

Curriculum Vitae
Norman Keith Womer
College of Business Administration
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PERSONAL



SUMMARY OF EXPERIENCE

Professor of Operations Management, University of Missouri – St. Louis, 2004- present.
Dean, College of Business Administration and Professor of Operations Management,
University of Missouri – St. Louis, 2004- 2013.
Director, Hearin Center for Enterprise Science and Professor of Operations Management,
University of Mississippi, 2001-2004.
Interim Dean, School of Business Administration, University of Mississippi, 1999-2001
Associate Dean for Faculty and Research, School of Business Administration, University
of Mississippi, 1998-1999.
Professor and Chair, Department of Economics and Finance, University of Mississippi,
1986 - 1998.
Visiting Professor, University of Torino, Torino, Italy,
November and December, 1992.
Visiting Professor, China Textile University, Shanghai, People's Republic of China,
Winter 1985-1986.
Professor, Department of Economics, College of Commerce and Industry, Clemson
University, 1984-1986.
Professor, Department of Management, College of Commerce and Industry, Clemson
University, 1979-1984.
Associate Professor, Department of Systems Management, School of Engineering, Air
Force Institute of Technology, 1973-1979.
Assistant Professor and Lieutenant U.S. Navy, Department of Operations Research and
Administrative Sciences, Naval Postgraduate School, 1969-1973.
Research Assistant, Pennsylvania Transportation and Traffic Safety Center, Pennsylvania
State University, 1968.

EDUCATION

PhD, Economics, The Pennsylvania State University, 1970 Dissertation,
"Estimating the Relations of an Input-Output Model with Variable Coefficients"

BA, Economics, Miami University, 1966

AREAS OF COMPETENCE

Administration: Responsible for all aspects of the College of Business Administration. Directed research center of ten research faculty. Managed a research budget of over \$4 million. Interim Dean for a two-year period. Guided the School through self-study for AACSB Reaccreditation. Associate Dean for faculty and research. Responsible for all aspects of faculty development and evaluation for the sixty-member faculty. Chaired a thirty member comprehensive department at the University of Mississippi, 1986-1998. The department was diverse with faculty from the disciplines of economics, finance, business law, financial institutions and management science. It offered six undergraduate degrees, a master's degree, and two Ph.D. degrees. The department was also responsible for half of the courses in the MBA program. Program Coordinator of Clemson's Ph.D. Program in Management Science, 1983-1985. President of the Faculty Council 1976-1977, chaired and served on numerous departmental and university committees. Managed budgets and supervised people on four funded research projects.

Research: Principal investigator for research in statistical cost estimation, production planning, learning, techniques of cost-effectiveness analyses, and econometric modeling. Developed two decision support systems. Directed thesis research for over thirty master's students. Directed eight Ph.D. dissertations. Frequent publications in major journals, numerous presentations at national meetings and extensive referee service.

External Affairs: Raised funds and recruited members for the Business Advisory Council. Active with Business School Alumni Association, chaired International Study Group of the Business Advisory Council. Member of the Business Order. Wide experience as a consultant to government and industry. Clients include Department of Justice, Office of Assistant Secretary of Defense (PA&E), Assistant Chief of Staff Air Force Studies and Analyses, Chief of Naval Operations (OP-964), several Air Force Program Offices, Office of Naval Research, Jet Propulsion Laboratory, MITRE, Institute for Defense Analyses, Logistics Management Institute, General Accounting Office, Management Consulting and Research, Hughes Aircraft, and United Technology. Expert witness testimony in a major Air Force contract dispute.

Teaching and Course Development: Successfully developed and taught graduate and undergraduate courses in supply chain management, management science, operations research, managerial economics, economic theory, statistical cost estimation and econometrics. Developed and taught management science seminars for senior Air Force and Department of Defense personnel. Named an outstanding teacher by the Engineering School Student Council.

