### A. PERSONAL INFORMATION

Director, Engineering Leadership and Innovation Institute Lockheed Martin St. Laurent Professor Industrial Engineering & Management Systems Department University of Central Florida (UCF), Orlando, FL, 32816-2450 Telephone: 407-823-5645—E-mail: Tim.Kotnour@ucf.edu

#### **B. CAREER OVERVIEW AND ROADMAP TO THE CV**

My mission is to help students, leaders, and organizations discover their burning desire, confidence, and strategy to deliver world-changing solutions. My career focuses in three areas with significant recognition in each area.

- 1. Educational/Research Program Development, Delivery, and Assessment—I am the founding director and leader of the Engineering Leadership & Innovation Institute (eli<sup>2</sup>) with programs across undergraduate, graduate, and executive levels. Significant accomplishments include
  - Securing Funding for Practice Oriented Research & Training. Over \$2.7M dollars have been raised to support research that provided both theoretical and direct-application implications.
  - Creating a Balanced Portfolio of Undergraduate Programs. This portfolio includes a new minor/certificate, Maker Spaces, courses, professional development workshops, and Development Circles. Over 33,000 (and counting) touchpoints have created increases in students' practice of creativity (80%), innovation (78%), collaboration (79%), and accountability (72%), and solution delivery (84%).
  - Creating the Graduate, Executive-Style Engineering Management Cohort Program. We created a new degree and hybrid-delivery model in partnership with industry. We have produced 197 alumni and \$5.8M in revenue with 75% of the alumni having a significant increase in job responsibilities and significant return on investment for the partnering organizations.
  - **Creating Executive Programs**. Led a CIO learning community with industry partners for 10 years, provided technical assistance and ran conferences. Generated \$1,368,00 in revenue.
  - **Developing (Diverse) Faculty**. Faculty development included mentoring junior faculty, re-tooling senior faculty, and building an adjunct bench of professors of practice to support the undergraduate and graduate programs.
  - Managing Resources. Managed a resource portfolio across multiple sources, departments and years.
  - **Philanthropic Relationship Building.** In partnership with the Dean's and Development Offices over \$1.17M was raised to support the programs.
  - **Capability Building**. To enable consistent, repeatable delivery of the eli2, focused on building of the staff and repeatable processes (e.g., program assessment tools and processes, annual processes, and semester/program playbooks).
  - **Recognition** includes being named the Lockheed Martin St. Laurent Professor and being asked to serve with the European School of Management and Technology.
- 2. Transformational Leadership of High-Performing Technical Organizations—I have over 25 years of active engagement with senior executives to deliver fundamental organizational transformations by:
  - Being Engaged with Senior Leaders and Their Teams—I have engaged with government (e.g., NASA Mission Directorates, Centers, and Program, DOD Centers, DOE Centers) and commercial (e.g., Electronic Arts) organizations. This work led to the book *Transforming Organizations: Strategies and Methods*.
  - Recognition includes receiving 3 NASA Public Service Medals (2001, 2005, and 2016).

- **3.** Service to the Profession—Service to the profession is best highlighted with the transformation of the Engineering Management Journal. Additional service to the university continues to occur at the university, college, and department levels.
  - **Recognition** includes being named the editor of the Engineering Management Journal and a Fellow of ASEM.

## C. ENABLERS TO SUCCESS

To consistently deliver relied on six key elements:

