCD School of Business, University College Dublin, Ireland
08/2004-07/2006	Assistant Professor, Department of Management, Mendoza College of Business, University of Notre Dame, Notre Dame, IN
08/1997-06/2003	Assistant Professor, School of Industrial Engineering, Purdue University, West Lafayette, IN

**II. Educational Preparation**

1997	Ph.D., Department of Industrial Engineering and Management Sciences, Northwestern University, Evanston, IL
1996	M.S., Department of Industrial Engineering and Management Sciences, Northwestern University, Evanston, IL
1990	B.A., Mathematics and the Social Sciences, Dartmouth College, Hanover, NH

**Professional Experience**

06/1996-10/1996	Consultant, Sears, Roebuck and Co., Hoffman Estates, IL
03/1995-10/1995	Consultant, Tucker Alan Inc., Chicago, IL
06/1994-08/1994	Instructor, Department of Industrial Engineering and Management Sciences, Northwestern University, Evanston, IL
06/1993-09/1993	Analyst, Center for Health Care Policy and Research, American Medical Association, Chicago, IL
08/1990-08/1992	Research Assistant, Lewin-VHI, Inc., Washington, DC

### III. Teaching and Student Supervision

#### Courses Taught

- **College of Business, Lehigh University**
  - SCM345 (Section 010): Analytical Approaches to Supply Chain Management, Fall Semester 2025
- **College of Business, University of Nebraska – Lincoln**
  - SCMA474 (Section 001): Strategic Supply Chain Management, Fall Semester 2021
  - SCMA434 (Section 001): Lean Supply Chain Operations, Spring Semester 2018 – 2023, 2025
  - SCMS/MRKT444 (Section 001): Supply Chain Logistics Management, Fall Semester 2015 and 2016
  - SCMS331 (Sections 004 and 005): Operations and Supply Chain Management, Spring Semester 2016
- **Department of Industrial and Systems Engineering, Rensselaer Polytechnic Institute**
  - ISYE4210: Design and Analysis of Supply Chains, Spring Semester, 2009-2015, Fall Semester 2014
  - ISYE6600: Design of Manufacturing Systems and Supply Chains, Spring Semester, 2009-2015, Fall Semester 2014
  - ISYE4280: Decision-Focused Systems Engineering, Fall Semester, 2009-2014
  - ISYE6962: Stochastic Models for Supply Chains, Fall Semester, 2009, 2011-2013
- **Smurfit School of Business, University College Dublin**
  - BMGT41040: Operations Management (Full-time MBA), Fall Semester, 2007
  - BMGT41510: Operations Management (EMBA Blackrock), Spring Semester, 2008
  - BMGT41520: Operations Management (EMBA Weekend), Spring Semester, 2007 - 2008
  - BMGT41530: Operations Management (EMBA City Centre), Spring Semester, 2007 - 2008
  - BMGT40300: Operations Management (DBS / DES Post-graduate Diploma), Spring Semester, 2007
- **Mendoza College of Business, University of Notre Dame**
  - BAMG30700 (Sections 5-8): Operations and Competitive Enterprises, Spring Semester, 2006
  - BA375 (Sections 1-6): Operations and Competitive Enterprises, Fall Semester, 2004
- **School of Industrial Engineering, Purdue University**
  - IE230: Probability and Statistics in Engineering I, Fall and Spring Semesters, 1997-1999
  - IE590B: Modeling and Analysis of Supply Chains, Spring Semester, 2002-2003
    - Taught through Continuing Engineering Education (CEE), Spring 2003
  - IE590G / IE690G: Stochastic Models for Inventory and Supply Chain Management, Fall Semester, 1998 and Spring Semesters, 2000-2001
  - IE545: Engineering Economic Analysis, Fall Semesters, 1999-2002
    - Taught through Continuing Engineering Education (CEE), Fall 2000 and Fall 2002
  - IE646: Advanced Decision Theory, Fall Semester, 2002
  - IE300: Honors Program Seminar (Coordinator), Fall and Spring Semesters, 1997-2002
  - IE697: Graduate Student Seminar (Coordinator), Fall and Spring Semesters, 1999-2001

#### Student Research Supervision

##### Doctoral Students Completed at Purdue University

1. Heung-Kyu Kim, Thesis: “Quantifying the Impact of Demand Data and Forecasting on Costs in a Supply Chain.” Ph.D. awarded December 2002, School of Industrial Engineering, Purdue University. Current position: Professor, Dankook University Business School (S. Korea)

2. Hui Zhao, Thesis: "Managing Service Parts Logistics: Inventory Sharing and Rationing in Decentralized Distribution Networks." Ph.D. awarded August 2003, School of Industrial Engineering, Purdue University. Current position: Professor, Smeal College of Business, Penn State University
3. Jimena Pascual, Thesis: "Pricing and Uncertainty in the Leasing of Durable Goods." Ph.D. awarded August 2003, School of Industrial Engineering, Purdue University. Current position: Professor and Director, School of Industrial Engineering, Pontificia Universidad Católica de Valparaíso (Chile)
4. Rong Li, Thesis: "Inventory Flexibility and Supply Chain Coordination through Adjustment Contracts." Ph.D. awarded August 2004, School of Industrial Engineering, Purdue University. Current position: Associate Professor, Whitman School of Management, Syracuse University

### **Doctoral Students Completed at Rensselaer Polytechnic Institute**

1. Vincent Hargaden, Thesis: "Workforce Planning in Professional Service Firms." Dissertation defense completed April 2011, Department of Industrial and Systems Engineering, Rensselaer Polytechnic Institute. Current position: Head of School of Mechanical and Materials Engineering, University College Dublin (Ireland)
  - Recipient of 2010 IBM Fellowship in amount of \$30,000 to support PhD studies
  - Co-recipient of 2012 Del and Ruth Karger Dissertation Prize (outstanding dissertation, DSES)
2. Xi Kan, Thesis: "Replacement Policy for Spare Parts Based on a Bivariate Weiner Process." Dissertation defense completed April 2012, Department of Industrial and Systems Engineering, Rensselaer Polytechnic Institute. Current Position: Machine Learning Specialist, VISA
3. Walter Yund, Thesis: "Supplier Qualification and Selection Policies for a Quality-Sensitive Buyer." Dissertation defense completed April 2012, Department of Industrial and Systems Engineering, Rensselaer Polytechnic Institute. Current position: Senior Scientist, GE Global Research
4. Zhi Zeng, Thesis: "Condition Monitoring-based Inventory Management for Large Scale Systems." Dissertation defense completed July 2012, Department of Industrial and Systems Engineering, Rensselaer Polytechnic Institute. Current position: Quant Trader, Centiva Capital
5. Michelle Park, Thesis: "Decision-making in Advanced Manufacturing." Dissertation defense completed June 2015, Department of Industrial and Systems Engineering, Rensselaer Polytechnic Institute. Current position: Technical Lead, Finance & Orders, Rover.com

### **Masters Students Completed at Purdue University**

1. Goker Aydin, Thesis: "An Incremental Approach to Product Line Expansion and Pricing Decisions". M.S. Aug 1999, School of Industrial Engineering, Purdue University
2. Rong Li, Thesis: "Decision Models for Large Scale Condition Monitoring." M.S. August 2001, School of Industrial Engineering, Purdue University
3. Jill Baumann, Thesis: "Performance Evaluation of Cross-Docking Centers." M.S. August 2002, School of Industrial Engineering, Purdue University (Co-advisor with M. Lawley)

### **Masters Projects and Undergraduate Research Supervision**

1. "Modeling IC Manufacturing Systems," ISYE 4940, Fall 2010 (undergraduate: Yuhuan Liang)
2. "Advanced IC Manufacturing Systems," ISYE 6940, Spring 2011 (undergraduate: Yuhuan Liang)
3. "Eycling Inventory Management," ISYE 6980, Fall 2012 and Spring 2013 (co-terminal masters project: Christopher Fuller)
4. "Production Scheduling with Queue-time Constraint," Summer 2013 (undergraduate: Lucky Cho)
5. "Understanding and Characterizing a Typical Process Flow in a Wafer Fab," Summer 2013 (undergraduate: Dagmawi Yifru)

