

Gregory A. DeCroix

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PROFESSIONAL EXPERIENCE

University of Wisconsin-Madison, Wisconsin School of Business

Professor, 2013-present

Grainger Professor of Supply Chain Management, 2016-present

Peter T. Allen Professor, 2015-2016

Wisconsin Naming Partners Professor, 2008-2015

Associate Professor, 2006-2013

University of Wisconsin-Madison, Nelson Institute for Environmental Studies

Affiliate Professor, 2008-present

University of Wisconsin-Madison, Department of Industrial and Systems Engineering

Affiliate Professor, 2010-present

Duke University, Fuqua School of Business

Associate Professor, 2000-2006

Visiting Associate Professor, 1998-2000

University of Washington, School of Business

Assistant Professor, 1991-1998

Stanford University, Department of Operations Research

Teaching Assistant, 1991

Teaching Fellow, 1990

EDUCATION

Stanford University

Ph.D., Operations Research, 1992

(NSF Graduate Fellowship, 1987-1990)

Thesis: *Equilibrium Warranties and Prices*

Advisor: Arthur F. Veinott, Jr.

Miami University

B.S., Mathematics and Statistics, 1987

Summa Cum Laude, University and Departmental Honors

RESEARCH PUBLICATIONS

Refereed Journal Articles

- DeCroix, G., X. Long and J. Tong (2021) How Service Quality Variability Hurts Revenue When Customers Learn: Implications for Dynamic Personalized Pricing. *Operations Research* **69**, 683-708.
- Bernstein, F., G. DeCroix and B. Keskin (2021) Competition Between Two-Sided Platforms Under Demand and Supply Congestion Effects. *Manufacturing & Service Operations Management* **23**, 1043-1061.
- Tong, J., G. DeCroix and J. Song (2020) Modeling Payment Timing in Multiechelon Inventory Systems with Applications to Supply Chain Coordination. *Manufacturing & Service Operations Management* **22**, 346-363.
- Zhao, C., J. Li, N. Huang and G. DeCroix (2016) Optimal Planning of Plant Flexibility: Problem Formulation and Performance Analysis. *IEEE Transactions on Automation Science and Engineering* **14**, 718-731.
- Bernstein, F. and G. DeCroix (2015) Advance Demand Information in a Multi-Product System. *Manufacturing & Service Operations Management* **17**, 52-65.
- DeCroix, G. (2013) Inventory Management for an Assembly System Subject to Supply Disruptions. *Management Science* **59**, 2079-2092.
- Bernstein, F., G. DeCroix and Y. Wang (2011) The Impact of Demand Aggregation through Delayed Component Allocation in an Assemble-to-Order System. *Management Science* **57**, 1154-1171.
- DeCroix, G., J.-S. Song and P. Zipkin (2009) Managing an Assemble-to-Order System with Returns. *Manufacturing & Service Operations Management* **11**, 144-159.
- Bernstein, F., G. DeCroix and Y. Wang (2007) Incentives and Commonality in a Decentralized Multiproduct Assembly System. *Operations Research* **55**, 630-646.
- DeCroix, G. (2006) Optimal Policy for a Multi-Echelon Inventory System with Remanufacturing. *Operations Research* **54**, 532-543.
- Bernstein, F. and G. DeCroix (2006) Inventory Policies in a Decentralized Assembly System. *Operations Research* **54**, 324-336.
- DeCroix, G. and P. Zipkin (2005) Inventory Management for an Assembly System with Product or Component Returns. *Management Science* **51**, 1250-1265.
- DeCroix, G., J.-S. Song and P. Zipkin (2005) A Series System with Returns: Stationary Analysis. *Operations Research* **53**, 350-362.
- Ferguson, M., G. DeCroix and P. Zipkin (2005) Commitment Decisions with Partial Information Updating. *Naval Research Logistics* **52**, 781-795.