- [1] Industry Partnerships—To create and deliver programs that make a difference industry partners are core. My collaboration philosophy and practice was set early in my career (e.g., see a detailed case analysis of this model with NASA's KSC published in the *International Journal of Operations* and Production Management in 2001). Partners have included: Campus Crusade from Christ, Darden Restaurants, Harris Corporation, HD Supply, Lockheed Martin, NASA/Kennedy Space Center, Raytheon Corporation, SAIC, Siemens Power Generation, The Boeing Corporation, Walt Disney World.
- [2] **Transformational Leadership**—To create new approaches in the university setting requires transformational leadership. We are integrating perspectives and support across administrators, faculty, staff, and students. The engagement with senior industry leaders provided the insight into the successful practices to drive change in the university.
- [3] **Strategic Thinking and Doing**—To consistently deliver programs while also building new programs requires an allocation of time, energy, and resources. This allocation requires strategic thinking and doing. In everything we do, we are driven by strategy. Again, the involvement with senior industry leaders provided the insight into the successful practices. I have used these practices to balance resources to create new programs while delivering current ones.
- [4] **An Entrepreneurial Philosophy**—To create new programs (often with limited resource investment) requires an entrepreneurial mindset. We consistently work a process to understand customer (industry and student) needs, develop a creative solution, pilot the approach, measure the impact, and improve it. We are also creative in how we provide the resources to execute the programs. This mindset was built through my experience in establishing a consulting business and working with entrepreneurs.
- [5] A Continuous Improvement Philosophy—To consistently deliver quality programs requires learning and adapting. At the core of the Industrial Engineering profession is the continuous improvement process. I live this philosophy in all facets of our programs. For example, I use a plan-do-study-act (PDSA) teaching process (e.g., see the description and evaluation of this teaching approach was published in *IEEE Transactions on Engineering Education*). We use a continuous improvement approach in our course, semester, and annual program assessment processes.
- [6] **Presence**—To create active, meaningful engagement from industry, faculty, staff, and students requires authentic presence. This presence is demonstrated through listening, saying "we'll figure it out" when confronted a challenge, and caring about your team by asking "how are you? how can I help you?"

### D. LEADERSHIP EXPERIENCE

- [1] **Director, Engineering Leadership and Innovation Institute**, University of Central Florida (UCF), Industrial Engineering and Management Systems, 2010-Present.
- [2] **Program Director, Professional Engineering Management Program,** University of Central Florida (UCF), Industrial Engineering and Management Systems. 2008-Present.
- [3] **Project Lead**, University-Wide Fiscal Innovation and Operational Efficiency Teams, University of Central Florida (UCF), 2017.
- [4] **Project Lead**, Taking Research to the Next Level, Office of Sponsored Research, University of Central Florida (UCF), 2005.

## E. ACADEMIC POSITIONS

- [1] Lockheed Martin St. Laurent Professor, University of Central Florida (UCF), Orlando, FL, 2018present, Industrial Engineering and Management Systems.
- [2] **Professor (with Tenure),** University of Central Florida (UCF), Orlando, FL, 2010-present, Industrial Engineering and Management Systems.
- [3] Associate Professor (with Tenure), University of Central Florida (UCF), Orlando, FL, 2001-2010, Industrial Engineering and Management Systems.
- [4] Assistant Professor, University of Central Florida (UCF), Orlando, FL, Fall 1995-2001, Industrial Engineering and Management Systems.
- [5] **Senior Graduate Research Assistant**, Virginia Polytechnic and State University (Virginia Tech), Blacksburg, Virginia, 1990-1995.

## F. PROFESSIONAL STRATEGY CONSULTING EXPERIENCE

Significant, long-term and sustained professional strategy consulting experience (using action research and learning approaches) with senior executives and their critical-to-success teams on strategy development and execution support include:

- [1] NASA Kennedy Space Center
- [2] NASA Launch Services Program
- [3] NASA Exploration Ground Systems
- [4] NASA International Space Station/Exploration and Research Technology
- [5] NASA Gateway Logistics
- [6] NASA Glenn Research Center
- [7] NASA Wallops Flight Facility
- [8] NASA Science Mission Directorate
- [9] Department of Energy (NETL)
- [10]Department of Defense
- [11]EA Sports
- [12]Zynga
- [13]Warner Brothers
- [14]Dynacs
- [15]Poulsen

