

STEPHEN R. LAWRENCE

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Education

Tepper School of Business (nee Graduate School of Industrial Administration)
Carnegie-Mellon University, Pittsburgh PA.

Ph.D. Operations Management (May 1988)

M.S. Operations Management (May 1985)

School of Engineering, Purdue University, Lafayette IN.

M.S. Civil Engineering – Urban Planning (May, 1975)

M.S. Engineering Sciences (December, 1974)

B.S. Engineering Sciences (December, 1973)

Academic Experience

Associate Professor of Operations Management, Leeds School of Business, University of Colorado, Boulder CO, August 1996 to present

Family of Robert H. and Beverly A. Deming Professor of Entrepreneurship, February 2000 to June 2004 (resigned to become Interim Dean)

Assistant Professor of Operations Management, College of Business and Administration, University of Colorado, Boulder CO, July 1993 to July 1996

Assistant Professor of Operations and Manufacturing Management, John M. Olin School of Business, Washington University, St. Louis MO, August 1987 to June 1993

Lecturer, Graduate School of Industrial Administration, Carnegie-Mellon University, Pittsburgh PA, September 1985 to June 1987 (part-time)

Instructor, College of General Studies, University of Pittsburgh, Pittsburgh PA, 1984 and 1985 (part-time)

Research, Visiting, and Courtesy Appointments

Fellow, Renewable & Sustainable Energy Institute, University of Colorado, 2010–2015

Associated Faculty, Environmental Studies, University of Colorado, 2008-present

Visiting Professor of Technology Entrepreneurship, Universität Regensburg, Germany, May-Jul 2007

Visiting Assoc. Professor of Operations Management, National University of Singapore, Jan-Apr 2007

Visiting Professor of Entrepreneurship, Instituto de Empresa, Madrid, Spain, Sep-Dec 2006

Visiting Professor, Aarhus School of Business, Aarhus, Denmark, Aug 2006

Administrative Experience

Be Boulder Anywhere

- *Associate Dean, Graduate School, Jul 2016 – July 2017*
- *Director, Be Boulder Anywhere, July 2015-July 2016*
- *Operations Director, Be Boulder Anywhere, Jan-Jun 2015*

Academic Director, Deming Center for Entrepreneurship, 2007–2011

Chair, Division of Management and Entrepreneurship, August 2008–2010

Interim Dean, Leeds School of Business, July 2004–July 2005
Associate Dean for Academic Programs, Leeds School of Business, November 2003–July 2004
Doctoral Program Coordinator, Systems Division, Leeds School of Business, 2001–2003
Faculty Director, Center for Business Education, Leeds School of Business, 2000–2005.
Interim Director, MBA Programs, CU College of Business, May–Oct 2001
Faculty Chair, Executive MBA Program, University of Colorado, 1997–2000
Interim Chair, Management Division, CU College of Business, July 1998–June 1999

Industrial Experience

Vice President of Operations, Teetor Casting Company, DeKalb IL, 1978 –1983
Quality Assurance Manager, Teetor Casting Company, DeKalb IL, 1977 – 1978
Industrial Sales Engineer, Toledo Scale Company, Chicago IL, 1975 –1977

Research Awards and Grants

2007 Best Paper Award, *Decision Sciences* journal, November 2007
Highly Commended paper award, POMS/EurOMA Service Operations Conference, July 2007
CU College of Business Competitive Summer Research Grant (entrepreneurship), 1998, 1999
C. George Van Kempen Entrepreneurship Scholar, 1997–1998
CU College of Business Competitive Summer Research Grant, 1995
Best Advanced Applications Paper, 21st Hawaiian International Conference on Systems Science, 1988
IBM Graduate Predoctoral Fellowship (manufacturing), 1986/87
William Larimer Mellon Ph.D. Fellowship, September 1983 to August 1986

Sponsored Research

Investigator, *Sustainable Energy Pathways: A Lab-to-Market Paradigm for the Optimal Design of Sustainable Energy Storage Materials*, NSF Grant, Project Director: Sehee Lee, 2012-present.

Investigator, *Pumped Hydroelectric Financial Estimation and Feasibility Models*, Alstom Hydro France, Principal Investigator: Frank Barnes, 2011-2012.

Investigator, *Scale, Location, and Value of Energy Storage in Electric Grids*, part of a larger grant *Smart Grid Communications Security Project*, U.S. Department of Energy, Principal Investigator: Frank Barnes, 2011-2012.