ADMINISTRATIVE ACCOMPLISHMENTS

Led BBA, BA, MA, and Ph.D. programs at the University of Mississippi
Assisted in fund raising for the School of Business
Led School AACSB self study year leading to reaccreditation at all levels
Led departmental strategic plan committee
Executed the Strategic Plan
Interviewed approximately five hundred faculty applicants
Recruited five chaired professors
Recruited thirty faculty
Formulated and secured the approval of tenure and promotion guidelines
Revised and modernized curricula on seven department programs
Instituted a merit pay system
Recruited undergraduate students
 -number of majors increased
 -average ACT score increased
Recruited graduate students
 -number of graduate students increased three-fold
 -average GMAT and GRE scores increased each year
Instituted policies to encourage research
 -number of published research articles increased by fifty percent
 -number of funded research grants tripled
Established weekly research seminar series
Organized office staff into an efficient support group under an office manager
Created a supportive research environment
 -department research rank increase is the highest in the U.S.

PROFESSIONAL ACTIVITIES

Associate Editor, Military Operations Research

Editorial Board, International Journal of Social Sciences

Institute of Management Science and Operations Research

Editor, Topics in Operations Research (2001-2007), Editor-At-Large, Interfaces (1995-2000), Associate Editor, Operations Research (1986-1996), Geographic Sections Committee, Chairman (1983-1986), Co-Chairman Symposium on Operations Research in Cost Analysis (1983); Military Applications Section, Vice Chairman (1986-1987), Chairman (1988-1989), Awards Chair (1990-2007)

Society of Cost Estimating and Analysis, Founding Director, Chairman Publications Committee (1985-1992), Certified Cost Analyst, Eastern Regional Vice President (1985-1987).

American Statistical Association, President of the Dayton Chapter (1975-1976), Member of the Council, 1976.

Military Operations Research Society, Board of Directors (1979-1984), Member of the Education Committee (1975-1990) David Rist Prize Committee (1977-1979), Publications Review Committee (1980), MORS Associate (1984-present).

Member American Economics Association, Productivity Analysis Research Network, Southern Economic Association.

AWARDS

Navy Scholarship	1962 - 1966
NDEA Fellowship	1966 - 1969
Outstanding Teacher	1978
MORS Associate	1984
Best Technical Paper	
DOD Cost Analysis Symposium	1986
Researcher of the Year, School of Business, University of Mississippi	1986 - 1987
Koopman Prize - Best paper in Military Operations Research	1989
Invited Speaker, CORE, Universite' Cathotique de Louvain, Belgium	1991
Invited Speaker, Universidad De Lima, Peru	1995
Steinhardt Prize	2015

PUBLIC SERVICE

Board of Trustees, Wood College
Sunday Church School Teacher, Oxford-University Methodist Church
Chair Staff Parish Committee, Oxford-University Methodist Church
Troop Committee Chair, Boy Scout Troop 144
Business Administration Order, University of Mississippi
Board of Directors, University of Mississippi Wesley Foundation
Board of Directors, University of Mississippi Center for the Study of Southern Culture
Race Director, Liberty Run, Oxford Mississippi

DOCTORAL STUDENTS

Thomas Gullede	(George Mason University)
Andy Litteral	(University of Richmond)
Dennis Riddley	(Florida A and M University)
Gary Fellers	(Augusta College)
Jeff Camm	(University of Cincinnati)
Bashir Al-Abedalla	(University of Jordan)
Young Silk Kwak	(Delaware State University)
Che-Peng Lin	(Chiu Feng University)
Hai Tao Li	(University of Missouri St Louis)

PUBLICATIONS

Books

The Economics of Made-to-Order Production: Theory with Applications Related to the Airframe Industry, with Thomas Gullledge, Springer-Verlag, 1986.

Edited Journals

Interfaces: Special Issue on Military Applications, July-August 1991, 168 pages.