Refereed Journal Articles (continued)

- Corbett, C., G. DeCroix and A. Ha (2005) Optimal Shared Savings Contracts in Supply Chains: Linear Contracts and Double Moral Hazard. *European Journal of Operational Research* **163**, 653-667.
- Bernstein, F. and G. DeCroix (2004) Decentralized Pricing and Capacity Decisions in a Multi-Tier System with Modular Assembly. *Management Science* **50**, 1293-1308.
- Corbett, C. and G. DeCroix (2001) Shared-Savings Contracts for Indirect Materials in Supply Chains: Channel Profits and Environmental Impacts. *Management Science* **47**, 881-893.
- DeCroix, G. (1999) Optimal Warranties, Reliabilities and Prices for Durable Goods in an Oligopoly. *European Journal of Operational Research* **112**, 554-569.
- DeCroix, G. and A. Arreola-Risa (1998) Optimal Production and Inventory Policy for Multiple Products under Resource Constraints. *Management Science* **44**, 950-961.
- Arreola-Risa, A. and G. DeCroix (1998) Make-to-Order vs. Make-to-Stock in a Production-Inventory System with General Production Times. *IIE Transactions* **30**, 705-713.
- Arreola-Risa, A. and G. DeCroix (1998) Inventory Management under Random Supply Disruptions and Partial Backorders. *Naval Research Logistics* **45**, 687-703.
- DeCroix, G. and A. Arreola-Risa (1998) On Offering an Economic Incentive to Backorder. *IIE Transactions* **30**, 715-721.
- DeCroix, G. and V. Mookerjee (1997) Purchasing Demand Information in a Stochastic-Demand Inventory System. *European Journal of Operational Research* **102**, 36-57.

Working Papers

- Bernstein, F., G. DeCroix and J.C. Goncalves Dosantos. An Analysis of Project Structure and its Impact on Project Completion Delays. Under review at *Manufacturing & Service Operations Management*.
- DeCroix, G. Performance Evaluation and Optimization of a One-Warehouse, Multi-Retailer Distribution System with Reverse Product Flows.
- Lin, He., L. Snyder and G. DeCroix. Assembly Systems Under Supply Risk.

Refereed Conferences and Proceedings

Tong, J., G. DeCroix and J. Song, Payment Timing and Coordination in Multiechelon Supply Chains. *MSOM 2015 Supply Chain SIG Conference*, June, 2015.

Bernstein, F., and G. DeCroix, The Impact of Information on Capacities and Profits in a Multi-Product System. *Proceedings of MSOM 2012 Conference*, June, 2012.

DeCroix, G., The Effect of Supply Disruptions on the Management of Multi-Component, Multi-Product Assemble-to-Order Systems. *Proceedings of MSOM 2011 Conference*, June, 2011.

DeCroix, G., Inventory Management for an Assembly System Subject to Component Supplier Disruptions. *Proceedings of MSOM 2008 Conference*, June, 2008.

DeCroix, G., Managing a Distribution System with Product Returns. *Proceedings of MSOM 2005 Conference*, June, 2005.

DeCroix, G., and P. Zipkin, Managing an Assembly System with Returns. *Proceedings of EUROMA 2004 Conference*, June, 2004.

Corbett, C., and G. DeCroix, Shared Savings Contracts in Supply Chains. *Ninth International Conference of the Greening of Industry Network*, January, 2001.

Corbett, C., and G. DeCroix, Shared Savings Contracts in Supply Chains. *Proceedings of MSOM 2000 Conference*, June, 2000.

PRESENTATIONS

Invited Talks at Academic Institutions

Fox School of Business, Temple University
Fuqua School of Business, Duke University
Technology and Operations Management Department, INSEAD
Hong Kong University of Science and Technology Business School
Faculty of Business, Hong Kong Polytechnic University
Foster School of Business, University of Washington
Sauder School of Business, University of British Columbia
Cox School of Business, Southern Methodist University
Johnson School of Management, Cornell University
Olin School of Business, Washington University
Kellogg School of Management, Northwestern University
Graduate School of Business, Stanford University
Weatherhead School of Business, Case Western Reserve University
Department of Industrial Engineering, North Carolina State University
McCombs School of Business, University of Texas
Kenan-Flagler Business School, University of North Carolina
School of Business Administration, University of Miami
McDonough School of Business, Georgetown University
The Wharton School, University of Pennsylvania
University of Michigan Business School

Selected Conference Presentations

“An Analysis of Project Structure and its Impact on Project Completion Delays” (with F. Bernstein and J.C. Goncalves Dosantos), IFORS International Meeting, Santiago, Chile, July, 2023.

“Payment Timing in Multiechelon Supply Chains: Cost Assessment, Incentives and Coordination” (with J. Tong and J. Song), INFORMS International Meeting, Hawaii, June, 2016.

“Can Promotions Mitigate Quality Nonconformance? Modeling and Managing Risk-Averse Customer Behavior” (with J. Tong), INFORMS Annual Meeting, Nashville, November, 2016.