Online Women & Entrepreneurship Program, *Eurasia Foundation*, 2008 – develop an online website to encourage and train women in Iran for entrepreneurship.

Sponsored research grant, *netLibrary*, 1999

Refereed Journal Publications – published

Ganguly, S., and S. Lawrence, “Emergency department staff scheduling to improve service while reducing costs,” *Decision Sciences* 45(1), February 2014, 115-145.

LaGanga, L.R. and S.R. Lawrence, “Appointment Overbooking in Health Care Clinics to Improve Patient Service and Clinic Performance,” *Production and Operations Management* 21(5), 2012.

Laganga, L. and S. Lawrence, “Clinic Overbooking to Improve Patient Access and Increase Provider Productivity,” *Decision Sciences* 38(2), May 2007, 251–276.

- Recipient of 2007 Best Paper Award from the *Decision Sciences* editorial staff

Connaway, L., and S. Lawrence, “Comparing Library Resource Allocations for the Paper and the Digital Library,” *D-Lib Magazine* 9(12), <http://www.DLIB.org>, December, 2003.

Lawrence, S., L. Connaway, and K Brigham, “Life Cycle Costs of Library Collections: Creation of Effective Performance and Cost Metrics for Library Collections,” *College & Research Libraries*, November 2001.

- Lawrence, S.R. and S.E. Sewell, "Heuristic versus Optimal Schedules when Processing Times are Uncertain," *Journal of Operations Management* 15, 1997, 71–82
- Lawrence, S.R., "Estimating Flowtimes and Setting Due-Dates in Complex Production Environments," *IIE Transactions* 27(4), 1995, 657–668
- Lawrence, S.R., and A.H. Buss, "Economic Analysis of Production Bottlenecks," *Mathematical Problems in Engineering*, 1995
- Buss, A.H., and S.R. Lawrence, "Mean Variance Interaction in Process Improvement and Capacity Design," *IIE Transactions* 27(3), 1995, 339–347
- Lawrence, S.R., "Negotiating Due-Dates between Customers and Producers," *International Journal of Production Economics* 37(1), 1994, 127–138
- Lawrence, S.R. and A.H. Buss, "Shifting Production Bottlenecks: Causes, Cures, and Conundrums," *Production and Operations Management* 3(1), Winter 1994, 21–37
- Buss, A.H., S.R. Lawrence, and D.H. Kropp, "Volume and Capacity Interaction in Facility Design," *IIE Transactions* 26(4), Jul 1994, 36–49
- Lawrence, S.R., and T.E. Morton, "Resource-Constrained Multiproject Scheduling with Tardy Costs," *European Journal of Operational Research* 64(2), Jan 1993, 168–187
- Lawrence, S.R., and M.J. Rosenblatt, "Introducing International Issues into Operations Management Curricula," *Production and Operations Management* 1(1), 1992, 103–117
- Lawrence, S.R., "Scheduling A Single Machine to Maximize Net Present Value," *International Journal of Production Research* 29(6), 1991, 1141–1160
- Morton, T.E., S.R. Lawrence, S. Rajagopalan, and S. Kekre, "Sched-Star: A Price-Based Shop Scheduling Module," *Journal of Manufacturing and Operations Management* 1(2) (now *International Journal of Production Economics*), 1988, 131–181

Book Chapters

- Lawrence, S.R., "Retail pricing structures," Chapter 9 in *Smart Grid Deployment in Colorado: Challenges and Opportunities*, Doran, Barnes, & Pasrich, eds. Colorado Governor's Energy Office, June 2010.
- Lawrence, S.R., "Workforce development," Chapter 10 in *Smart Grid Deployment in Colorado: Challenges and Opportunities*, Doran, Barnes, & Pasrich, eds. Colorado Governor's Energy Office, June 2010.
- Lawrence, S.R., "Pollution," in *Encyclopedia of Business Ethics and Society*, R. Kolb (editor), Sage Publishing, 2007.
- Lawrence, S.R. and A.H. Buss, "Excess Capacity and International Production Arbitrage," in *Advanced Manufacturing Systems: Strategic Management and Implementation*, J. Sarkis (editor), 1999
- Bayer, J., S.R. Lawrence, and J. Keon, "PEP: An Expert System for Promotion Marketing," Chapter 9, *Applied Expert Systems*, E. Turban and P.R. Watkins (eds.), North Holland, New York, 1988, 121 – 141