Journal Articles and Contributions to Books

"Lancaster's Version of the Walras-Wald Model," Journal of Economic Theory, October 1973, pp. 515-519.

"A Transportation Sensitive Model of a Regional Economy," Transportation Research, vol. 8 1974, (with M. Bronzini, J. Miller and J. Herendeen) pp. 45-61.

"Learning Curves, Production Rate, and Program Costs," Management Science, April 1979, pp 312-319.

"Some Propositions on Cost Functions," Southern Economic Journal, April 1981, pp. 1111-19.

"Analysis and Personnel Supply Models," Department of Defense and Navy Personnel Supply Models, May 1981, pp. 47-60.

"The Treatment of Risk in Analysis," Electronic Systems Effectiveness and Life Cycle Costing, J. K. Shwizynski editor, Springer-Verlag, 1983, pp. 621-631.

"Applying the NLRA and Mod-Metric Models as Aids in Decisions," IEEE Transactions on Reliability, August, 1983, (with Lewis Litteral) pp. 272-275.

"A Dynamic Cost Function for an Airframe Production Program," Engineering Costs and Production Economics, September 1983, (with Thomas Gullledge) pp. 213-227.

"Estimation and Testing of Learning Curves," Journal of Business and Economic Statistics, October, 1983, (with Wayne Patterson) pp. 265-272.

"Optimal Resource Allocation in Airframe Production: A Dynamic Programming Approach," Cost Analysis, G. McNichols editor Operations Research Society of America, 1984, (with Thomas Gullledge and Murat Tarimillar), pp. II-93-107.

- "Bayesian Estimation of Availability with Generally Similar Predecessor Systems," Cost Analysis, G. McNichols editor, Operation Research Society of America, 1984, (with Gary Fellers), pp. V-14-29.
- "Learning and Costs in Airframe Production: A Multiple Output Production Function Approach," Naval Research Logistics Quarterly, March 1984, (with Thomas Gullledge and James Dorroh), pp. 67-85.
- "Estimating Learning Curves from Aggregate Monthly Data," Management Science, August, 1984, pp. 982-992.
- "A Discrete Dynamic Optimization Model for 'Made-to-Order' Cost Analysis," Decision Sciences, Winter, 1985, (with Thomas Gullledge and Murat Tarimcilar), pp. 73-90.
- "Hierarchical vs. Non-nested Tests for Contrasting Expectancy-Valence Models: Some Effects of Cognitive Characteristics," Multivariate Behavioral Research, July 1985, (with John Butler), pp. 335-352.
- "Identification and Least Squares in Simultaneous Equations," The American Statistician, November, 1985, pp. 295-297.
- "Aircraft Cost Estimation Using An Error Components Model," Journal of Cost Analysis, Spring 1986, (with Ronald Marcotte), pp. 39-62.
- "A Comparison of Several Dynamic Programming Models of the Made-to-Order Production Situation," Operations Research Letters, July, 1986, (with Thomas Gullledge and Murat Tarimcilar), pp. 87-92.
- "A Generalization of the Learning Curve," European Journal of Operational Research, August, 1986, (with James Dorroh and Thomas Gullledge), pp. 205-216.
- "Resource Allocation in the Crew Assembly Process," International Journal of Production Research, February, 1987, (with Jeffrey Camm), pp. 17-30.
- "The Cost of Production Breaks," Naval Research Logistics, March 1987, (with Jeffrey Camm), pp. 199-205.
- "The Unit Learning Curve Approximation of Total Cost," Computers and Industrial Engineering, June 1987, (with Jeffrey Camm and James Evans), pp. 205-213.