## IV. Publications

### Refereed Journal Articles (citations from Web of Science, current/former students in italics)

1. Gupta, S., A. Agrawal and J.K. Ryan, "Agile Contracting: Managing Incentives Under Uncertain Needs." *Production and Operations Management*. Vol. 32, No. 3 (2023), p. 972-988. Citations (8/2024): 1.
2. Chen, H. and J.K. Ryan, "Optimal Specialty Crop Planning Policies with Yield Learning and Forward Contract." *Production and Operations Management*. Vol. 23, No. 2 (2023), p. 359-378. Citations (8/2024): 2.
3. Shao, L., J.K. Ryan, and D. Sun, "Contracting Mechanisms for Stable Sourcing Networks." *Manufacturing and Service Operations Management*. Vol. 24, No. 5 (2022), p. 2558-2576. Citations (8/2024): 2.
4. Li, Z., C. Qian, J.K. Ryan, and D. Sun, "Robust Mechanism Design and Production Structure for Assembly Systems with Asymmetric Information." *European Journal of Operational Research*. Vol. 301, No. 2 (2022), p. 609-623. Citations (8/2024): 2.
5. Li, Z., Lu, S., J.K. Ryan, and D. Sun, "Impact of Organizational Structure on Development Strategy under Equity-Based Incentives." *Production and Operations Management*. Vol. 30, No. 4 (2021), p. 984-996. Citations (8/2024): 5.
6. Yayla-Kullu, M., J.K. Ryan and J. Swaminathan, "Product Line Flexibility for Agile and Adaptable Operations." *Production and Operations Management*. Vol. 30, No. 3 (2021), p. 725-737. Citations (8/2024): 8.
  - Appears in special issue "AAA Global Value Chains in the Digital Age" in honor of Hau Lee.
7. Shao, L., J.K. Ryan, and D. Sun, "Responsible Sourcing under Asymmetric Information: Price Signaling vs. Supplier Disclosure." *Decision Sciences*. Vol. 51, No. 5 (2020), p. 1082-1109. Citations (8/2024): 14.
8. Batur, D., J.K. Ryan, M.C. Vuran and Z. Zhao, "Dynamic Pricing of Wireless Internet Based on Usage and Stochastically Changing Capacity." *Manufacturing & Service Operations Management*. Vol. 21, No. 4 (2019), p. 833-852. Citations (8/2024): 3.
9. Basten, R.J.I. and J.K. Ryan, "The value of maintenance delay flexibility for improved spare parts inventory management." *European Journal of Operational Research*. Vol. 278, No. 2 (2019), p. 646-657. Citations (8/2024): 14.
10. Li, Z., J.K. Ryan, L. Shao and D. Sun, "Incentive-Compatible in Dominant Strategies Mechanism Design for an Assembler under Asymmetric Information." *Production & Operations Management*. Vol. 28, No. 2 (2019), p. 479-496. Citations (8/2024): 7.
11. Li, R., J.K. Ryan and Z. Zeng, "Coordination in a Single-supplier, Multiple-retailer Distribution System: Supplier Facilitated Transshipments." *Production & Operations Management*. Vol. 26, No. 5 (2017), p. 784-801. Citations (8/2024): 8.
12. Li, Z., J.K. Ryan and D. Sun, "Selling through outlets: The impact of quality, product development risk, and market awareness." *International Journal of Production Economics*. Vol. 186 (2017), p. 71-80. Citations (8/2024): 9.
13. Jin, Y. and J.K. Ryan, "Can Contracts Replace Qualification in a Sourcing Process with Competitive Suppliers and Imperfect Information?" *IEEE Transactions on Engineering Management*. Vol. 63 (2016), p. 283-295. Citations (8/2024): 1.
14. Hargaden, V. and J.K. Ryan, "Resource Planning in Engineering Services Firms." *IEEE Transactions on Engineering Management*. Vol. 62 (2015), p. 578-590. Citations (8/2024): 11.
15. Li, E., J.K. Ryan, L. Shao and D. Sun, "Supply Contract Design for Competing Heterogeneous Suppliers under Asymmetric Information." *Production and Operations Management*. Vol. 24 (2015), p. 791-807. Citations (8/2024): 41.

16. Li, E., J.K. Ryan and D. Sun, "Multi-Attribute Procurement Contracts." *International Journal of Production Economics*. Vol. 159 (2015), p. 137-146. Citations (8/2024): 2.
17. Jin, Y., J.K. Ryan and W. Yund, "Sourcing Decisions with Competitive Suppliers and Imperfect Information." *Decision Sciences*. Vol. 45 (2014), p. 229-254. Citations (8/2024): 12.
18. Jin, Y., J.K. Ryan and W. Yund, "Two Stage Procurement Processes with Competitive Suppliers and Uncertain Supplier Quality." *IEEE Transactions on Engineering Management*. Vol. 61 (2014), p. 147-158. Citations (8/2024): 14.
19. Ryan, J.K., D. Sun, X. Zhao, "Coordinating a Supply Chain with a Manufacturer-Owned Online Channel: A Dual Channel Model under Price Competition." *IEEE Transactions on Engineering Management*. Vol. 60 (2013), p. 247-259. Citations (8/2024): 92.
20. Ryan, J.K., D. Sun, X. Zhao, "Competition and Coordination in Online Marketplaces." *Production and Operations Management*. Vol. 21 (2012), p. 997-1014. Citations (8/2024): 232.
21. Li, R. and J.K. Ryan, "Inventory Flexibility through Adjustment Contracts." *International Journal of Production Research*. Vol. 50 (2012), p. 1955-1978. Citations (8/2024): 5.
22. Jin, Y. and J.K. Ryan, "Price and Service Competition in an Outsourced Supply Chain." *Production and Operations Management*. Vol. 21 (2012), p. 331-344. Citations (8/2024): 41.
23. Li, R. and J.K. Ryan, "A Bayesian Inventory Model Using Real-Time Condition Monitoring Information." *Production and Operations Management*. Vol. 20 (2011), p. 754-771. Citations (8/2024): 65.
24. Bauman, J., M. Lawley, A. Mishra, J.K. Ryan, J. Tew and P. Wu, "Evaluating the Performance of Cross-Docks: A Data Envelopment Analysis Based Approach." *International Journal of Operations and Quantitative Management*, Vol. 16 (2010), p. 23-42.
25. Zhao, H., J.K. Ryan and V. Deshpande, "Optimal Dynamic Production and Inventory Transshipment Policies for a Two-Location Make-to-Stock System." *Operations Research*, Vol. 56 (2008), p. 400-410. Citations (8/2024): 58.
26. Sun, D., J.K. Ryan and H. Shin, "Why Do We Observe Stockless Operations on the Internet? Stockless Operations under Competition." *Production and Operations Management*, Vol. 17 (2008), p. 139-149. Citations (8/2024): 13.
27. Zhao, H., V. Deshpande, and J.K. Ryan, "Emergency Transshipments in Decentralized Dealer Networks: When to Send and Accept Transshipment Requests." *Naval Research Logistics*, Vol. 53 (2006), p. 547-567. Citations (8/2024): 44.
28. Zhao, H., V. Deshpande, and J.K. Ryan, "Inventory Sharing and Rationing in Decentralized Dealer Networks." *Management Science*, Vol. 51 (2005), p.531-547. Citations (8/2024): 81.
29. Gebraeel, N., Lawley, M., Li, R., and J.K. Ryan, "Residual Life Distributions from Component Degradation Signals: A Bayesian Approach." *IIE Transactions*, Vol. 37 (2005), p. 543-557. Citations (8/2024): 568.
30. Kim, H.K. and J.K. Ryan, "The Cost Impact of Using Simple Forecasting Techniques in a Supply Chain." *Naval Research Logistics*, Vol. 50 (2003), p. 388-411. Citations (8/2024): 28.
31. Gallego, G., J.K. Ryan, and D. Simchi-Levi, "Minimax Analysis for Finite Horizon Inventory Models." *IIE Transactions*, Vol. 33 (2001), p. 861-874. Citations (8/2024): 48.
32. Chen, F., Z. Drezner, J.K. Ryan, and D. Simchi-Levi, "Quantifying the Bullwhip Effect: The Impact of Forecasting, Lead Times and Information." *Management Science*, Vol. 46 (2000), p. 436-443. Citations (8/2024): 1137.
33. Chen, F., J.K. Ryan, and D. Simchi-Levi, "Exponential Smoothing Forecasts and the Bullwhip Effect." *Naval Research Logistics*, Vol. 47 (2000), p. 269-286. Citations (8/2024): 287.

## Refereed Journal Articles under Submission/Revision

1. Li, Z., A. Mutha, J.K. Ryan and D. Sun, "Mechanism Design under Asymmetric Information Regarding Demand for Remanufactured Goods." Revision submitted (reject and resubmit) to *Production and Operations Management* (submitted May 2025).
2. Batur, D., J.K. Ryan and M.C. Vuran, "Dynamic Resource Sharing in Private 5G Networks with Slicing." Submitted to *Manufacturing and Service Operations Management* (submitted June 2025).
3. Lee, J., J.K. Ryan, H. Shin and D. Sun, "Impacts of a Non-Profit Intermediary on Reliability of Drug Supply." Under revision for *Manufacturing and Service Operations Management* (major revision, reviews received August 2024).
4. Yayla-Kullu, M., J.K. Ryan and J. Swaminathan, "Product Line and Capacity Decisions for the Real Estate Industry under Willingness-to-pay Uncertainty." Under first revision for *Decision Sciences* (reviews received February 2022).
5. Li, Z., J.K. Ryan, and D. Sun, "A Robust Optimization Model for Product Line Design and Inventory Planning." Under revision for submission.