Refereed Proceedings

- Ganguly, S. and S. Lawrence. "Using On-Call Providers for Emergency Departments (EDs)." Proceedings of the DSI Annual Conference. San Francisco CA. November 2012.
- Lawrence S. and L. LaGanga. *Testing the Assumptions of Outpatient Healthcare Appointment Scheduling*. Proceedings of the POMS/EurOMA World Conference, Amsterdam NL, July 2, 2012.
- LaGanga, L.R. and S.R. Lawrence, "Maximizing scheduling value and utility in realistic clinic settings," Proceedings of the 2009 Decision Sciences Institute National Conference, Boston MA, November 2011.

- LaGanga, L.R. and S.R. Lawrence, "Clinic No-Shows and Overbooking: Reflections and New Directions in Appointment Yield Management, Proceedings of the 2008 Decision Sciences Institute National Conference, Baltimore FD, November 2008.
- LaGanga, L.R. and S.R. Lawrence, "Yield Management in Health Care Clinics with Walk-In Traffic," *Proceedings of the 2008 EurOMA Conference*, Groningen, Netherlands, June 17, 2008.
- LaGanga, L.R. and S.R. Lawrence, "Appointment Scheduling with Overbooking to Mitigate Productivity Loss from No-Shows," *Proceedings of the 2007 Decision Sciences Institute National Conference*, Phoenix, AZ, November 19, 2007.
- LaGanga, L.R. and S.R. Lawrence, "An Appointment Overbooking Model to Improve Client Access and Provider Productivity," *Proceedings of the New Challenges in Service Operations*, POMS College of Service Operations and EurOMA, London Business School, London UK, July 12, 2007.
- Received a "Highly Commended" paper award
- Lawrence, S.R., "Interaction of Due-Dates and Dispatch Rules in Single-Stage Production Settings," *Proceedings of the 1995 Decision Sciences Institute National Conference*, Boston MA, November 1995
- Lawrence, S.R. and S.E. Sewell, "Comparing Heuristic and Optimal Schedules with Stochastic Processing Times," *Proceedings of the 1994 Decision Sciences Institute National Conference*, Honolulu HI, November 1994.
- Lawrence, S.R., "Critical Factors in the Globalization of Service Operations," in the collected papers of the *Symposium on Globalization of Operations Management*, Georgetown University, May 1993
- Lawrence, S.R. and A.H. Buss, "Shifting Bottlenecks: Causes and Cures," *Proceedings of the 1992 Decision Sciences Institute National Conference*, 1992
- Lawrence, S.R., "Introducing Global Issues into Operations Strategy Curricula," *Papers of the Invited Workshop on Teaching Manufacturing Strategy*, 23rd Annual Meeting of the Decision Sciences Institute, San Francisco CA, Nov 22, 1992
- Lawrence, S.R. and M.J. Rosenblatt, "Introducing Global Issues into Operations Management Teaching," *Proceedings of the Eleventh Annual Meeting of the International Conference on Production Research*, Hafai, China, August 1991
- Prietula, M.J., S.R. Lawrence, and D.P. Greene, "Task-Centered Research: Understanding, Augmenting, and Discovering Managerial Expertise," *Proceedings of the 21st Hawaiian International Conference on Systems Science*, IEEE Computer Society Press, January 1988. Received award as Best Advanced Applications paper
- Lawrence, S.R. and T.E. Morton, "Patriarch: A Hierarchical Production Scheduling System," *Proceedings of the Symposium on Real Time Optimization in Automated Manufacturing Facilities*, National Bureau of Standards, Gaithersburg MD, 1986.