## G. EDUCATION

- [1] AACSB Post-Doctoral Bridge Program, 2010, University of Florida
- [2] Ph.D., Industrial and Systems Engineering, emphasis in Management Systems Engineering, Virginia Tech, Blacksburg, Virginia, July 1995
- [3] M. S., Industrial and Systems Engineering, Virginia Tech, August 1992
- [4] B. S., Industrial Engineering, Bradley University, Peoria, Illinois, May 1990— Minors: Business Administration and Computer Science
- [5] Additional Training
  - Learning As Leadership, 2012
  - Systems Dynamics, ASEM, 2008
  - Scenario Planning, Global Business Network, 2000
  - Educational Outcomes Assessment, SUCCEED, 1999
  - Assessing Student Outcomes, Center for Education Development, 1997
  - 1997 NASA Educator's Retreat, 1997
  - Paradigm for Success: Enabling Strategies for Obtaining Federal Research Dollars, 1997
  - Cooperative Learning, Southeastern Center for Cooperative Learning, 1996-97
  - Distance Education in the Engineering Core at the University of Illinois, UCF, 1996
  - Fundamentals of Kaizen, Ford Motor Company, 1994
  - Continuous Process Improvement Workshop, Management Systems Laboratories, 1993

#### **H. PROFESSIONAL REGISTRATION**

Registered Professional Engineer-In-Training, State of Illinois, 1990

### I. AWARDS HONORS & RECOGNITIONS

### 1. International and National Awards & Honors

- [1] NASA Public Service Medal, 2016
- [2] NASA Public Service Medal, 2005
- [3] NASA Public Service Medal, 2001
- [4] Published book Transforming Organizations: Strategies and Methods, Kotnour, Taylor & Francis, May, 2009.
- [5] Bernard Sarchet Award, American Society for Engineering Management, 2005
- [6] Fellow, American Society for Engineering Management, 2005
- [7] Fellow, NASA Center for Program/Project Management Research, 2004

#### 2. International and National Service and Recognition

- [1] Instructor, European School of Management & Technology (corporate program), 2017-2019
- [2] Editor, Engineering Management Journal, 2001-2009
- [3] Series Editor, Complex Systems Engineering & Management (CRC Press), 2008-Present
- [4] Invited Doctoral Committee Member, Geert Lettens, Royal Military Academy, Belgium, 2008-2009
- [5] Editorial Board, Human Factors and Ergonomics in Manufacturing and Service Industries, 2008-Present
- [6] Associate Editor, Journal for Enterprise Transformation, 2008-2018

## 3. University Awards & Honors

- [1] University Teaching Incentive Program—Teacher Excellence, 2004
- [2] University Teaching Incentive Program—Teacher Excellence, 1999
- [3] IEMS Excellence in Graduate Teaching, 1998, 1999
- [4] Certificate of Appreciation from the Kennedy Space Center, 1997, 1998
- [5] Certificate of Recognition from the Kennedy Space Center, 1996, 1997
- [6] NASA/ASEE Summer Faculty, 1996, 1997
- [7] Bradley University Department of Industrial Engineering Hall of Fame, 1993
- [8] Bradley University Academic Hall of Fame, 1990