## Refereed Conference Proceedings

1. Park, H. and Ryan, J.K., "Condition-based Inventory Management with Planned and Unplanned Maintenance." *Proceedings of the 2015 Industrial and Systems Engineering Research Conference*, May 30 - June 2, 2015, Nashville, TN.
2. Sun, H. and Ryan, J.K., "Real-time Condition-monitoring: The Impact of Bayesian Updating on Failure-time Distribution." *Proceedings of the 2015 Industrial and Systems Engineering Research Conference*, May 30 - June 2, 2015, Nashville, TN.
3. Cho, L., H. Park, J.K. Ryan, T.C. Sharkey, C. Jung and D. Pabst, "Production Scheduling with Queue-time Constraints: Alternative Formulations." *Proceedings of the 2014 Industrial and Systems Engineering Research Conference*, May 31-June 3, 2014, Montreal, Canada.
4. Li, R. and J.K. Ryan, "Supplier-facilitated Transshipments with Positive Shipping Costs." *Proceedings of the 2013 Industrial and Systems Engineering Research Conference*, May 18-22, 2013, San Juan, PR.
5. Jin, Y. and J.K. Ryan, "Design of Competitive Procurement Processes and the Outsourcing Decision." *Proceedings of the 2013 Industrial and Systems Engineering Research Conference*, May 18-22, 2012, San Juan, PR.
6. Li, R., J.K. Ryan and Z. Zeng, "Coordination in a Single-supplier, Multiple-retailer Distribution System: Supplier Facilitated Transshipments." Extended abstract. *Proceedings of the 2012 Manufacturing & Service Operations Management Conference*, June 18-19, 2012, New York.
7. Li, R., J.K. Ryan and Z. Zeng, "Supply Chain Coordination with Supplier Facilitated Transshipments." *Proceedings of the 2012 Industrial and Systems Engineering Research Conference*, May 19-23, 2012, Orlando, FL.
8. Jin, Y., J.K. Ryan and W. Yund, "Design of Two-Stage Procurement Processes with Imperfect Information." *Proceedings of the 2012 Industrial and Systems Engineering Research Conference*, May 19-23, 2012, Orlando, FL.
9. Ryan, J.K., R. Li and Z. Zeng, "A Bayesian Inventory Model Using Real-Time Condition Monitoring Information." *Proceedings of the IIE Annual Conference (IERC) 2011*, Reno, NV, May 21-25, 2011.
10. Ryan, J.K., W. Yund and Y. Jin, "Design and Analysis of Two Stage Procurement Processes." *Proceedings of the IIE Annual Conference (IERC) 2011*, Reno, NV, May 21-25, 2011.
11. Ryan, J.K., W. Yund and Y. Jin, "Qualification and Allocation Policies for Quality Sensitive Manufacturers." *Proceedings of the IIE Annual Conference (IERC) 2010*, Cancun, June 5-9, 2010.
12. Hargaden, V. and J.K. Ryan, "Workforce Planning in Engineering Professional Service Firms." *Proceedings of the IIE Annual Conference (IERC) 2010*, Cancun, Mexico, June 5-9, 2010.
13. Hargaden V. and J.K. Ryan, "A Model for Workforce Planning in Professional Services Firms." *Proceedings of the 15th European Operations Management Association (EurOMA) International Annual Conference*, Groningen, Netherlands, June 15-18, 2008.

## Non-refereed Conference Proceedings

1. Li, R., J.K. Ryan and Z. Zeng, "Supplier Facilitated Transshipments in a Multi-Retailer Distribution System." *Proceedings of 2012 POMS Annual Conference*, April 20-23, 2012, Chicago, IL.
2. Kan, X., R. Li, J.K. Ryan and Z. Zeng, "Inventory Management of Spare Parts Subject to Deterioration." *Proceedings of 2012 POMS Annual Conference*, April 20-23, 2012, Chicago, IL.
3. Rong Li and J.K. Ryan, "A Bayesian Inventory Model Using Real-Time Condition Monitoring Information." *Proceedings of 2011 NSF CMMI Research and Innovation Conference*; Atlanta, GA, January 4-7, 2011.
4. Kan, X. and J.K. Ryan, "Replacement Decisions with Imperfect Condition Information." *Proceedings of 2011 POMS Annual Conference*, Reno, NV, April 29-May 2, 2011.
5. Hargaden, V. and J.K. Ryan, "Workforce Capacity Management in Service Operations." *Proceedings of 2011 POMS Annual Conference*, Reno, NV, April 29-May 2, 2011.
6. Jin, Y. and J.K. Ryan, "Price and Service Competition in an Outsourced Supply Chain." *Proceedings of 2010 POMS Annual Conference*, Vancouver, Canada, May 7-10, 2010.
7. H. Zhao, V. Deshpande, J.K. Ryan, "Inventory Sharing and Rationing in Decentralized Dealer Networks." *Proceedings of 2003 NSF Design, Service and Manufacturing Grantees and Research Conference*; Birmingham, AL, January 6-9, 2003.
8. Deshpande, V., J.K. Ryan, and H. Zhao, "Inventory Sharing in a Decentralized Dealer Network." *Proceedings of the 2002 MSOM Conference*, Cornell University, Ithaca, NY, June 17-18, 2002.
9. Ryan, J.K. "An Approximate Inventory Model for a Simple Assortment Problem." *Proceedings of 2002 NSF Design, Service and Manufacturing Grantees and Research Conference*; San Juan, Puerto Rico; January 7-10, 2002.
10. Kim, H. and J.K. Ryan, "The Impact of Incorrect Assumptions and Information Delay on Costs in a Supply Chain." *Proceedings of 2002 NSF Design, Service and Manufacturing Grantees and Research Conference*; San Juan, Puerto Rico; January 7-10, 2002.
11. Iyer, A., J. Pekny, P. Preckel, J.K. Ryan and R. Uzsoy, "Supply Chain Optimization and Protocol Environment (SCOPE): A Modeling Environment for Analysis of Extended Enterprises." *Proceedings of 2002 NSF Design, Service and Manufacturing Grantees and Research Conference*; San Juan, Puerto Rico; January 7-10, 2002.
12. Kim, H. and J.K. Ryan, "Quantifying the Impact of Forecast Updating and Demand Information on Variability and Costs in a Supply Chain." *Proceedings of the 2001 NSF Design and Manufacturing Research Conference*, January 2001.
13. Iyer, A., J. Pekny, P. Preckel, J.K. Ryan and R. Uzsoy, "Supply Chain Optimization and Protocol Environment (SCOPE): A Modeling Environment for Analysis of Extended Enterprises." *Proceedings of 2001 NSF Design and Manufacturing Research Conference*, January 2001.
14. Aydin, G. and J.K. Ryan, "Selecting and Pricing a Product Line Using Estimated Reservation Prices." *Proceedings of 2000 NSF Design & Manufacturing Research Conference*, January 2000.
15. Aydin, G. and J.K. Ryan, "Product Line Selection and Pricing Under Stochastic Consumer Choice." *Proceedings of the 2000 MSOM Conference*, University of Michigan, Ann Arbor, MI, June 26-27 2000.

## Book Chapters

1. Chen, F., Z. Drezner, J.K. Ryan, and D. Simchi-Levi, "The Bullwhip Effect: Managerial Insights on the Impact of Forecasting and Information on Variability in the Supply Chain." Ch 14 in *Quantitative Models for Supply Chain Management*, edited by S. Tayur, M. Magazine and R. Ganesham (Kluwer, 1998).
2. Ryan, J.K., "Systems Engineering: Opportunities for Health Care" in *Engineering and the Health Care System, Part 2*, edited by P. Reid, W.D. Compton, J.H. Grossman and G. Fanjiang, National Academy of Engineering and Institute of Medicine (National Academies Press, 2005).

## V. Research Grants and Contracts

*National Science Foundation: DYNAmWIC: Dynamic mmWave Spectrum Sharing Techniques for Public Safety Communications*

Lead-PI: Mehmet Vuran

Co-PI: Demet Batur, Jennifer Ryan

Project period: January 2021 – December 2025

Funding level: \$500,000

Program: SWIFT (Spectrum and Wireless Innovation enabled by Future Technologies), ECCS (Electrical, Communications and Cyber Systems)

Grant number: 2030272

*National Science Foundation: SpecEES: Collaborative Research: CoSeC-RAN: Cognitive Secure Cloud RAN for Efficient Spectrum Sharing*

Lead-PI: Mehmet Vuran

Co-PI: Demet Batur, Qiben Yan, Jennifer Ryan

Project period: October 2017 – September 2020

Funding level: \$435,399

Program: CNS (Computer and Network Systems)

Grant number: CNS-1731833

*National Science Foundation: Collaborative Research/GOALI: Improved Spare Parts Inventory Management in Aircraft Engines through Hybrid Sensing*

Lead-PI: Jennifer K. Ryan

Co-PI: Robert Tomastik, Pratt & Whitney

Project period: June 2013 – May 2018

Funding level: \$150,000

Program: CMMI (Civil, Mechanical and Manufacturing Innovation)

Grant number: CMMI-1300968

*Center for Automation Technologies and Systems (CATS): Advanced Production Scheduling and Optimization in the Microelectronics Industry*

Lead-PI: Jennifer K. Ryan

Co-PI: Thomas Sharkey

Project period: June 2010 – August 2014

Funding level: \$90,000

Source: GLOBALFOUNDRIES

*National Science Foundation: Bayesian Inventory and Replacement Models Using Real-Time Condition Monitoring Information*

Lead-PI: Jennifer K. Ryan

Project period: March 2009 – March 2012

Funding level: \$188,171

Program: CMMI (Civil, Mechanical and Manufacturing Innovation)

