Claudia R. Rosales

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

RESEARCH INTERESTS

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

PUBLICATIONS

- "*Transfreight reduces costs and balances workload at Georgetown crossdock*", Interfaces, 39 (4), 316-328, with Dr. Michael Fry and Rajesh Radhakrishnan, 2009.

- "*Retailer transshipment versus central depot allocation for supply network design*" – with Dr. Uday Rao and Dr. David Rogers. Decision Sciences, 44 (2), 329-356, with Dr. Uday Rao and Dr. David Rogers, 2013.

- "*Point-of-use hybrid inventory policy for hospitals*" – with Dr. Michael Magazine and Dr. Uday Rao, Decision Sciences - forthcoming.

WORKING PAPERS AND RESEARCH IN PROGRESS

- *"Dispensing and controlling medical supplies at the point of use – the RFID enabled two-bin system"* - Working paper with Dr. Michael Magazine and Dr. Uday Rao.

- *"Hybrid-joint replenishment policies for medical supplies"*- Working paper with Dr. Michael Magazine and Dr. Uday Rao.

- "*Comparing traditional and DSD distribution options: the impact of stockouts on loyalty*" working paper with Dr. Judith Whipple and Dr. Jennifer Blackhurst.

- "*Risk modeling in a supplier-buyer network*" working paper with Jiho Yoon, Dr. Srinivas Talluri, and Claudia Rosales.

- "*The Impact of Drug Shortages*" – Working paper with Dr. David Close and David Dreyfus.

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,

PRESENTATIONS

- "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.

TEACHING EXPERIENCE

- SCM475 – *Decision Modeling in Supply Chain:* Michigan State University, Fall 2010, Fall and Spring 2011, Fall and Spring 2012, and Spring 2013. Two credit hour course that covers forecasting, aggregate planning, cycle and safety inventory, network design, and transportation models in supply chain.

- OM480 – *Project Management:* University of Cincinnati, Winter and Spring 2009: Four-credit hour course that covers project planning and scheduling, budgeting, resource allocation, monitoring and controlling projects, and evaluation and termination of projects.

- OM476 – *Operations Planning and Scheduling*: University of Cincinnati, Summer and Fall 2007: Three-credit hour course that covers inventory models, MRP, JIT, factory dynamics and variability.

- OM481 – *Supply Chain Management*: University of Cincinnati, Fall 2006: Three-credit hour course that covers inventory models, logistics and supply chain contracting.

- QA241 - *Business Statistics I*: University of Cincinnati, Summer and Fall 2004, Summer and Fall 2005: Three-credit hour course that covers descriptive statistics, probability and sampling distributions.

- Teaching Assistant, College of Business, University of Cincinnati, QA375 – *Introduction to Quantitative Analysis*: Winter and Spring 2005, Winter and Spring 2006, Winter and Spring 2007.

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.

HONORS AND SCHOLARSHIPS

- 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.

AFFILIATIONS

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

OTHER

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