Recent Presentations

- LaGanga, L. and S. Lawrence. *Practical Application of a Scheduling and Overbooking Model in a Clinical Setting*, INFORMS Annual Meeting. San Francisco CA. November 2014.
- Ganguly, S., S. Lawrence and M. Prather. *Staff Planning for Emergency Departments: With and Without On-Call Providers*. INFORMS Annual Meeting. Phoenix AZ. October 2012.
- Lawrence S. and L. LaGanga. *Testing the Assumptions of Outpatient Healthcare Appointment Scheduling*. POMS/EurOMA World Conference, Amsterdam NL, July 2, 2012.
- Ganguly, S., S. Lawrence and M. Prather. *Emergency Department Staff Scheduling to Improve Patient Care and Reduce Costs*. Society of Operations Management – IIM Calcutta, Kolkata, India. December 2011
- Paper received Outstanding Student Paper Award (Subhamoy Ganguly)

- Ganguly, S., S. Lawrence and M. Prather. *Utilizing On-Call Providers for Optimal Staff Scheduling in Emergency Rooms*. INFORMS Annual Conference, Charlotte, North Carolina, November 2011.
- Ganguly, S., S. Lawrence and M. Prather. *Effective Staffing to Balance Staffing-Cost and Patient-Service in Emergency Rooms*. Production and Operations Management Society, Reno NV, April 2011.
- Carmichael, D, and S. Lawrence, *Mitigating Supply and Demand Variability Within the Electrical Grid Using Energy Storage*, INFORMS Annual Meeting, Charlotte NC, November 16, 2011.
- Ganguly, S. and S. Lawrence, *Effective ER Physician Scheduling to Balance Patient Service and Staffing Costs*, INFORMS Healthcare conference, Montreal CA, June 21, 2011.
- Ganguly, S. and S. Lawrence, *Smart Grids and Wind Integration: Evaluating Impacts on Emissions and Costs*, INFORMS Annual Meeting, San Antonio, Texas, November 8, 2010.
- LaGanga, L., and S. Lawrence, *Appointment Scheduling: Evaluating the Robustness of Models*, INFORMS Annual Meeting, San Antonio, Texas, November 9, 2010.
- LaGanga & Lawrence. *Service Appointment Scheduling with Walk-In, Short-term, and Traditional Scheduling*, Decision Sciences Annual Conference, New Orleans, November 15, 2009.
- LaGanga & Lawrence. *Appointment Scheduling with Variable Service Times*. INFORMS Annual Conference, San Diego, October 14, 2009.
- LaGanga & Lawrence. *Lean Options for Walk-In, Open Access, and Traditional Appointment Scheduling in Outpatient Health Care Clinic*. Mayo Clinic Conference on Systems Engineering & Operations Research in Health Care. Rochester MN, August 17, 2009.
- LaGanga & Lawrence. *Increasing Access to Healthcare Services through Service Time Process Improvements*. Production and Operations Management Annual Meeting, Orlando FL, May 2, 2009.
- Flexible and Robust Business Strategies for an Uncertain Energy Future*, with Tim Smunt, Production and Operations Management Annual Conference, Orlando FL, May 1, 2009.
- Economic and Carbon Impacts of Utility Smart Grid Systems*, with Subhamoy Ganguly and Rebecca Johnson, Production and Operations Management Annual Conference, Orlando FL, May 2, 2009.
- Clinic No-Shows and Overbooking: Reflections and New Directions in Appointment Yield Management*, with Linda LaGanga, 2008 Decision Sciences Institute National Conference, Baltimore MD, November 2008.
- Demand Management in Health Care Clinics with Variable Service Times*, with Linda LaGanga, INFORMS Annual Conference, Washington DC, October 15, 2008.
- Yield Management in Health Care Clinics with Open Access Scheduling*, with Linda LaGanga, INFORMS Annual Conference, Washington DC, October 13, 2008.
- Yield Management in Health Care Clinics with Walk-In Traffic*, with Linda LaGanga, 2008 EurOMA Conference, Groningen, Netherlands, June 17, 2008.
- Near Optimal Appointment Overbooking to Improve Client Access and Server Productivity*, with Linda LaGanga, INFORMS Annual Conference, Seattle WA, November 7, 2007.
- Appointment Scheduling with Overbooking to Mitigate Productivity Loss from No-Shows*, with Linda LaGanga, Decision Sciences Institute Annual Conference, Phoenix, AZ, November 19, 2007.
- An Appointment Overbooking Model to Improve Client Access and Provider Productivity*, New Challenges in Service Operations Conference, POMS College of Service Operations and EurOMA, London Business School, London UK, July 12, 2007.
- Appointment Scheduling with Overbooking to Improve Patient Access and Provider Productivity*, with Linda LaGanga, Joint INSEAD-NUS-NTU-SMU OM/MS Symposium, National University of Singapore Business School, Singapore, 20 April 2007.