Grant number: CMMI-0856379

Fund number: A12036



*National Science Foundation: CAREER: Coordination Issues in Retail Operations Management*

Lead-PI: Jennifer K. Ryan

Project period: February 2001 – February 2006

Funding level: \$375,000

Program: CAREER, CMMI (Civil, Mechanical and Manufacturing Innovation)

Grant number: CMMI-0092482

*National Science Foundation: Scalable Enterprises: Supply Chain Optimization and Protocol Environment (SCOPE): A Rapid Prototyping and Modeling Tool for Extended Enterprises*

Lead-PI: Reha Uzsoy

Co-PI's: J. Ryan, R. Rardin, P. Preckel, J. Pekney and A. Iyer

Project period: August 2001 – July 2004

Funding level: \$621,908

Program: CMMI (Civil, Mechanical and Manufacturing Innovation)

Grant number: CMMI-0122207

*General Motors Research and Development Center: Development of a Statistical Methodology for Performance Evaluation of Cross-docking Centers in General Motors*

Lead-PI: Jennifer K. Ryan

Co-PI's: M. Lawley

Project period: July 2001 – July 2002

Funding level: \$95,544

Program: Distribution and Supply Chain Analysis Group, Enterprise System Labs, GM

*National Science Foundation: Supply Chain Optimization and Protocol Environment (SCOPE): A Modeling Environment for Extended Enterprises*

Lead-PI: Reha Uzsoy

Co-PI's: J. Ryan, R. Rardin, P. Preckel, J. Pekney and A. Iyer

Project period: September 2000 – August 2001

Funding level: \$200,000

Program: CMMI (Civil, Mechanical and Manufacturing Innovation)

Grant number: CMMI-0075606

*National Science Foundation: Quantifying the Impact of Demand Data and Demand Forecasting on Costs in a Supply Chain*

Lead-PI: Jennifer K. Ryan

Project period: September 1998 - August 2001

Funding level: \$101,392

Program: CMMI (Civil, Mechanical and Manufacturing Innovation)

Grant number: CMMI-9872483

## **VI. Editorship of Journals and Reviewer Activity**

### **Journal Editorial Service**

- Focused Issue Editor for Supply Chain & Logistics, *IISE Transactions* (Institute of Industrial and Systems Engineers), 2021 - present.
- Department Editor, *IISE Transactions* (Institute of Industrial and Systems Engineers), 2014 - 2021.
  - IISE Transactions Survey Committee (member), 2020 – 2021.
- Associate Editor, *IISE Transactions* (Institute of Industrial and Systems Engineers), 2001 - 2021.
- Associate Editor, *Naval Research Logistics* (Wiley), 2002 - 2021.
- Associate Editor, *OMEGA* (Elsevier), 2011-2016.
- Editorial Review Board, *IEEE Transactions on Engineering Management*, 2013-2017.

### **Referee and Reviewer Service**

- External reviewer for National Science Foundation for the third-year review of AI4OPT, a National AI Institute, August 2024
- Panelist for National Science Foundation
  - November 2019, October 2020, November 2021 and October 2022
  - May 2016 and February 2017
  - December 2002 and December 2009
  - April 2009
- Reviewer for Israel Science Foundation proposal, March 2010
- Reviewer for Netherlands Organisation for Scientific Research (NOW), August 2011
- Reviewer for technical journals and books:
  - *Management Science* (INFORMS)
  - *Operations Research* (INFORMS)
  - *Manufacturing and Services Operations Management* (INFORMS)
  - *Production and Operations Management* (POMS)
  - *IISE Transactions* (Institute of Industrial and Systems Engineers)
  - *IISE Transactions on Healthcare Systems Engineering* (Institute of Industrial and Systems Engineers)
  - *Decision Sciences* (Decision Sciences Institute)
  - *Naval Research Logistics* (Wiley)
  - *European Journal of Operations Research* (Elsevier)
  - *International Journal of Production Research* (International Foundation for Production Research)
  - *International Journal of Production Economics* (Elsevier)
  - *Production Planning and Control* (Taylor & Francis)
  - *Omega* (Elsevier)
  - *Handbook of Production Planning* (Kluwer International Series in ORMS)
  - John Wiley and Sons, Inc.
- Reviewer for conference proceedings:
  - Prognostics and Health Management (PHM) Society Annual Conference (2009, 2010)
  - Industrial Engineering Research Conference (2010, 2011, 2012, 2013)
  - Value Chain Management Conference (2011)

## **VII. Administration and Service**

### **Administration**

- Department Chair for Decision and Technology Analytics, College of Business, Lehigh University, July 2025 - present
- Department Chair for Supply Chain Management and Analytics, College of Business, University of Nebraska – Lincoln, August 2016 – May 2025
  - Appointed to be the inaugural department chair upon formation of Department of Supply Chain Management and Analytics (SCMA) in August 2016; currently serving a third term, concluding on June 30, 2025.
  - Oversee 16 full-time faculty, including 13 tenure/tenure-track faculty, as well as several part-time lecturers.
  - Serve on the College of Business Management Team and College of Business Executive Committee.
  - Managed the hiring of six tenure-track faculty and three professors of practice, as well as an external hire to fill an endowed chaired professorship (with tenure).
  - Managed the tenure and promotion cases for seven assistant professors; the promotion case of one assistant professor of practice to associate professor of practice; and the promotion of one associate professor to full professor.
  - Proposed and currently in the process of launching an undergraduate major in Business Analytics (final approval received in August 2024).
  - Proposed and launched an M.S. in Business Analytics, an M.S. in Supply Chain Management, and a graduate certificate in Supply Chain Analytics.
  - Proposed and launched a Ph.D. specialization in Supply Chain Management and Analytics.
  - Extensive participation in outreach activities for middle school and high school students, such as workshops, presentations and school visits, including participation in initiatives targeted at women and underrepresented groups.
  - Represented the College of Business on the University of Nebraska-Lincoln's "Forward to Fall" committee during Summer 2020, which oversaw various aspects of campus decision-making in advance of re-opening the campus in for the fall semester of 2020.
  - Selected to participate in the Big Ten Academic Alliance Department Executive Officers Program and the Big Ten Academic Alliance Academic Leadership Program.

### **Service to University**

- Search Advisory Committee for Director of the MBA and Online Graduate Programs, chair, Fall 2021 and Spring 2022, College of Business, University of Nebraska – Lincoln
- Search Advisory Committee for Assistant Professor of Practice, member, Fall 2021, Jeffrey S. Raikes School of Computer Science and Management, University of Nebraska – Lincoln
- Search Advisory Committee for Associate Dean of Master Programs and Executive Development, chair, Fall 2020 and Spring 2021, College of Business, University of Nebraska – Lincoln
- Forward to Fall Committee, member, Summer 2020, University of Nebraska – Lincoln
- Search Advisory Committee for Executive Vice Chancellor for Academic Affairs, member, Summer and Fall 2019, University of Nebraska – Lincoln
- Strategic Planning Working Group, member, and Scholarship and Research Taskforce, co-chair, Spring 2018, College of Business, University of Nebraska – Lincoln
- Search Advisory Committee for College of Business Dean, member, Summer and Fall 2017, University of Nebraska – Lincoln
- Ethics Curriculum Taskforce, member, Spring 2017, College of Business, University of Nebraska – Lincoln

- Teaching Evaluation Taskforce, member, Spring 2015 – Fall 2016, College of Business, University of Nebraska – Lincoln
- Faculty Search Committee, member, Fall 2015, Supply Chain Management Systems, University of Nebraska – Lincoln
- Undergraduate Advisory Committee, member, Fall 2013 – Spring 2015, Department of Industrial & Systems Engineering, Rensselaer Polytechnic Institute.
- Faculty Search Committee, member, Fall 2008 – Spring 2014, Department of Industrial & Systems Engineering, Rensselaer Polytechnic Institute.
- ISE 2017 Committee, member, Fall and Spring 2013, Department of Industrial & Systems Engineering, Rensselaer Polytechnic Institute, development of draft ISE 2017 Plan.
- Graduate Advisory Committee, member, Fall 2009 – Summer 2013, Department of Industrial & Systems Engineering, Rensselaer Polytechnic Institute.
- Judge, Undergraduate Research Symposium, oral or poster presentations, April 2011, 2012 and 2013, Rensselaer Polytechnic Institute.
- Reviewer, ISYE Doctoral Qualifying Exam proposals, May 2009 and 2010, Department of Industrial & Systems Engineering, Rensselaer Polytechnic Institute.
- Reviewer, Undergraduate IME Portfolios, April 2010, Department of Industrial & Systems Engineering, Rensselaer Polytechnic Institute.
- Academic Assessment Board, member, February - June 2008, Permanent Lectureship in Management (Project Management), UCD School of Business, University College Dublin.
- Research and Innovation Committee, member, June 2007 – June 2008, UCD School of Business, University College Dublin.
- PhD Programme Strategic Initiative Committee, member, March 2007 – June 2008, UCD School of Business, University College Dublin.
- Graduate Admissions Committee, member, Spring 2000 – Summer 2001, School of Industrial Engineering, Purdue University.
- Faculty Search Committee, member, Fall 1999 – Summer 2001, School of Industrial Engineering, Purdue University.
- Coordinator / Instructor, Undergraduate Honors Program for School of Industrial Engineering, Purdue University, Fall 1997 – Summer 2002.
- Organizer for School of Industrial Engineering sessions at Women in Engineering Career Day, Purdue University, October 1998 and October 1999.