- "A New Model for Learning Curves: Comment," Journal of Business and Economic Statistics, July 1987, (with Wayne Patterson), pp. 336-337.
- "Production Rate and Contractor Behavior," Journal of Cost Analysis, Summer 1987, (with Jeffrey Camm and Thomas Gullledge) pp. 27-38.
- Learning and Production Costs: An Application of A Cost Prediction Model to a Fighter Airframe Program," Engineering Costs and Production Economics, September 1987, (with Thomas Gullledge and Jeffrey Camm), pp. 389-400.
- "The Demand For Risky Assets Under Uncertain Inflation: An Examination of Some Widely Used Assumptions," Journal of Economics and Business, November, 1987, (with Stephen Cantrell), pp. 357-362.
- "An Error Components Model of Cost Overruns and Schedule Slip on Army R & D Programs," Naval Research Logistics Quarterly, May, 1988, (with Gordon Arbogast), pp. 367-382.
- "A Method for Repricing Aircraft Procurement Programs," Operations Research, March -April, 1989, (with Steve Balut and Thomas Gullledge), pp. 255-265.
This paper won the Koopman prize for the best military operations research paper of 1987.
- "Cost Analysis: A Methodological Statement," Journal of Cost Analysis, Summer, 1989, pp. 27-41.
- "Cost Realism in Defense Contracting," Naval Research Logistics, vol. 36, 1989, (with Ted Wallenius) pp. 554-577.
- "The Effect of Defense Program Uncertainty on Cost, Schedule, and Capital Investment," Journal of Productivity Analysis, December 1989 (with Katsuaki Terasawa) pp. 193-228.
- "Turbulence, Cost Escalation, and Capital Intensity Bias in Defense Contracting," in Cost Analysis Applications of Economics and Operations Research, T. R. Gullledge and L. A. Litteral editors, Springer-Verlag, 1989, (with Katsuaki Terasawa and James Quirk), pp. 97-116.
- "Learning Curves and Production Functions: An Integration," Engineering Costs and Production Economics, vol. 20, 1990, pp. 3-12 (with Thomas Gullledge).

- "Data Envelopment Analysis and System Selection," Telecommunications Review, 1993, pp. 107-115 (with Anh Tran).
- "Cost Analysis in the Time Domain," European Journal of Operational Research, vol. 68, 1993, pp. 334-343 (with Thomas Gullledge and Jeff Camm).
- "Investment in Knowledge: A Generalization of Learning by Experience," Management Science, vol. 40, 1994, pp. 947-958 (with Thomas Gullledge and James Dorroh).
- "An Alternative Approach to Stochastic Calculus for Economic and Financial Models," Journal of Economic Dynamics and Control, vol. 19, 1995, pp. 553-568 (with Lloyd Blenman and others).
- "Cost Effectiveness Analysis", in Encyclopedia of Operations Research and Management Science, Saul Gass and Carl Harris editors, Kluwer, 1996, (also in the 2001 Centennial edition and the 2010 edition) pp. 122-125.
- "Estimation Problems in a Rate-Augmented Learning Model", IEEE Transactions on Engineering Management, vol. 44, 1997, pp. 91-97 (with Thomas Gullledge and Murat Tarimcular).
- "Specification Versus Data Fitting: SEM Prediction and the Q-class Estimator," The Journal of Forecasting, vol. 17, 1998, pp. 77-93, (with Stephen Cantrell and Walter Mayer).
- "An Econometric Analysis of Attendance and Giving in the Local Church," Academy of Information Management Sciences Journal, vol. 1, no. 2, 1998, pp. 1-7 (with Faye McIntyre and Jim McIntyre).
- "Scheduling with time dependent processing times: Review and extensions," Journal of the Operational Research Society, vol. 50, 1999, pp. 711-720 (with B. Alidaee).
- "Performance evaluation based on multiple attributes with nonparametric frontiers," Omega, vol. 27, 1999, pp. 637-645 (with Lou Caporaletti and Jose Dula)
- "Measuring Efficiency with a Linear Economic Model" Applied Economics, vol. 35, 2003, pp. 1459-1468. (with Homeé F.E. Shroff, Thomas R. Gullledge and Kingsley E. Haynes)
- "Nonparametric frontier analysis with multiple constituencies," Journal of Operational Research Society, vol. 56, 2005, p. 252-266. (with M.-L.Bougnol, J.H.Dula, and D.Retzlaff-Roberts)
- "Benefit-Cost Analysis using Data Envelopment Analysis" Annals of Operations Research, 2006, vol. 145, pp. 229-250. (with J. H. Dula', D. Retzlaff-Roberts and M.-L. Bougnol)

