Claudia R. Rosales

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Michigan State University
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- CURRENT STATUS

  Assistant Professor, Supply Chain Management Department, Eli Broad College of Business, Michigan State University

- RESEARCH INTERESTS

  - Health care operations
  - Supply chain risk management
  - Inventory models and transshipment
  - Optimization and simulation modeling
  - Logistics, cross-docking, retail operations

- PUBLICATIONS

  - *"Dual sourcing and joint replenishment of hospital supplies"* Rosales, C., Magazine, M., and Rao, U. *IEEE Transactions on Engineering Management, forthcoming.*

  - *"The impact of distribution channel decisions and repeated stockouts on manufacturer and retailer performance"* Rosales, C., Whipple, J., and Blackhurst, J. *IEEE Transactions on Engineering Management* 99 (2018): 1-13.

  - Rosales, Claudia, Judy Whipple, and Jennifer Blackhurst. "The Impact of Out Of Stocks and Supply Chain Design on Manufacturers: Insights from an Agent-Based Model" *Transportation Journal* 57, no. 2 (2018): 137-162. (***Received the Best Paper of the year Award in Transportation Journal, 2018***)

  - Yoon, Jiho, Claudia Rosales, and Srinivas Talluri. "Inter-firm partnerships–strategic alliances in the pharmaceutical industry." *International Journal of Production Research* 56 no.1-2 (2018): 862-881.

  - Rosales, Claudia R., Michael Magazine, and Uday Rao. "The 2Bin System for Controlling Medical Supplies at Point-of-Use." *European Journal of Operational Research* 243, no. 1 (2015): 271-280.

  - Rosales, Claudia R., Michael Magazine, and Uday Rao. "Point-of-Use Hybrid Inventory Policy for Hospitals." *Decision Sciences* 45, no. 5 (2014): 913-937. (***Received the Best Paper of the year Award in Decision Sciences Journal, 2014***)

  - Rosales, Claudia R., Uday S. Rao, and David F. Rogers. "Retailer Transshipment versus Central Depot Allocation for Supply Network Design. "*Decision Sciences* 44, no. 2 (2013): 329-356.

- Rosales, Claudia R., Michael J. Fry, and Rajesh Radhakrishnan. "Transfreight reduces costs and balances workload at Georgetown crossdock." *Interfaces* 39, no. 4 (2009): 316-328.

- WORKING PAPERS

  - "*Optimal Sourcing Decisions and Information Sharing under Multi-tier Disruption Risk in a Supply Chain*" Yoon, J., Talluri, S., and Rosales, C.

  - "*Complexity and financial performance: A detailed study in the context of the automotive component industry*" De Campos, H., Narayanan, S., Rosales, C.

  - "*In the Operating Room: Drivers of Waste and its Implication for Patient Outcomes and Perceived Disruption*" Dreyfus, D., Nair, A., Rosales, C.

  - "*Managing Inventories of Physician Preferred and General Medical Supplies: A critical examination of in-stock versus consignment stock policies*". Nair, A., Rosales, C.

- EDUCATION
  - Ph.D., Operations Management, Spring 2011
    College of Business, University of Cincinnati.
    Thesis: *Technology Enabled Hybrid Inventory Control Policies in Hospitals*
    Advisors: Dr. Michael Magazine and Dr. Uday Rao

  - Master of Science in Quantitative Analysis, Fall 2007
    Department of Quantitative Analysis and Operations Management,
    College of Business, University of Cincinnati,
    Master Thesis: *Optimal Inbound Trailer Allocation at a Crossdock – Optimizing Operations and Balancing Workload*

  - Bachelor of Science in Chemical and Industrial Engineering, Nov. 1999
    Universidad Rafael Landivar, Guatemala City, Guatemala,