### **Service to the Profession**

- Conference Organizing and Conference Committees
  - Member of program committee, Early Career Sustainable Operations Management Workshop, February 21-23, 2025, Boulder, CO.
  - Member of program committee, Early Career Sustainable Operations Management Workshop, February 23-25, 2024, Lincoln, NE.
  - Member of the planning committee, INFORMS Meeting of Analytics Program Directors (part of the INFORMS Business Analytics Conference), April 15, 2023, Aurora, CO.
  - Member of the planning committee, INFORMS Meeting of Analytics Program Directors (part of the INFORMS Business Analytics Conference), April 2, 2022, Houston, TX.
  - Co-chair (with Sıla Çetinkaya), 2015 Industrial and Systems Engineering Research Conference (ISERC), part of the part of the IIE Annual Conference and Expo, the flagship conference of the Institute of Industrial Engineers.

- Member of the scientific committee, European Operations Management Association (EurOMA) Conference, June 7-12, 2013, Dublin, Ireland.
- Member of the organizing committee and session co-chair for session on supply chain management, 2006 National Academy of Engineering “Frontiers of Engineering” Conference, September 21-23, 2006, Dearborn, MI.
- Invited Conference Session Organizer and Chair
  - Invited track co-chair and organizer, Tutorials Track, IISE Annual Conference (ISERC), May 2016, Anaheim, CA.
  - Invited session chair and session organizer, Dynamic Inventory and Risk Management, Production and Operations Management Society (POMS) Annual Conference, May 2016, Orlando, FL.
  - Invited session chair and session organizer, Supply Chain and Logistics, IIE Annual Conference (ISERC), May 2013, San Juan, PR.
  - Invited session chair and session organizer, Workforce Management in the Services, INFORMS National Meeting, October 2012, Phoenix, AZ.
  - Invited session chair and session organizer, Production Planning and Scheduling, 23<sup>rd</sup> Annual POMS Meeting, April 20-23, 2012, Chicago, IL.
  - Invited session chair and session organizer, Workforce Planning in the Services, INFORMS National Meeting, November 2011, Charlotte, NC.
  - Invited session co-chair and session co-organizer, Condition Based Maintenance, INFORMS 2011 Northeastern Conference, May 2011, Amherst, MA.
  - Invited session chair and session organizer, Production Scheduling and Optimization, CATS Technical Showcase and Conference, April 2011, Troy, NY.
  - Invited session chair and session organizer, Supply Chain Management, POMS 2010 Annual Conference, May 2010, Vancouver, BC.
  - Invited session chair and session organizer, Workforce Planning in the Professional Service Organizations, INFORMS National Meeting, October 2009, San Diego, CA.
  - Invited session chair and session organizer, Workforce Planning in the Services, INFORMS National Meeting, November 2007, Seattle, WA.
- Invited Panelist
  - Invited panelist, New Faculty Colloquium, INFORMS National Meeting, October 2023, Phoenix, AZ.
  - Invited panelist, Academic Job Search Panel, INFORMS National Meeting, October 2022, Indianapolis, IN.
  - Invited panelist, 2022 POMS Doctoral Consortium, 32nd Annual Production and Operations Management Society Conference, April 2022, virtual.
  - Invited panelist, Junior Faculty Interest Group Panel on Work-Life Balance, INFORMS National Conference, November 2018, Phoenix, AZ.
  - Invited panelist, Junior Faculty Interest Group Panel on Best Practices in Reviewing Papers, INFORMS National Conference, October 2017, Houston, TX.
  - Invited panelist, WORMS Panel on Dual Careers – Challenges and Creative Solutions, INFORMS National Meeting, November 2007, Seattle, WA.
  - Invited panelist, Panel on Teaching, INFORMS Doctoral Colloquium, Nov 1999, Philadelphia, PA.
  - Invited panelist, Panel on Experiences of New Faculty, INFORMS Doctoral Colloquium, October 1998, Seattle, WA.

- Other Professional Service Activities
  - Chair, INFORMS Educational Outreach Committee, February 2020 - October 2023
  - Member, INFORMS - NSF Liaison Committee, January 2022 - October 2023
  - Co-chair, 2019 INFORMS Junior Faculty Interest Group (JFIG) Paper Competition
  - Chair, Award Committee for 2013 Kuhn Award (awarded to the best paper published in *Naval Research Logistics* during past 3 years)
  - Member, Selection committee for Editor-in-Chief, *IIE Transactions*, 2012.
  - Member (judge), Award Committee for 2009 Kuhn Award (awarded to the best paper published in *Naval Research Logistics* during past 3 years)
  - Session chair, Inventory Management, CORS-INFORMS International Meeting, June 2009, Toronto.
  - Judge, Production and Operations Management Society (POMS) College of Supply Chain Management, 2008 Student Paper Competition
  - Judge, Manufacturing & Services Operations Management (MSOM), 2001 Student Paper Competition
  - Judge, Student Poster Competition, INFORMS National Meeting, November 2014, San Francisco, CA
- Media Interviews and Appearances
  - Speaking of Nebraska, Nebraska Public Media, January 27, 2022
  - KFOR Interview with Dale Johnson, January 13, 2022
  - Chancellor's Query Delivers Supply Chain Insight, Nebraska Today, December 8, 2021
  - Tips for Holiday Shoppers: Start Early and Be a Little Flexible, Lincoln Journal Star, November 25, 2021
  - Holiday Shopping Expected to be Affected by Distortion of Supply Chains, Daily Nebraskan, November 17, 2021
  - Leadership Lincoln Hot Topics Panel on Supply Chain Delays, November 10, 2021
  - Plenty of Turkeys Now, But Will They be Gobbled Up? KETV, November 2, 2021
  - New and Used Car Shortage Driving Up Prices, KETV, October 26, 2021
  - Supply Chain Problems Could Affect Holiday Shopping, NTV, October 15, 2021
  - Many Issues Causing Problems in Getting Products to Consumers, Nebraska Today, October 25, 2021
  - Nebraska Retailers, Consumer Experts Warn of Potential Holiday Inventory Shortages, Omaha World Herald, October 7, 2021
  - Supplies Still Affected by Pandemic After Shocks, The Pawnee Republican, September 30, 2021
  - Meatpacking Workers Are Considered Essential. But What Happens When They Get COVID-19? Omaha World Herald, April 12, 2020
  - KFOR Interview with Dale Johnson, March 30, 2020
  - Shelves, Crowds Slowly Returning to Normal at Lincoln Grocery Store, KETV, March 28, 2020

## **VIII. Professional and Public Lectures and Presentations**

### **Invited Seminars**

1. J.K. Ryan, "Dynamic Resource Sharing in Private 5G Networks with Slicing," Whitman School of Management, Syracuse University, September 15, 2023.
2. J.K. Ryan, "Dynamic Resource Sharing in Private 5G Networks with Slicing," Department of Industrial and Systems Engineering, University Tennessee, Knoxville, March 24, 2023.

3. J.K. Ryan, "Connecting RUL Estimation to Demand Forecasts and Inventory Management Decisions," presented as part of the Pratt & Whitney Modeling and Forecasting Conference, Hartford, CT, December 12, 2016.
4. J.K. Ryan, "Issues and Trends in Spare Parts Inventory Management," presented to the HPE (Hewlett-Packard Enterprise) Global Support Delivery Team, December 7, 2015.
5. J.K. Ryan, "Condition-Based Spare Parts Inventory Management with Planned and Unplanned Maintenance," presented as part of the Pratt & Whitney Modeling and Forecasting Conference, Hartford, CT, October 30, 2015.
6. J.K. Ryan, "Managing the Spare Parts Supply Chain," Institute for Supply Management – Nebraska, Lincoln, NE, October 22, 2015.
7. J.K. Ryan, "Supplier-facilitated Transshipments in a Multi-Retailer Distribution System," College of Business, University Tennessee, Knoxville, January 16, 2015.
8. J.K. Ryan, "Supplier-facilitated Transshipments in a Multi-Retailer Distribution System," College of Business, University of Nebraska, Lincoln, December 8, 2014.
9. J.K. Ryan, "Supplier-facilitated Transshipments in a Multi-Retailer Distribution System," College of Business, Iowa State University, October 13, 2014.
10. J.K. Ryan, "Sourcing Decisions with Competitive Suppliers and Imperfect Information," The Lally School of Management & Technology, RPI, October 29, 2013.
11. J.K. Ryan, "Supplier-facilitated Transshipments in a Single-supplier, Multi-retailer Distribution System," The Lally School of Management & Technology, RPI, December 5, 2012.
12. J.K. Ryan, "Design and Analysis of Two Stage Procurement Processes," Penn State Industrial Engineering Lecture Series, October 7, 2010.
13. J.K. Ryan, "Inventory Management of Service Parts," Invited seminar at Bell Labs (Alcatel-Lucent), Dublin, Ireland, July 2007.
14. J.K. Ryan, "Quantifying the Impact of Forecast Updating and Information in a Supply Chain," March 2003, Mendoza College of Business, University of Notre Dame, South Bend, IN.
15. J.K. Ryan, "Systems Engineering, Logistics and Health Care Delivery Systems," National Academy of Engineering Workshop on Engineering and Health Care Delivery, May 2001, Washington, DC.
16. J.K. Ryan, "Quantifying the Impact of Demand Information and Forecasting on Costs in a Supply Chain," Department of Industrial and Operations Engineering, University of Michigan, Feb 2001, Ann Arbor, MI.