- “Project Scheduling with Multi-Purpose Resources: A Combined MILP/CP Decomposition Approach,” International Journal of Operations and Quantitative Management, Vol. 12, 2006, No. 4. (with H. Li)
- “A Model and Procedure for Competitive Bidding under Resource Constraints,” International Journal of Operational Research, Vol. 2, 2007 No. 4, p. 452-480. (with H. Li)
- “Scheduling Projects with Multi-Skilled Personnel by a Hybrid MILP/CP Benders Decomposition Algorithm,” Journal of Scheduling, Vol. 12, No. 3, 281-298. (with H. Li)
- “Modeling the Supply Chain Configuration Problem under Resource Constraints,” International Journal of Project Management, Vol. 26, 2008 No. 6, 646-654. (with H. Li)
- “Beyond Distribution and Assignment: Managing Navy Careers,” International Journal of Services Sciences, Vol. 1, 2008 No.2, 164 - 178.
- “A Decomposition Approach for Shipboard Manpower Scheduling,” Military Operations Research, Vol. 14, 2009 No. 3, 1-23. (with H. Li)
- “Optimizing the supply chain configuration for make-to-order manufacturing,” European Journal of Operational Research 221, 2012, 118–128. (with H. Li)
- “Solving Stochastic Resource-Constrained Project Scheduling Problems by Closed-Loop Approximate Dynamic Programming” 2015 European Journal of Operational Research (with H. Li)
- “Multiple local optima for seemingly unrelated regression models,” International Journal of Computational Economics and Econometrics, Vol. 6, 2016, No.1, 1757-1189

Proceedings of Meetings

- "Auditing Cost-Effectiveness Analysis," Proceedings of the 31st Military Operations Research Symposium, 1973.
- "Integrating Group Behavioral Experiences into Decision Science Courses," with R.R. Manley and E.J. Dunne, Proceedings of the Seventh Annual Meeting of the American Institute for Decision Sciences, (November 1975), pp. 147-180.
- "Proceedings of the Symposium on Application of Decision Theory to Problems of Diagnosis and Repair," AFIT Technical Report 76-15, Air Force Institute of Technology (October 1976), 248 pages. Editor.
- "Airframe Cost Estimation: An Application of Joint Generalized Least Squares," with Vernon Handel. Proceedings of the Thirty-ninth Military Operations Research Symposium, 23 pages, (June 1977).