- TEACHING EXPERIENCE

  Michigan State University - Broad College of Business

  - SCM - 372 – *Manufacturing Planning and Control* – Fall 2018

  - SCM - 372 – *Manufacturing Planning and Control* – Fall 2017

  - SCM - 372 – *Manufacturing Planning and Control* – Fall 2016

  - SCM - 372 – *Manufacturing Planning and Control* – Fall 2015

  - SCM – 475 – *Decision Modeling in Supply Chain* - Fall 2014

- SCM - 372 – *Manufacturing Planning and Control* – Spring 2014

- SCM - 475 – *Decision Modeling in Supply Chain* - Spring 2014

- SCM - 475 – *Decision Modeling in Supply Chain* - Fall 2013

- SCM - 475 – *Decision Modeling in Supply Chain* - Spring 2013

- SCM - 475 – *Decision Modeling in Supply Chain* - Fall 2012

- SCM - 475 – *Decision Modeling in Supply Chain* - Spring 2012

- SCM - 475 – *Decision Modeling in Supply Chain* - Fall 2011

- SCM - 475 – *Decision Modeling in Supply Chain* - Spring 2011

- SCM - 475 – *Decision Modeling in Supply Chain* - Fall 2010

University of Cincinnati – Lindner College of Business

- OM – 480 – *Project Management* – Winter 2009

- OM – 480 – *Project Management* – Spring 2009

- OM – 476 – *Operations Planning and Scheduling* – Fall 2007

- OM – 476 – *Operations Planning and Scheduling* – Summer 2007

- OM – 481 – *Supply Chain Management* – Fall 2006

- QA – 241 – *Business Statistics I* – Fall 2005

- QA – 241 – *Business Statistics I* – Summer 2005

- QA – 241 – *Business Statistics I* – Fall 2004

- QA – 241 – *Business Statistics I* – Summer 2004

- Teaching Assistant for QA – 375 – *Introduction to Quantitative Analysis* – Spring 2007, Winter 2007, Spring 2006, Winter 2006, Spring 2005, Winter 2005.

- PRESENTATIONS
  - Managing Inventories of Physician Preferred and General Medical Supplies: An examination of in-stock vs. consignment stock policies –Michigan Association of Healthcare Resource and Materials Management (MAHRMM), Kellogg Center, East Lansing, September 27, 2018

- "Managing Physician Preferred vs. General Medical Supplies" - Invited Speaker at Michigan Ambulatory Surgery Association (MASA) Membership Meeting – Kellogg Center, East Lansing, December 15, 2017.

- "NPD in the Pharmaceutical Industry" Decision Sciences Annual meeting 2017, Washington, D.C., November 19, 2017. (invited session)

- "Managing Physician Preferred vs. General Medical Supplies" Decision Sciences Annual meeting 2017, Washington, D.C., November 19, 2017. (invited session)

- "Managing Physician Preferred vs. General Medical Supplies - The Use of Consignment Inventory", 2017 INFORMS annual meeting, Houston, TX, October 23, 2017 (invited session)

- "Unplanned Costs: Physician preference cards" 2016 Decision Sciences Institute Annual Meeting, Nov. 20, 2016

- Optimal sourcing strategy and upstream information sharing under multi-tier disruption risk, Nov. 21, 2016

- "Hospital Inventory Management New Trends in Healthcare", 2015 Decision Sciences Institute Annual Meeting, Nov. 22nd, 2015. Invited Session

- "An ethnographic study of operating room waste" ", 2015 Decision Sciences Institute Annual Meeting, Nov. 22nd, 2015.

- Invited to present at the "Providing better healthcare through systems engineering: seminars and discussions" at the University of Michigan Center for Healthcare Engineering and Patient Safety. October 5, 2015.

- "Managing Physicians Preferred vs. General Medical Supplies: Reduce Costs and Improve Quality of Care". INFORMS Healthcare Conference, July 29, 2015. Invited Session on Hospital Operations

- "Optimal Sourcing Decisions and Information Sharing under Multi-tier Disruption Risk", 2015 Production and Operations Management Annual Conference, May 10, 2015.