### **Invited Conference Presentations**

1. Z. Li, J.K. Ryan, L. Shao and D. Sun, "Procurement Mechanism Design for Assembler under Asymmetric Information," INFORMS National Meeting, November 2018, Phoenix, AZ.
2. J.K. Ryan and H. Park, "An Inventory Model Using Real-Time Sensor Data to Predict Unplanned Maintenance," POMS Annual Conference, May 2016, Orlando, FL.
3. E. Li, J.K. Ryan and D. Sun, "A Manufacturer's Outlet Decision: Impact of Quality, Innovation and Market Awareness," INFORMS National Meeting, November 2015, Philadelphia, PA.
4. R. Gao, A. Muriel, M. Park, J.K. Ryan and R. Tomastik, "Condition-Based Spare Parts Inventory Management for Aircraft Engines," INFORMS National Meeting, November 2014, San Francisco, CA.
5. J.K. Ryan, "Condition-Based Spare Parts Inventory Management," 2014 Rensselaer CATS / CEG Advanced Manufacturing Conference, Troy, NY, April 23, 2014.

6. R. Li and J.K. Ryan, "Supplier-facilitated Transshipments with Positive Shipping Costs," IIE Annual Conference (ISERC) 2013 Annual Conference, May 2013, San Juan, PR.
7. J.K. Ryan, "Condition-Based Supply Chain Management," 2013 Rensselaer CATS / CEG Advanced Manufacturing Conference, Troy, NY, April 16, 2013.
8. J.K. Ryan, X. Kan, R. Li and Z. Zeng, "Using Sensor Data to Improve the Management of Spare Parts", INFORMS National Meeting, October 2012, Phoenix, AZ.
9. R. Li and J.K. Ryan, "Inventory Management of Spare Parts Subject to Deterioration," POMS 2012 Annual Conference, April 2012, Chicago, IL.
10. J.K. Ryan, R. Li and Z. Zeng, "Supplier Facilitated Transshipments in a Multi-Retailer Distribution System," POMS 2012 Annual Conference, April 2012, Chicago, IL.
11. J.K. Ryan, D. Sun and X. Zhao, "Competition and Coordination in Online Marketplaces," POMS 2012 Annual Conference, April 2012, Chicago, IL.
12. J.K. Ryan, W. Yund and Y. Jin, "Design and Analysis of Two Stage Procurement Processes," IIE Annual Conference (IERC) 2011, May 2011, Reno, NV.
13. J.K. Ryan, "An Overview of Joint Research on Supplier Qualification and Selection Procedures," 2011 Rensselaer CATS Technical Showcase and Conference, Troy, NY, April 27, 2011.
14. J.K. Ryan, W. Yund, Y. Jin, "Qualification and Allocation Policies for Quality Sensitive Manufacturers," IIE Annual Conference (IERC) 2010, June 2010, Cancun, Mexico.
15. Y. Jin, J.K. Ryan, "Price and Service Competition in an Outsourced Supply Chain", POMS 2010 Annual Conference, May 2010, Vancouver, BC.
16. R. Li, J.K. Ryan, "A Bayesian model Using Real Time Condition Monitoring Information", Institute of Industrial Engineers Annual Conference, May 2009, Miami, FL.
17. Y. Jin and J.K. Ryan, "Price and Service Competition in an Outsourced Supply Chain", INFORMS National Meeting, October 2008, Washington, DC.
18. J.K. Ryan, invited speaker, Panel on Dual Careers – Challenges and Creative Solutions, INFORMS National Meeting, November 2007, Seattle, WA.
19. V. Desphande, J.K. Ryan, H. Zhao, "Dynamic Production and Inventory Transshipment Policies for a Two-Location Make-to-Stock System," INFORMS National Meeting, November 2006, Pittsburgh, PA.
20. J.K. Ryan, "Information and Information Sharing in the Extended Enterprise," LEEAP Industrial Workshop, February 2001, Purdue University, West Lafayette, IN.
21. Kim, J.K. Ryan, "Quantifying the Value of Information & Information Sharing in a Supply Chain: Naive Inventory Policies & Information Delay," INFORMS National Meeting, November 2001, Miami, FL.
22. Aydin, J.K. Ryan, "Product Line Selection and Pricing Under the Multinomial Logit Choice Model," INFORMS National Meeting, November 2000, San Antonio, TX.
23. J.K. Ryan, invited speaker, Panel on Teaching, INFORMS Doctoral Colloquium, November 1999, Philadelphia, PA.
24. K. Ryan, invited speaker, Panel on Experiences of New Faculty, INFORMS Doctoral Colloquium, October 1998, Seattle, WA.
25. Kim, J.K. Ryan, "Quantifying the Impact of Demand Information and Forecasting on Variability and Costs in a Supply Chain," INFORMS National Meeting, May 2000, Salt Lake City, UT.
26. Chen, J.K. Ryan, D. Simchi-Levi, "Quantifying the Bullwhip Effect in a Multi-Retailer Supply Chain", INFORMS National Meeting, April 1998, Montreal, Quebec, Canada.



27. Z. Drezner, J.K. Ryan, D. Simchi-Levi, "Quantifying the Bullwhip Effect: Impact of Forecasting, Lead Times and Information", INFORMS National Meeting, May 1997, San Diego, CA.
28. Chen, J.K. Ryan, D. Simchi-Levi, "A Survey of New Results on the Bullwhip Effect", INFORMS National Meeting, October 1997, Dallas, TX.
29. J.K. Ryan, G. Gallego, D. Simchi-Levi, "Minimax Analysis for Finite Horizon Inventory Models", INFORMS National Meeting, October 1997, Dallas, TX.

**Invited Conference Presentations by Ph.D. Students or Co-authors (presenters are italicized)**

1. *S. Gupta*, A. Agrawal, J.K. Ryan, "Agile Contracting: Managing Incentives under Uncertain Needs," POMS 34<sup>th</sup> Annual Conference, April 2024, Minneapolis, MN.
2. *D. Batur*, J.K. Ryan and M.C. Vuran, "Dynamic Resource Sharing in Private 5G Networks with Slicing," INFORMS National Meeting, October 2023, Phoenix, AZ.
3. *J. Lee*, H. Shin, D. Sun, J.K. Ryan, "Impacts of a Non-profit Organization on Reliability of Drug Supply," INFORMS National Meeting, October 2023, Phoenix, AZ.
4. *S. Gupta*, A. Agrawal, and J.K. Ryan, "Agile Contracting: Managing Incentives Under Uncertain Needs," POMS 33<sup>rd</sup> Annual Conference, April 2023, Orlando, FL.
5. *J. Lee*, H. Shin, D. Sun, J.K. Ryan, "The Impacts of a Non-profit Organization on Drug Shortages," INFORMS National Meeting, October 2022, Indianapolis, IN.
6. *D. Batur*, J.K. Ryan, F. Guo, and M.C. Vuran, "Dynamic Spectrum Sharing for Wireless Internet," POMS 32<sup>nd</sup> Annual Conference, April 2021, online.
7. *S. Gupta*, A. Agrawal, and J.K. Ryan, "Agile Contracting: Managing Incentives Under Uncertain Needs," POMS 32<sup>nd</sup> Annual Conference, April 2021, online.
8. *H. Chen* and J.K. Ryan, "Conventional Crops or Hops? Optimal Crop Planning and Contract Design Policies with Yield Learning," POMS 30<sup>th</sup> Annual Conference, May 2019, Washington, DC.
9. *D. Batur*, J.K. Ryan, F. Guo and M. Vuran, "Dynamic Spectrum Capacity Sharing," MSOM 2019 Conference, June-July 2019, Singapore.
10. *D. Batur*, J.K. Ryan, Z. Zhao and M. Vuran, "Dynamic Pricing of Wireless Internet Based on Usage and Stochastically Changing Capacity," MSOM 2018 Conference, July 2018, Dallas, TX.
11. *D. Batur*, J.K. Ryan, Z. Zhao and M. Vuran, "Dynamic Pricing of Internet under Changing Capacity," POMS 28<sup>th</sup> Annual Conference, May 2018, Houston, TX.
12. *V. Hargaden*, J.K. Ryan, and A. Azaron, "An Optimization Approach To Workforce Planning In Professional Service Firms," INFORMS National Meeting, November 2016, Nashville, TN.
13. *D. Batur*, J.K. Ryan, Z. Zhao and M. Vuran, "Dynamic Pricing for Wireless Internet Based on Changing Capacity and Usage," POMS Annual Conference, May 2016, Orlando, FL.
14. *R. Basten* and J.K. Ryan, "Inventory Management with Two Demand Streams: A Maintenance Application," POMS Annual Conference, May 2016, Orlando, FL.
15. *M. Yayla-Kullu*, J.K. Ryan and J. Swaminathan, "Product Line Design And Capacity Management: The Role Of Consumer Behavior Uncertainty," INFORMS National Meeting, November 2015, Philadelphia, PA.
16. E. Li, J.K. Ryan and *D. Sun*, "Procurement Contracts under Information Asymmetry and Demand Uncertainty," POMS 2013 Annual Conference, April 2013, Denver, CO.
17. *V. Hargaden*, A. Azaron and J.K. Ryan, "Demand Management for Optimal Workforce Planning in Professional Service Firms," INFORMS National Meeting, October 2012, Phoenix, AZ.