- "Some Problems of Statistical Cost Estimation," Proceedings of the Twelfth Annual Department of Defense Cost Analysis Symposium(October 1977) 16 pages.
- "Learning Curves, Production Rate and Program Costs: An Illustration of Results," Proceedings of the Seventh Annual Acquisition Research Symposium (May 1978).
- "Estimating Learning Curves from Monthly Data," Proceedings of the Thirteenth Annual Department of Defense Cost Analysis Symposium (September 1978), pp. 80-90.
- "Learning Curves and Monthly Data Revisited," Proceedings of the Fourteenth Annual Department of Defense Cost Analysis Symposium, October, 1979.
- "A Cost Function for Military Airframes," Proceedings of the Ninth Annual DOD/FAI Research Symposium, October, 1979.
- "A Cost Function for an Airframe Production Program," Proceedings of the Southeast TIMS Conference, October, 1980 (with Thomas Gullledge) pp. 21-33.
- "A Spectral Analysis of the Power Market in South Carolina," Proceedings of the Southeast TIMS Conference, October 1981, (with Dennis Ridley) pp. 12-22.
- "Logistics Support Analysis and Life Cycle Costing: The Interface," Proceedings of the 48th Military Operations Research Symposium, December 1981.
- "Comparing Non-Nested Expectancy - Valence Models: Some Effects of Cognitive Variables," Southern Management Association Proceedings, 1983 (with John Butler) pp. 225-227.
- "An Automated Airframe Production Cost Model," Proceedings of the 1983 Federal Acquisition Research Symposium, December, 1983.
- "Learning and Production Costs: An Application to a Fighter Airframe Program," Proceedings of the 1985 Federal Acquisition Research Symposium, 1985, (with Thomas Gullledge).
- "An Examination of the Relationship Between Production Rate and Learning in Airframe Production," Proceedings of the Southwestern Chapter of the American Institute for Decision Sciences, 1985, (with Thomas Gullledge).
- "Improvement Curves, Production Rate, and Optimal Contractor Behavior, "Proceedings of the Southwestern Chapter of the American Institute for Decision Sciences, 1985. This paper won the best paper award for the meeting. (With J. D. Camm and Thomas Gullledge).
- "Repricing Aircraft Procurement Programs," Proceedings of the 20th Annual DOD Cost Analysis Symposium, 1986. This paper won the best technical paper for the meeting, (with Stephen Balut and Thomas Gullledge).

- "Measuring Production Rate in Aircraft Repricing Models," Proceedings of the IXth International Conference on Production Research, 1987, (with Steve Balut, J. D. Camm and Thomas Gullledge).
- "Production Disruption in the Military Aircraft Industry: A Study of the Black Hawk Helicopter Program," Proceedings of the First Joint Cost Analysis and Estimating Conference, 1988, (with Bashir Al-Abedalla).
- "Simultaneous Nonlinear Learning Curve Estimation," Operations Research Proceedings 1989: DGOR 18th Annual Meeting, 1990, (with Thomas Gullledge and Murat Tarimeilar) pp. 482-488.
- "Structural Problems in DEA Modeling," Proceedings of the Twenty-Third Annual Pittsburgh Conference on Modeling and Simulation, 1992, (with Homee Shroff and others)
- "A Bang-Bang Approximation to the Solution of a Learning Augmented Planning Model," Proceedings of the 1992 Society of Cost Estimating and Analysis Conference, (with James Dorroh and Thomas Gullledge).
- "Dynamic Learning Augmented Production Planning Models," in Operations Research Proceedings, Heidelberg: Springer-Verlag, 1992, pp. 397-405.
- "A Constraint Programming Approach to Solve Resource Constrained Project Scheduling Problem," in Conference Proceedings of the International Academy of Business and Public Administration Disciplines, New Orleans, January 2004, (with Jose Dula, Karen Lewis, and Haitao Li)
- "Project Scheduling in Decision-Theoretic Competitive Bidding," Evolutionary Computation, CEC 2006, IEEE Congress on Computation, July 2006, p3042-3049. (with H. Li)
- "Using Constraint Programming to Solve a Project Scheduling Problem with Skilled Labor, in 14th International Conference on Automated Planning & Scheduling, Canada, June 2004. (with Li, H., J. Dula, K. Lewis)

Technical Reports and Funded Research Projects

- "Methodological Framework for Comprehensive Transportation Planning," with J.J. Coyle and others. Report prepared for the Governor's Committee for Transportation, Commonwealth of Pennsylvania, 1968.
- "Estimating the Relations of an Input-Output Model with Variable Coefficients," Ph.D. Thesis (available as a Technical Report of the Pennsylvania Transportation and Traffic Safety Center, Pennsylvania State University, 1970).