- "Hospital Inventory Management", 2015 Production and Operations Management Annual Conference, May 8, 2015. Invited Session

- "Waste within the operating room", 2014 Decision Sciences Institute's Annual Meeting, Nov 22 2014, Tampa. FL, with Dr. Anand Nair and David Dreyfus.

- "Optimal sourcing decisions and upstream information sharing under multi-tier disruption risk in a supply chain", 2014 Decision Sciences Institute's Annual Meeting, Nov 22 2014, Tampa. FL, with Dr. Sri Talluri and Jiho Yoon.

- "The Impact of Demand Variability in a Centralized Healthcare Supply Chain", INFORMS annual meeting, Minneapolis, MN, Oct 7, 2013

- "Real-Time Inventory Visibility – Is it Essential to Reduce Hospital Supply Chain Costs?", POMS annual conference, Denver, CO, May 5th, 2013 with Dr. Michael Magazine and Dr. Uday Rao

- *"Retailer Transshipment versus Central Depot Allocation for Supply Network Design",* INFORMS annual conference, Phoenix, AZ, October 17, 2012 with Dr. Uday Rao and Dr. David Rogers

- "*Storing and Dispensing Medical Supplies – Taking Advantage of Technology*", Sponsored Session: Improving Efficiency in Healthcare Operations, INFORMS Annual Conference, Charlotte, NC, November 16, 2011 with Dr. Michael Magazine and Dr. Uday Rao.

- "*Dispensing and Controlling Medical Supplies at the Point-of-Use*", Invited Session: Optimizing Resources in Healthcare Delivery Systems, INFORMS Midwest Conference, Columbus, OH, August 1, 2011 with Dr. Michael Magazine and Dr. Uday Rao.

- "*Storing and Dispensing Hospital Supplies to Nursing Wards*", Supply Chain Research Symposium, Association for Healthcare Resource and Materials Management (AHRMM), Boston, MA, August 10, 2011 with Dr. Michael Magazine and Dr. Uday Rao.

- "*Storing and Dispensing Hospital Supplies to Nursing Wards – The RFID- enabled Two-Bin System*", Markov Decision Processes Session, INFORMS Healthcare Conference, Montreal, Canada, June 22, 2011, with Dr. Michael Magazine and Dr. Uday Rao.

- "*Joint Inventory Replenishment Policies in Health Care: Taking Advantage of Technology*", Healthcare Operations Management Session, Production and Operation Management Society-POMS- Annual Meeting, Vancouver, Canada, May 7-10, 2010, with Dr. Michael Magazine and Dr. Uday Rao.

- "*New inventory policies in health care: Taking advantage of technology*", Manufacturing and Service Operations Management Session, INFORMS Annual Meeting, San Diego, CA, October 11-14, 2009, with Dr. Michael Magazine and Dr. Uday Rao.

- *"Technology enabled hybrid inventory control policies in hospitals"*, Sponsored Session on Optimization of Inventory in Supply Chains, INFORMS Annual Meeting, Washington D.C., October 12-15, 2008, with Dr. Michael Magazine and Dr. Uday Rao.

- "*Transfreight reduces costs and balances workload at Georgetown crossdock*", Graduate Poster Forum, University of Cincinnati, March 7, 2008.

- "*Optimal Inbound Trailer Allocation at a Crossdock – Optimizing Operations and Balancing Workload*", Sponsored Session on Crossdocks and Warehouses, INFORMS Annual Meeting, Seattle, WA, November 4-7, 2007, with Dr. Michael Fry and Rajesh Radhakrishnan.

- "*Demand Variability Impact in an Inventory System with Transshipments*", presented at INFORMS Annual Meeting, San Francisco, CA, November 13-16 2005, with Dr. Uday Rao and Dr. David Rogers.