Clinic Overbooking to Improve Patient Access and Increase Provider Productivity, with Linda LaGanga, Instituto de Empresa, Madrid, Spain, October 2006.

Overbooking of Clinical Appointment Schedules with Wave Heuristics, with Linda LaGanga, DSI Annual Meeting, San Antonio TX, November 2006.

Work in Progress

Capacity Expansion in High Growth, High Risk Markets, with Timothy Smunt. Target journal is *Production and Operations Management*.

When to Call On-Call Providers, with Subhamoy Ganguly. Target journal is *Production and Operations Management*.

Teaching Grants, Awards, and Recognition

German Academic Exchange Service (DAAD) teaching fellowship; Summer 2007.

Dean's Award for Teaching Excellence, Graduate School of Business, Univ. of Colorado, June 2001

MBA Teaching Excellence Award, Graduate School of Business Admin, Univ. of Colorado, May 2000

Nominee – Franscona Teaching Excellence Award, College of Business, Univ. of Colorado, 2000

Tisone Teaching Scholar, College of Business, Univ. of Colorado, 1998–1999

Finalist – Franscona Teaching Excellence Award, College of Business, Univ. of Colorado, 1995

Instructional Technology Resource Center (ITRC) Individual Course Development Grant, CU, 1995

Cited as an “Outstanding Faculty” member in *The Best Business Schools*, McGraw-Hill, New York, 1993

MBA Teacher of the Year, Washington University, 1991, 1992

Apple for the Teacher Award. College of General Studies, University of Pittsburgh, 1984, 1985

Teaching Experience

Leeds School of Business, University of Colorado, Boulder CO

- International Business (EvMBA hybrid course) 2019
- Operations Management (Executive MBA); 1994–2014, 2016-2020
- Decision Modeling (EvMBA) 2019
- Decision Modeling (MBA) 2018-2019
- International Operations Management (MBA/MS) 2017-2019
- The Business of Sustainable Energy (MS/MBA); 2009-2017
- Supply Chain and Operations Analytics (MBA); 2012-2015
- International Operations Management: Hong Kong & China (UG); May 2014
- Supply Chain Management (UG); 2012, 2014
- Project Management (MBA); 2012-2014
- Operations Management (MBA); 2013
- Systems Doctoral Proseminar (PhD); 2001–2003, Spring 2012
- Global Perspectives (MBA); 2010-2011
- Operations Models (PhD); 2009
- Sustainable Business Venturing (MBA); 2008, 2009
- International Operations Management (MBA); 2008, 2009
- Entrepreneurship (MBA); 2008
- International Operations (undergraduate); 2006, 2008
- Assessing Sustainable Energy Technologies (MS, undergraduate); 2006
- Business Process Design (undergraduate); 2006
- Decision Modeling and Operations Management (ProMBA, MBA); 2001–2004
- Bootstrap Tactics for Entrepreneurs (MBA); 2002, 2003
- Survey of Operations Research (MBA, PhD); 2000–2002
- Business Plan Preparation (undergraduate, MBA); 1995–2000

- Managing Process Technologies (MBA); 1994–2000
- Adding Value with Management (undergraduate large sections): 1997, 1998
- Operations Management (undergraduate mega-sections); 1994–1995
- Operations Strategy (MBA); 1993–1995

International Teaching

- *Energy Value Chains* (MBA); Petronas Technical University, Malaysia, Nov 2013, 2015, 2017
- *Renewable Energy Entrepreneurship* (MBA), Tunisia, Nov 2013
- International Entrepreneurship (MBA); ESSAM, Aarhus, Denmark; Jul 2009–2011
- Technology Management (MS); Universität Regensburg, Germany; 2008
- Business Plan Preparation (MS); Universität Regensburg, Germany; 2008
- Operations Strategy (MBA); National University of Singapore; 2008
- Managing Process Technology (MBA); National University of Singapore; 2008
- Technology Venturing (International MBA); Instituto de Empresa, Madrid; 2007
- Entrepreneurship I (International MBA); Instituto de Empresa, Madrid; 2007
- Technology Management (MS); Aarhus Business School, Denmark; 2007

John M. Olin School of Business, Washington University, St. Louis MO:

- Operations Strategy (MBA); 1990–1993
- Operations Management (MBA); 1987–1993
- International Operations (mixed), London Summer Program; 1992
- Manufacturing Strategy Seminar (Executive); 1989–1992
- Production Planning and Control (MBA); 1988
- Quantitative Methods for Managers (MBA); 1988