“Payment Timing and Coordination in Multiechelon Supply Chains” (with J. Tong and J. Song), INFORMS Annual Meeting, Philadelphia, November, 2015.

“Performance Evaluation and Optimization of a One-Warehouse, Multi-Retailer Distribution System with Reverse Product Flows,” INFORMS Annual Meeting, Minneapolis, October, 2013.

“The Impact of Information on Capacities and Profits in a Multi-Product System” (with F. Bernstein)

- MSOM 2012 Conference, New York, NY, June, 2012.
- POMS Conference, Chicago, IL, April, 2012.

“The Effect of Supply Disruptions on the Management of Multi-Component, Multi-Product Assemble-to-Order Systems”

- MSOM 2011 Conference, Ann Arbor, MI, June, 2011
- INFORMS Annual Meeting, Austin, TX, November, 2010.

“Inventory Management for an Assembly System Subject to Component Supplier Disruptions”

- MSOM 2008 Conference, College Park, MD, June, 2008.
- INFORMS Annual Meeting, Seattle, WA, November, 2007.

“Inventory Management for an Assembly System Subject to Component Supplier Disruptions”

- MSOM 2008 Conference, College Park, MD, June, 2008.
- INFORMS Annual Meeting, Seattle, WA, November, 2007.

“Managing a Distribution System with Product Returns”

- INFORMS Annual Meeting, San Francisco, CA, November, 2005.
- MSOM 2005 Conference, Evanston, IL, June, 2005.

“Managing an Assemble-to-Order System with Returns” (with J.-S. Song and P. Zipkin)

- POMS Conference, Dallas, TX, May, 2007.
- Fourth Annual Florida Supply Chain Conference, Cocoa Beach, FL, February, 2005.
- MSOM 2004 Conference, Eindhoven, The Netherlands, July, 2004.

Selected Conference Presentations (continued)

- “Managing an Assembly System with Returns,” EUROMA 2004 Conference, Fontainebleau, France, June, 2004 (with P. Zipkin).
- “Inventory Policies in a Decentralized Assembly System,” INFORMS Annual Meeting, Atlanta, GA, October, 2003 (with F. Bernstein).
- “Decentralized Pricing and Capacity Decisions in a Multi-Tier System with Modular Assembly,” MSOM 2003 Conference, Los Angeles, CA, June, 2003 (with F. Bernstein).
- “The Impact of Product Returns on Inventory Management for an Assembly System” (with P. Zipkin)
 - MSOM 2002 Conference, Ithaca, NY, June, 2002.
 - INFORMS Annual Meeting, Miami Beach, FL, November, 2001.
- “Optimal Inventory Policy for a Multi-Echelon Inventory System with Remanufacturing”
 - Multi-Echelon Inventory Conference, Berkeley, CA, June, 2001.
 - INFORMS Annual Meeting, Philadelphia, PA, November, 1999.
- “Shared-Savings Contracts in Supply Chains,” INFORMS Meeting, Salt Lake City, UT, May, 2000 (with C. Corbett).
- “On Offering an Economic Incentive to Backorder,” INFORMS Meeting, Dallas, TX, October, 1997 (with A. Arreola-Risa).
- “Inventory Management under Random Supply Disruptions and Partial Backorders” (with A. Arreola-Risa)
 - EURO XV Conference, Barcelona, Spain, July, 1997.
 - INFORMS Meeting, San Diego, CA, May, 1997.

TEACHING

Courses (* = Developed course)

University of Wisconsin-Madison

Supply Chain Analytics*	MBA Elective
Operations Management	Eve/FT MBA Core
Operations Analytics	BBA Elective
Operations and Technology Strategy	Executive MBA

Duke University

Distribution and Supply Chain Management	Executive MBA Elective
Operations Management	Executive MBA Core
Operations Management	MBA Core
Managing Environmental Opportunities and Risks*	MBA Elective
Operations and the Environment*	MBA Elective
Environmental Sustainability	MBA Elective
Manufacturing Strategy	MBA Elective

Courses (continued) (* = Developed course)

University of Washington

Decision Support Models	MBA Core
Spreadsheet Models for Managerial Decision Making*	Undergraduate Elective
Spreadsheet Models for Managerial Decision Making*	MBA Elective
Environmental Management*	MBA Elective
(Operations portion of course developed)	
Integrative Administration	Graduate Elective
Linear and Integer Programming	MBA & PhD Elective
Dynamic Programming and Networks	MBA & PhD Elective