18. *R. Li*, J.K. Ryan and Z. Zeng, "Coordination in a Multi-retailer Distribution System: Supplier-facilitated Transshipments," INFORMS National Meeting, October 2012, Phoenix, AZ.
19. J.K. Ryan, *D. Sun* and X. Zhao, "Competition and Coordination in Online Marketplaces," INFORMS National Meeting, October 2012, Phoenix, AZ.
20. *V. Hargaden* and J.K. Ryan, "A Rolling Time Horizon Approach to Workforce Planning in Professional Service Firms," INFORMS National Meeting, November 2011, Charlotte, NC.
21. J.K. Ryan, *W. Yund* and Y. Jin, "Design and Analysis of a Two-Stage Service Outsourcing Process," INFORMS National Meeting, November 2011, Charlotte, NC.
22. *X. Kan* and J.K. Ryan, "Replacement Decisions With Imperfect Condition Information," **INFORMS** Northeast Regional Conference, May 6-7, 2011, Amherst, Massachusetts.
23. R. Li, J.K. Ryan, and Z. Zeng, "A Bayesian Inventory Model using Real-time Condition Monitoring Information," INFORMS Northeast Regional Conference, May 6-7, 2011, Amherst, Massachusetts.
24. *V. Hargaden* and J.K. Ryan, "Skill Mix and Cross-Training in Professional Service Firms," INFORMS National Meeting, November 2010, Austin, TX.
25. J.K. Ryan and Z. Zeng, "A Bayesian Inventory Model Using Real-Time Condition Monitoring Information," INFORMS National Meeting, November 2010, Austin, TX.
26. J.K. Ryan, *D. Sun* and X. Zhao, "Coordinating a Supply Chain with a Manufacturer-Owned Online Channel," INFORMS National Meeting, November 2010, Austin, TX.
27. J.K. Ryan, *D. Sun* and X. Zhao, "Competition and Coordination in Online Marketplaces," INFORMS National Meeting, November 2010, Austin, TX.
28. *R. Li*, J.K. Ryan, "Two-period Coordination for a Single Supplier Multiple Buyers Supply Chain with Adjustment Contract," Production and Operations Management Society (POMS) Annual Conference, May 2010, Vancouver, BC.
29. J.K. Ryan, *D. Sun*, *X. Zhao*, "Competition and Cooperation in Online Marketplaces," POMS 2010 Annual Conference, May 2010, Vancouver, BC.
30. J.K. Ryan and *Y. Jin*, "Price and Service Competition in an Outsourced Supply Chain: The Impact of Demand Allocation Policies," INFORMS National Meeting, October 2009, San Diego, CA.
31. J.K. Ryan, *D. Sun*, *X. Zhao*, "Coordinating a Supply Chain with a Manufacturer-owned Online Channel," INFORMS National Meeting, October 2009, San Diego, CA.
32. *V. Hargaden*, J.K. Ryan, "Modeling the Workforce Planning Process in Service Operations," INFORMS National Meeting, October 2009, San Diego, CA.
33. *V. Hargaden*, J.K. Ryan, "Assigning Professional Service Workers to Teams: A Mathematical Optimization Model," INFORMS National Meeting, October 2009, San Diego, CA.
34. J.K. Ryan, *D. Sun*, *X. Zhao*, "Price and Quantity Competition in Online Retailing: Amazon's Marketplace Contract," INFORMS National Meeting, October 2008, Washington, DC.
35. *V. Hargaden*, J.K. Ryan, "Resource Planning in Professional Service Organizations," INFORMS National Meeting, October 2008, Washington, DC.
36. J.K. Ryan, *D. Sun*, *X. Zhao*, "Price and Quantity Competition between Outlets and Retail Stores," INFORMS National Meeting, October 2008, Washington, DC.
37. *R. Li*, J.K. Ryan, "Supply Chain Coordination with Two-direction Adjustment Contract," INFORMS National Meeting, November 2007, Seattle, WA.
38. Deshpande, J.K. Ryan and *H. Zhao*, "An Analysis of Emergency Transshipments in Decentralized Dealer Networks," POMS Annual Conference, April 2005, Chicago, IL.

39. Deshpande, J.K. Ryan and *H. Zhao*, "Equilibrium Solutions to Inventory Sharing and Rationing in Decentralized Distribution Systems," INFORMS National Meeting, October 2003, Atlanta, GA.
40. Deshpande, J.K. Ryan and *H. Zhao*, "Managing Service Parts Logistics: Inventory Sharing/Rationing in Decentralized Distribution Networks," INFORMS National Meeting, November 2002, San Jose, CA.
41. *F. Chen*, J.K. Ryan, D. Simchi-Levi, "The Impact of Exponential Smoothing Forecasts on the Bullwhip Effect," INFORMS National Meeting, May 1997, San Diego, CA.

### **Contributed Conference Presentations**

1. D. Batur, J.K. Ryan, M. Vuran, "Dynamic Capacity Management in 5G Networks," IISE Annual Conference and Expo, May 2024, Montreal, Canada.
2. D. Batur, J.K. Ryan, M. Vuran, "Multi-resource Capacity Management in 5G Networks," POMS 34<sup>th</sup> Annual Conference, April 2024, Minneapolis, MN.
3. Z. Li, A. Mutha, J.K. Ryan, D. Sun, "Product Acquisition for Remanufacturing," POMS 34<sup>th</sup> Annual Conference, April 2024, Minneapolis, MN.
4. D. Batur, J.K. Ryan, M. Curan, "Dynamic Resource Sharing in Private 5G Networks with Slicing," 23rd Conference of the International Federation of Operational Research Societies, July 2023, Santiago, Chile.
5. S. Gupta, A. Agrawal, and J.K. Ryan, "Agile Contracting: Managing Incentives Under Uncertain Needs," POMS 31<sup>st</sup> Annual Conference, May 2021, online.
6. D. Batur, J.K. Ryan, M. Vuran and F. Guo, "Dynamic Spectrum Sharing for Wireless Internet," POMS 31<sup>st</sup> Annual Conference, May 2021, online.
7. H. Chen and J.K. Ryan, "Conventional Crops or Hops? Optimal Crop Planning Policies With Yield Learning And Forward Contract," INFORMS National Meeting, October 2019, Seattle, WA.
8. D. Batur, J.K. Ryan, Z. Zhao and M. Vuran, "Pricing of Internet Dynamically Under Changing Capacity and Customer Usage," POMS 28<sup>th</sup> Annual Conference, May 2017, Seattle, WA.
9. D. Batur, J.K. Ryan, Z. Zhao and M. Vuran, "Pricing of Internet Dynamically Under Changing Capacity," INFORMS National Meeting, November 2016, Nashville, TN.
10. V. Hargaden, A. Azaron and J.K. Ryan, "Demand Management and Optimal Workforce Scheduling in Professional Service Firms," INFORMS National Meeting, November 2015, Philadelphia, PA.
11. R. Basten and J.K. Ryan, "Managing Inventory for a Stochastic and a Deterministic Demand Stream," INFORMS National Meeting, November 2015, Philadelphia, PA.
12. Sun, H. and Ryan, J.K., "Real-time Condition-monitoring: Impact of Bayesian Updating on Failure-time Distribution". IIE Annual Conference (ISERC), May 30-June 2, 2015, Nashville, TN.
13. Park, H. and Ryan, J.K., "Condition-based Inventory Management with Planned and Unplanned Maintenance". IIE Annual Conference (ISERC), May 30 - June 2, 2015, Nashville, TN.
14. Cho, L., H. Park, J.K. Ryan, T.C. Sharkey, C. Jung and D. Pabst, "Production Scheduling with Queue-time Constraints: Alternative Formulations". IIE Annual Conference (ISERC) 2014, May 2014, Montreal, Canada.
15. Y. Jin, J.K. Ryan, "Design of Competitive Procurement Processes and the Outsourcing Decision," IIE Annual Conference (ISERC) 2013, May 2013, San Juan, PR.
16. Rong Li, J.K. Ryan, Zhi Zeng, "Coordination in a Single-supplier, Multi-retailer Distribution System with Supplier-facilitated Transshipments," MSOM Conference, June 2012, New York, NY,
17. Rong Li, J.K. Ryan, Zhi Zeng, "Supply Chain Coordination with Supplier-facilitated Transshipments," IIE Annual Conference (ISERC) 2012, May 2012, Orlando, FL.