Graduate School of Industrial Administration, Carnegie-Mellon University, Pittsburgh PA:

- Management Decision Making (MBA); 1985–1987
- Quantitative Skills Review Program (MBA); 1986, 1987
- Introduction to Operations Research (MBA); 1986
- Mathematical Methods for Management Science (MBA); 1986
- Doctoral Survey of Operations Research (PhD); 1985

College of General Studies, University of Pittsburgh, Pittsburgh PA:

- Operations Management (undergraduate); 1985
- Management Science (undergraduate); 1984

Graduate Student Supervision

Doctoral Thesis Chair, Subhamoy Ganguly, Leeds School of Business, Univ of Colorado, 2013.

Member, Dissertation Committee, Michele Samorani, 2012.

Member, Dissertation Committee, Harald Reinertsen, 2010.

Doctoral Thesis Chair, Rebecca Johnson, Environmental Studies, University of Colorado, 2010

- *Carbon and Economic Trade-Offs in Smart Grid Programs*

Doctoral Thesis Chair, Keith Stockton, Environmental Studies, University of Colorado, 2009

- *Government-to-Private Sector Energy Programs: Identification of Common Elements Leading to Successful Implementation*

Doctoral Thesis Chair, Linda LaGanga, Leeds School of Business, University of Colorado, 2006

- *Clinical Appointment Scheduling: The Cost of No-Shows and the Value of Overbooking*

Doctoral Thesis Chair, Rahul Patil, Leeds School of Business, University of Colorado, 2006

- *Improved Techniques for Due Date Quotation in Realistic Production Environments*

Doctoral Thesis Committee, Gyung Jung, Leeds School of Business, Univ of Colorado, 2003

Masters Thesis Committee, Robert Patterson, Engineering Mgmt, Univ of Colorado, May 2002

Masters Thesis Committee, Witt Sparks, Engineering Mgmt, Univ of Colorado, May 2002

Masters Thesis Committee, John Zimmerman, Engineering Mgmt, Univ of Colorado, May 2002

Masters Thesis Committee, Joline Robertson, Engineering Mgmt, Univ of Colorado, May 2002
 Masters Thesis Committee, William Garrett, Engineering Mgmt, Univ of Colorado, May 2001
 Doctoral Thesis Committee, Kerry Paige, Graduate School of Business Admin, Univ of Colorado, 1999
 Doctoral Thesis Committee, Balu Rangaswamy, Grad School of Business Admin, Univ of Colorado, 1997
 Doctoral Thesis Committee, Nancy McQuillan, Grad School of Business Admin, Univ of Colorado, ABD
 Doctoral Thesis Committee, Helmut Mausser, Graduate School of Business Admin, Univ of Colorado, 1995
 Master's Thesis Committee Member, Ray F.X. Rumawas, Civil Engineering, Univ of Colorado, 1994

Professional Activities

Invited Session Chair, INFORMS annual meeting, San Diego, 2009.
 Cluster Chair, INFORMS annual meeting, Denver CA, 2003
 Associate Editor, *Production and Operations Management*, 2001–2003
 Chair, POM/Manufacturing Track, DSI National Conference, San Diego, November 2002
 Chair, Entrepreneurship Theme, DSI National Conference, San Francisco, November 2001
 Session Chair, discussant, and paper reviewer, DSI National Conferences, 1999–2000
 Member, Program Committee, Decision Sciences Institute, 1996–1998
 Chair, Program Evaluation Subcommittee, Decision Sciences Institute, 1997
 Chair, Environmental Management Theme, DSI National Conference, Orlando FL, November 1996
 Invited Paper Session Chair, Estimating Leadtimes and Setting Production Due-Dates, INFORMS Spring Conference, Los Angeles CA, April 1995
 Session Chair, Process Design, DSI National Conference, Honolulu HI, November 1994
 Track Chair, International Business track, DSI National Conference, Washington DC, November 1993
 Member, Doctoral Student Affairs Committee, Decision Sciences Institute, 1992 –□□□□□
 Session Chair, Leadtime and Bottleneck Analysis in Manufacturing, ORSA/TIMS, Anaheim CA, Nov 1991
 Invited Paper Session Chair, Economic Scheduling, TIMS/ORSA Annual Meeting, Las Vegas NV, 1990
 Session Chair, Scheduling Applications, ORSA/TIMS Annual Meeting, Denver CO, October 1988
Ad hoc referee for *Management Science*, *Operations Research*, *IIE Transactions*, *Naval Logistics Research*, *Journal of Operations Management*, *POM Journal*, *IEEE Transactions on Engineering Management*, *International Journal of Flexible Manufacturing Systems*, *Journal of Intelligent Manufacturing*, *National Science Foundation*