- "Auditing Cost-Effectiveness Analysis of Technological Changes," with James K. Hartman. Technical Report NPS55HH7312A, Naval Postgraduate School, Monterey, California (November, 1973).
- "The Effect of WIPICS on the F4-B to N Conversion Program," Technical Report, AFIT TR 74-5, Air Force Institute of Technology (April 1974).
- "Cost Functions for Airframe Production Programs," Final report on research contract F33615-81-K-5116 with the Air Force Business Research Management Center, Clemson University, Clemson, S.C., (July 1982).
- "Cost Realism Scoring Rules: The Contractor's Point of View," Interim Report N153 on research contract N00014-75-C-0451 with the Naval Office of Acquisition Research, Clemson University, Clemson, S.C., (November, 1983).
- "PRATE Users Manual," Final report on research contract F33615-83-M-5097 with the Air Force Business Research Management Center, Clemson University, Clemson, S.C., (June 1984).
- "Navy Indirect Costs: Data Collection on Electronics Firms," TR-8411-1 Management Consulting & Research, Falls Church, VA (September 1984) (with G. McNichols, J. McFarland, and M. Klock).
- "Navy Indirect Costs: Database Development on Electronics Firms," TR-8411-3 Management Consulting & Research, Falls Church, VA (April 1985) (with G. McNichols, J. McFarland, and M. Klock).
- "Competition in Defense Industries," Final report for the Logistics Management Institute, Bethesda, MD, (October 1985), (with W. Mahoney and E. Young).
- "Navy Indirect Costs: Analysis of Indirect Costs and Cost Drivers for Electronic Firms," TR-8411-6 Management Consulting & Research, Falls Church, VA, (December 1985), (with G. McNichols and J. McFarland).
- "A Financial Description and Evaluation of Public Water Systems in South Carolina," Working Paper WP082586, Strom Thurmond Institute, Clemson University, Clemson, S.C. (August 1986) (with C.D. Wiggins and B.P. Woodside)
- "An Improved Method for Repricing Defense Systems," IDA Paper P-2013 Institute for Defense Analyses, Alexandria, VA, (May, 1988), (with S. Balut and T. Gullledge).
- "The Impact of the Airline Deregulation Process on Air-Travel Safety," CSAB working paper 143, St. Louis, MO, (September 1991), (with Richard McKenzie).

- "Fee for Service," MITRE White Paper, MITRE Corp., McLean, VA, (October 1991) (with Kathy King).
- "A User's Manual for Data Envelopment Analysis," MITRE Corp., McLean, VA, (October 1992) (with Anh Tran).
- "Nuclear Officer Retention: An Analysis of Binary Panel Data Using Semiparametric Methods," Office of Naval Research, (August 1999) \$63,000, (with Walter Mayer).
- "A Data Envelopment Analysis Approach to Benefit Cost Analysis," Office of Naval Research, (August 2000) \$412,070, (with Jose Dula and Donna Retzlaff-Roberts).
- "Personnel Research Science," Office of Naval Research, (August 2001) \$1,933,000, (with numerous other faculty)
- "Personnel Research Science," Office of Naval Research, (April 2003) \$3,800,000, (with numerous other faculty)
- "Estimating Models of Program Management," Office of Naval Research, (September 2003) \$186,478 (with Jeffrey D. Camm).
- "Personnel Research Science," Office of Naval Research, 2004 \$1,332,000, (with numerous other faculty).
- "OptForce: New Human Resource Optimization Methods," Office of Naval Research, 2006 \$750,000, (with numerous other faculty).
- "Skills Gap Report: A Critical Problem," University of Missouri--St Louis, October 2009, with Steve Finkelstein.
- "Skill Gaps: A Critical Problem," University of Missouri--St Louis, September 2010, with Steve Finkelstein.
- "Skill Gaps: The Ill-Prepared Workforce," University of Missouri--St Louis, January 2014, with Steve Finkelstein and Shuang Han.

CURRENT RESEARCH IN PROGRESS

Manuscripts are under review by journals at the present time.

"Learning and Bayesian Updating in Made-to-Order (MTO) Production International" with Hai Tao Li and three others