18. Y. Jin, J.K. Ryan, W. Yund, "Design of Two-Stage Procurement Processes with Imperfect Information," IIE Annual Conference (ISERC) 2012, May 2012, Orlando, FL.
19. R. Li, J.K. Ryan, Z. Zeng, "A Bayesian Inventory Model Using Real-Time Condition Monitoring Information," IIE Annual Conference (IERC) 2011, May 2011, Reno, NV.
20. Y. Jin, J.K. Ryan, W. Yund, "Design and Analysis of Two Stage Procurement Processes," INFORMS Northeast Regional Conference, May 6-7, 2011, Amherst, Massachusetts.
21. Xi Kan, J.K. Ryan, "Replacement Decisions with Imperfect Condition Information," Production and Operations Management Society (POMS) Annual Conference, April 2011, Reno, NV.
22. V. Hargaden, J.K. Ryan, "Workforce Capacity Management in Service Operations," Production and Operations Management Society (POMS) Annual Conference, April 2011, Reno, NV.
23. J.K. Ryan, W. Yund and Y. Jin, "Supplier Qualification and Selection Policies for a Quality-sensitive Buyer," INFORMS National Meeting, November 2010, Austin, TX.
24. V. Hargaden and J.K. Ryan, "Workforce Planning in Engineering Professional Service Firms," IIE Annual Conference (IERC) 2010, June 2010, Cancun, Mexico.
25. R. Li and J.K. Ryan, "A Bayesian model Using Real Time Condition Monitoring Information," CORS-INFORMS International Meeting, June 2009, Toronto, ON.
26. V. Deshpande, J.K. Ryan and H. Zhao, "Optimal Dynamic Production and Inventory Transshipment Policies for Multi-Location Make-to-Stock Systems," Manufacturing and Service Operations Management Conference, June 2006, Atlanta, GA.
27. J.K. Ryan, D. Sun, "The Role of Stockless Operations in Electronic Retailing," INFORMS National Meeting, November 2006, Pittsburgh, PA.
28. V. Deshpande, J.K. Ryan and H. Zhao, "Optimal Dynamic Production and Inventory Policies for a Two-Location Make-to-Stock System," INFORMS National Meeting, Octr 2004, Denver, CO.
29. R. Li, J.K. Ryan, "Supply Chain Coordination through Adjustment Contracts," INFORMS National Meeting, October 2004, Denver, CO.
30. R. Li, J.K. Ryan, "Inventory Flexibility through Adjustment Contracts," INFORMS National Meeting, October 2003, Atlanta, GA.
31. V. Deshpande, J.K. Ryan and H. Zhao, "Inventory Sharing and Rationing In Decentralized Dealer Networks," Second Annual Supply Chain Optimization Conference, February 27 – March 1, 2003, University of Florida, Gainesville, Florida.
32. N. Gebræel, M. Lawley, R. Li, J.K. Ryan, "Residual Life Distribution from Component Degradation Signals: A Bayesian Approach," INFORMS National Meeting, November 2002, San Jose, CA.
33. V. Deshpande, J.K. Ryan and H. Zhao, "Inventory Sharing in a Decentralized Dealer Network," MSOM Conference, Cornell University, Ithaca, NY, June 2002.
34. V. Deshpande, J.K. Ryan and H. Zhao, "Inventory Sharing and Rationing in a Make-to-Stock System," INFORMS National Meeting, November 2001, Miami, FL.
35. Aydin, J.K. Ryan, "Product Line Selection and Pricing Under the Multinomial Logit Choice Model", MSOM Conference, June 2000, Ann Arbor, MI.
36. Aydin, J.K. Ryan, "Product Line Selection and Pricing Under Stochastic Utility", INFORMS National Meeting, November 1999, Philadelphia, PA.
37. J.K. Ryan, "An Approximate Inventory Model for a Retail Assortment with Substitutable Products", INFORMS National Meeting, October 1998, Seattle, WA.
38. Chen, J.K. Ryan, D. Simchi-Levi, "A Survey of New Results on the Bullwhip Effect", Multi-Echelon Inventory Conference, June 1997, Stern Graduate School of Business, New York University, New York.

39. Gallego, J.K. Ryan, D. Simchi-Levi, "Minimax Analysis of the Discrete Finite Horizon Inventory Model", INFORMS National Meeting, May 1996, Washington, DC.
40. Gallego, J.K. Ryan, D. Simchi-Levi, "Minimax Analysis of the Discrete Finite Horizon Inventory Model", Multi-Echelon Inventory Conference, June 1996, Dartmouth College, Hanover, NH.

### **Poster Presentations**

1. M. Park, J.K. Ryan, T. Sharkey, C. Jung and D. Pabst, "Semiconductor Fab Scheduling with Queue Time Constraints," 2013 Rensselaer CATS / CEG Advanced Manufacturing Conference, Troy, NY, April 16, 2013.
2. R. Li, J.K. Ryan and Z. Zeng, "Coordination in a Single-supplier, Multi-retailer System with Supplier-facilitated Transshipments," INFORMS National Meeting, November 2011, Charlotte, NC.
3. R. Li and J.K. Ryan, "A Bayesian Inventory Model Using Real-Time Condition Monitoring Information," 2011 NSF CMMI Research and Innovation Conference; Atlanta, GA, January 4-7, 2011.
4. J.K. Ryan, W. Yund and Y. Jin, "Supplier Qualification and Selection with Uncertain Quality," 2011 Rensselaer CATS Technical Showcase and Conference, Troy, NY, April 27, 2011.
5. J.K. Ryan, X. Kan and Z. Zeng, "Inventory and Maintenance Planning for Service Parts with Real-Time Condition Monitoring," 2010 CATS Annual Technology Showcase, Troy, NY, May 10, 2010.
6. J.K. Ryan, "An Approximate Inventory Model for a Simple Assortment Problem," 2002 NSF Design, Service and Manufacturing Grantees & Research Conference, San Juan, PR, January 7-10, 2002.
7. H. Kim, J.K. Ryan, "Quantifying the Impact of Demand Data and Demand Forecasting on Costs in a Supply Chain," NSF Design and Manufacturing Grantees Conference, January 1999, Long Beach, CA.
8. J.K. Ryan, X. Kan and Z. Zeng, "Inventory and Maintenance Planning for Service Parts with Real-Time Condition Monitoring," 2010 CATS Annual Technology Showcase, Troy, NY, May 10, 2010.

### **IX. Honors and Awards**

- INFORMS Senior Member, 2024-present.
- Faculty Service Award, College of Business, University of Nebraska-Lincoln, 2025.
- Distinguished Research Award, College of Business, University of Nebraska-Lincoln, 2021.
- Selected to participate in Big Ten Academic Alliance Academic Leadership Program, 2021-22.
- Selected to participate in Big Ten Academic Alliance Department Executive Officers Program, 2016-17.
- Best Paper Award in the Supply Chain and Logistics Track of the Industrial and Systems Engineering Research Conference (ISERC), Nashville, TN, May 2015. Paper titled "Condition-based Inventory Management with Planned and Unplanned Maintenance."
- Best Paper Award in the Quality Control and Reliability Engineering Track of the Industrial and Systems Engineering Research Conference (ISERC), Nashville, TN, May 2015. Paper titled "Real-time Condition-monitoring: The Impact of Bayesian Updating on Failure-time Distribution."
- Best Paper Award, eBusiness Section of the Institute for Operations Research and the Management Sciences (INFORMS), San Diego, CA, October 11-14, 2009. Paper titled "Coordinating a Supply Chain with a Manufacturer-Owned Online Channel: A Dual Channel Model under Price Competition."
- Finalist, Best Paper Award, Service Science Section of the Institute for Operations Research and the Management Sciences (INFORMS), San Francisco, CA, November 9-12, 2014. Paper titled "Impact of Economic Uncertainty on Product Line Design and Capacity Management."
- Finalist, Best Paper Award, 2014 Annual Meeting of the Decision Sciences Institute (DSI), November 22-25, 2014. Paper titled "Economic Uncertainty and Product Line Design."

- Finalist, Best Paper Award in the Supply Chain and Logistics track of Industrial and Service Engineering Research Conference (ISERC), Orlando, FL, May 2012. Paper titled “Supply Chain coordination with Supplier-facilitated Transshipments.”
- 2010 IBM Fellowship received by Vincent Hargaden (former RPI PhD student) in amount of \$30,000 to support PhD studies under my supervision.
- Selected to attend the 2001 National Academy of Engineering “Frontiers of Engineering” Conference. March 1-3, 2002, University of California, Irvine.
- Invited to attend and present at the National Academy of Engineering Workshop on Engineering and Health Care Delivery, May 2001, Washington, DC.
- CAREER Award, National Science Foundation (NSF), 2001.
- James H. Greene Outstanding Graduate Educator Award, 2<sup>nd</sup> place, School of Industrial Engineering, Purdue University, 2001.
- A. Alan B. Pritsker Outstanding Undergraduate Teaching Award, 1<sup>st</sup> place, School of Industrial Engineering, Purdue University, 2000.
- A. Alan B. Pritsker Outstanding Undergraduate Teaching Award, 2<sup>nd</sup> place, School of Industrial Engineering, Purdue University, 1999.
- Cabell Fellowship, September 1992 – June 1993, Department of Industrial Engineering and Management Sciences, Northwestern University, Evanston, IL.
- Charles A. Collis Scholarship, Dartmouth College, September 1988 - June 1990.