Service

University of Colorado at Boulder

- CU Teaching Professor Review Committee, Fall 2017
- CU Learning Management System (LMS) Selection Committee, Summer 2017
- CU Graduate School Executive Committee, 2016-2017
- School of the Environment & Sustainability School Implementation Committee, 2014
- Environmental Studies Exploratory Committee, 2013
- CU Study Abroad Committee, Fall 2010–2012
- Internal Reviewer, Department of Civil, Environmental, and Architectural Engineering, Spring 2011
- CU Information, Communication, and Technology Committee, Fall 2010
- CU Energy Initiative Steering Committee, AY 2009-2010
- CU ATLAS Committee, member, 1997–1999
- CU Executive MBA Program, faculty chair, 1997 to 2000

Leeds School of Business, University of Colorado at Boulder

- SEO Division Executive Committee, 2018-2020
- Chair, Distance Education Committee, 2017-2019
- Executive Committee, member, 2010–2014
- Leeds Executive Committee, 2008–2010; 2012-2014
- Management & OPIM Divisions Executive Committee, 1997–2011, 2012-2014
- *Ad hoc* MS Business Analytics & MS Supply Chain Management development group, 2012-2014

- Undergraduate Initiatives Taskforce, 2012-2014
- Management & Entrepreneurship Division Chair, 2008–2010
- International Studies Committee, Fall 2010-2014 (Chair 2010-2012)
- Chair, Deming Center Steering Committee, 2007–2008
- Co-Chair, Undergraduate Curriculum and Policy Committee, AY 2005–2006
- Interim Dean, July 2004–July 2005
- Associate Dean for Programs, 2003–2005
- Leeds Executive Committee, elected member, 2002–2004, 1999–2001, 1996–1998
- Leeds Planning Task Force, Spring 2003
- Leeds Corporate Awards Committee, 2002
- Chair, Special Programs Committee, 1999–2002
- Dean’s Policy Committee, 1999–2002
- CU Administrator’s Appraisal Committee, 2001–2002
- External Relations Committee, 2000–2002
- Masters Curriculum and Policy Committee, 1999–2000
- Management Division Interim - AY1998/99
- Dean Search Committee, member, 1997–1998 and 1998–1999
- Objectives and Resources Task Force, member, 1998–1999
- Technology Committee, member 1998–1999, chair 1997–1999
- Teaching Excellence Committee, member, Summer 1997 to Spring 1998
- BCOR 2050/2150 Course Design Committee, chair, 1995–1997
- Undergraduate Curriculum Committee, member, 1994–1997
- Management Division Strategy Committee, member, 1994–1997
- Undergraduate Core Curriculum Committee, member, January to April 1994

Management & Entrepreneurship Division, University of Colorado at Boulder
John M. Olin School of Business, Washington University, St. Louis MO

- Academic Review Committee (September 1989 to June 1992)
- International Library Committee (September 1989 to September 1990)
- University Teaching Center Committee (October 1988 to May 1989)

Consulting

Sun Microsystems (2002)–policy deployment
 Advance Surface Finishing (2002)–policy deployment
 First National Bank of Colorado (2002)–policy deployment
 PeopleIKNOW (2001)–market forecasting
 K-Group, Inc. (2000)–policy deployment
 netLibrary.com (1998)–business plan preparation
 InfoMaster, Inc. (1997)–business plan preparation
 Vail Resorts (1998)–personnel database
 ACX Technologies (1996)–expert witness on production technology
 Barden Bearings, Danbury, CT. (1992)–operations assessment
 F.A.G. Corporation, Joplin, MO. (1992)–operations assessment
 MEMC Electronic Materials Company, Saint Peters, MO. (1990)–production assessment

Professional Affiliations

Institute for Operations Research and Management Science (INFORMS)
 Production and Operations Management Society (POMS)
 Decision Sciences Institute (DSI)