- PROFESSIONAL SERVICE

  - Judging Panel for the Production and Operations Management Society (POMS) Emerging Economies Doctoral Student Award, 2018.
  - Judging Panel for the Production and Operations Management Society (POMS) Best Student Paper Competition, 2018.
  - "Prize for the Teaching of the OR/MS Practice committee, INFORMS 2018-2019.
  - Excellence in Teaching Citations Selection Committee, Fall 2017
  - Editorial Review Board member of IEEE Transactions on Engineering Management September 1, 2017 – September 1, 2020
  - Session chair for DSI Annual meeting, Washington, D.C., 2017.
  - Session chair for INFORMS Annual meeting, Houston, TX 2017.
  - Review Board Member for the Best Student Paper Competition – POMS Annual Conference Spring 2017
  - Track Co-Chair for the Decision Models in Sourcing and Logistics Track - Decision Sciences Annual Conference, 2016.
  - Review Board Member for the Best Student Paper Competition – POMS Annual Conference Spring 2016
  - Served in Faculty Selection Committee for Operations Position Fall 2015.
  - Invited session chair and organizer for Decision Sciences Annual Meeting 2015.
  - Reviewer for Best Student Paper Competition – POMS Conference Spring 2015.
  - Served in Faculty Selection Committee for Purchasing Position Fall 2014.
  - Editorial Review Board for JOM especial issue on service triads – Summer 2013
  - Reviewer for Best Student Paper Competition – POMS Conference 2013.
  - POMS Annual Conference 2013 Session Chair for Invited Session on Healthcare Operations Management – Models in Healthcare. May 5th. 2013.
  - Served in Faculty Selection Committee for Purchasing Position Fall 2013.
  - Reviewer for Handbook of Healthcare Operations Management Book, Brian Denton ed. summer 2011.
  - Ad-hoc reviewer for: Production and Operations Management Journal, Manufacturing and Service Operations Management, Journal of Business Logistics, IEEE Transactions on Engineering Management, International Journal of Production Research, International Journal of Inventory Research, IIE Transactions on Healthcare Systems Engineering, Computers and Industrial Engineering Journal.

- AWARDS / SCHOLARSHIPS

  - Transportation Journal Best Paper of the Year Award, 2018.
  - Decision Sciences Journal Best Paper of the Year Award, 2014.
  - General Electric Fellowship (2003-2007) University of Cincinnati
  - "Medalla Texaco" (Texaco Medal) award to the top ranking student in Chemical Engineering, University Rafael Landivar, Guatemala City, 1999.

- CORPORATE EXPERIENCE

  - Summer Internship, Transfreight LLC, U.S.A. July – September 2006 - Developed a mixed integer linear program that provides the optimal allocation of trailers to docks for Transfreight's crossdocking operations in Georgetown, KY. The optimization model was implementation in both Excel-Visual Basic and AMPL/CPLEX environments for small and large scale optimization problems.

- Packaging Engineer, Colgate Palmolive C.A., Sept 2002 – July 2003 - In charge of designing packaging material for production, and R&D. Responsible for managing quality initiatives in the packaging area, designing and supervising a packaging testing laboratory.

- Process Engineer, Colgate Palmolive C.A., Oct 1999 – Sept 2002 - Responsible for formulation processes for the plastics and liquids plant. In charge of managing quality initiatives.

- Productivity Engineer / Quality Assurance, Colgate Palmolive C.A., July 1999 – Sept 1999 - Testing and verifying production quality for liquids, powder detergents, and R&D. Responsible for equipment improvement and production efficiencies in the areas of liquid products formulation and packing, plastics extrusion molding, blow molding, injection molding, and flexography.

- AFFILIATIONS
  - INFORMS – The Institute for Operations Research and the Management Sciences
  - DSI - Decision Sciences Institute
  - POMS - Production and Operation Management Society
  - Omega Rho International Honor Society
  - AHRMM – Association of Healthcare Resource and Materials Management

- OTHER
  - English (Fluent) / Spanish (Fluent)
  - Computer Languages: C++, AMPL, CPLEX, Visual Basic, SAS,
  - Simulation Software: ARENA, SIGMA, NetLogo