Stanford University

Dynamic Programming	PhD Core
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Dissertation Committees

University of Wisconsin-Madison

Alison Gorr, 2018-2022	Tugce Martagan, 2014-2015
Yasemin Limon, 2018-2019	Sanket Bhat, 2013-2014
Ravi Suman, 2018-2019	Ozgur Isil, 2010-2014
Amy Vilasdaechanont, 2012-2016	Mehmet Ayvaci, 2012
Cong Zhao, 2015-2016	Deng Ge, 2010-2011
Ashesh Kumar Sinha, 2015-2016	Debjit Roy, 2010-2011
Vivek Dubey, 2015-2016	Ben Van Roo, 2006-2007

Duke University

Yulan Wang (co-chair), 2004-2006
Mark Ferguson, 2000-2001

Lehigh University

He Lin, 2010-2014

University of Washington

Robert Furick, 1996-1997
Emre Berk, 1995-1996

SELECTED BUSINESS ADVISING

American Family Children's Hospital, 2012	Cisco Systems, 2007
Oclaro, Inc., 2012	EMC Corporation, 2004-05
Stoughton Trailer, 2012	John Deere, 2002
UW Credit Union, 2010	Sun Precautions, 1997
UW Medical Foundation, 2008-2009	CERAS, 1989

SERVICE

University Service

Academic Director, Grainger Center for Supply Chain Management, Wisconsin School of Business, 2016-present
Subcommittee of the Executive Committee, Wisconsin School of Business, 2014-2017, 2020-2023
Committee Chair: 2015-2016
Academic Planning Council, Wisconsin School of Business, 2008-09, 2010-2013, 2014-2017, 2020-2023
Board of Directors, Center for Applied Studies in Business, 2020-present
Academic Policy Committee, Grainger Center for Supply Chain Management, Wisconsin School of Business, 2007-present
Chair, Teaching Award Committee, Wisconsin School of Business, 2017
MBA Honor Board, Wisconsin School of Business, 2008-2010, 2014-2018
Navigating Uncertainty Task Force, Wisconsin School of Business, 2014-2015
Masters Curriculum Committee, Wisconsin School of Business, 2010-2013, 2018-2020
Business, Environment and Social Responsibility Certificate Oversight Committee, Wisconsin School of Business, 2011-present
PhD and Research Committee, Wisconsin School of Business, 2007-2010
Wisconsin School of Business-Nelson Institute for Environmental Studies Joint Faculty Committee on Business, Environment and Social Responsibility, 2007-2010
Affiliated Faculty, Erdman Center for Operations and Technology Management, Wisconsin School of Business, 2006-present
Area Coordinator, Operations Management Area, Duke University, 2003-04
Operations Management Core Course Lead, Duke University, 2001-02, 2004, 2006
Faculty Advisor, Net Impact, Duke University, 2000
Operations Management PhD Committee, Duke University, 2000
Management Science PhD Program Committee, University of Washington, 1997-98
Environmental Management Program, University of Washington, 1996-98
Core Faculty and Course Coordinator
Faculty Advisor, Challenge for Charity, University of Washington, 1992-97
MBA Program Committee, University of Washington, 1992-96

Professional Service

Associate Editor, *Operations Research*, 2008-present
Senior Editor, *Production and Operations Management*, 2007-present
Associate Editor, *Manufacturing & Service Operations Management*, 2010-2014
Editorial Board, *Manufacturing & Service Operations Management*, 2003-05
MSOM Sessions Cluster Chair, International INFORMS Meeting, June, 2001
Referee for Journals
Management Science, Operations Research, Manufacturing & Service Operations Management, Production and Operations Management, IIE Transactions, Annals of Operations Research, European Journal of Operational Research, Marketing Science

AWARDS

Erwin A. Gaumnitz Distinguished Faculty Service Award, Wisconsin School of Business, 2016

Erwin A. Gaumnitz Distinguished Faculty Teaching Award, Wisconsin School of Business, 2009

Meritorious Service Award, *Operations Research* journal, 2010, 2012

Meritorious Service Award, *M&SOM* journal, 2006, 2010

Teaching Excellence Award (Core), CCMBA Program, Duke University, 2006

Daniel R. Siegel Service Award, University of Washington, 1993, 1994

Professor of the Quarter, MBA Core, University of Washington, Winter, 1993

Teaching Assistant of the Year, Stanford University, 1991

NSF Graduate Fellowship, Stanford University, 1987-90