## J. RESEARCH GRANTS AND GRANTS PREPARATION

### 1. Research Grant Awards Processed through Office of Sponsored Research

- [1] Leadership Development Program, PSM (PI, \$15,000, January 2017-December 2017)
- [2] University of Central Florida I-Corps Sites Program: Enhancing Technology Commercialization to Develop a World-Class Innovation Ecosystem, National Science Foundation (Co-Pi, 60,000 credit of the total \$300,000, May 2014-April 2017).
- [3] Next Generation Expeditionary Warfare Intelligent Training (NEW-IT), Office of Naval Research, (PI/Accountable for \$377,800 of ~\$7,618,721 effort).
- [4] Learning-Based Project Reviews (Phase II), Kotnour, NASA/USRA, May 2005, August 2007, \$218,220.
- [5] Learning-Based Project Reviews (Phase II—KSC/LSP contribution), Kotnour, NASA/KSC, May 2005, August 2007, \$60,000.
- [6] Learning-Based Project Reviews (Phase I), Kotnour, NASA/USRA, March 2004, February 2004, \$59,121.
- [7] NASA/ASEE Summer Faculty Program, NASA/KSC, PI: Kotnour, January, 2004, December, 2006 (with a two-year additional option), \$960,000 (\$1,600,000).
- [8] Systems Engineering Competence, Kotnour, NASA, KSC, PI: Kotnour, January 2003-December 2004, \$35,000
- [9] NASA/ASEE Summer Faculty Program, NASA/KSC, PI: Kotnour, January, 2003, December, 2003, \$371,000.
- [10]NASA/ASEE Summer Faculty Program, NASA/KSC, PI: Kotnour, January, 2002, December, 2002, \$327,796.
- [11]Institutionalizing Kennedy Strategic Learning Processes, NASA/KSC, PI: Kotnour, January, 2001, May, 2002, \$262,000.
- [12]Process Alignment, Graduate Student Researchers Program, NASA/KSC, PI: Kotnour (with B. McIlrath), August, 2001, September, 2003, \$46,000.
- [13]Strategic Alignment and Transformation: Strategic Thinking Tools, NASA/KSC, PI: Kotnour, December, 1999, January, 2001, \$16,419.
- [14]Strategic Alignment and Transformation: Process Alignment, NASA/KSC, PI: Kotnour, December, 1999, January, 2001, \$40,000 (+ \$14,250 UCF match=\$54,250).
- [15]Learning in the Project Management Environment, NASA/KSC, PI: Kotnour, May, 2000, January 2001, \$20,000 (+ 7,125 UCF match=\$27,125).
- [16]Strategic Alignment and Transformation: Integrated Management Systems Gap Analysis, NASA/KSC, PI: Kotnour, Co-PI: Thompson, September, 1999, January, 2000, \$10,000 (+ \$3,563 UCF match=\$13,563)
- [17]Strategic Alignment and Transformation: Applied Research Process, NASA/KSC, PI: Kotnour, January, 2000, January, 2000, \$15,000 (+ \$5,344 UCF match=\$20,344).
- [18]Strategic Alignment and Transformation: Strategic Management, NASA/KSC, PI: Kotnour, July, 1999, May, 2000, \$36,982.
- [19]Critical Success Factors for Project Management in a Development Environment, NASA/KSC, PI: Kotnour, July, 1999, May, 2000, \$14,388.
- [20]Best Practices on Process Reengineering, Lockheed Martin, PI: Kolunda, Co-PIs: Kotnour, Thompson, February, 1999, May, 1999, \$25,000.
- [21]Aerospace Research & Educational Needs and Activities in the State of Florida, NASA/KSC, PI: Kotnour, September 15, 1997, May 15, 1998, \$67,614.
- [22]Customer Satisfaction in a Project, Technical Environment, Graduate Student Researchers Program, NASA/KSC, PI: Kotnour (with J. Matkovich), August, 1998, September, 2001, \$66,000.

- [23]Project Management Framework for Organizational Transitions, NASA/KSC, PI: Kotnour, June 1, 1998, December 15, 1998, \$71,572.
- [24]Project Management Framework for Organizational Transitions, NASA/KSC, PI: Kotnour, September 1, 1997, May 15, 1998, \$55,212.
- [25]Project Management Approach to KSC's Transition, NASA/KSC, PI: Kotnour, June 1, 1997, August 31, 1997, \$20,129.
- [26]Project Management Approach to KSC's Transition, NASA/KSC, PI: Kotnour, October 1, 1996, May 31, 1997, \$22,995.
- [27]Orlando Regional Healthcare System/UCF Partnership: Process Improvement/Innovation, Orlando Regional Healthcare System, PI: Thompson, Co-PIs: Kotnour & Sepulveda, May 1, 1997, May 1, 1998, \$200,000.
- [28]Understanding Organizational Change and the Potential Applications of Change Models at KSC, NASA-ASEE Summer Faculty Fellowships in Aeronautics and Space Research, PI: Kotnour, May 1, 1996, August 1, 1996, \$10,000 (plus an additional \$1,800 for student support).

# 2. Proposals Written and Declined

- [1] Intelligent Data Understanding Through Novel Multimodal Information Displays, Stanney, Kotnour, The Advanced Research and Development Activity, \$250,000.
- [2] Strategic Project Management, National Science Foundation/Innovation and Organizational Change Program, PI: Kotnour, \$225,000.
- [3] Strategic Alignment and Transformation, National Science Foundation/Innovation and Organizational Change Program, PI: Kotnour, \$143,800.
- [4] Design and Implementation of a Leadership Excellence Achievement Program, Kotnour, NASA/KSC, PI: Kotnour, October, 1999, \$500,000.
- [5] Knowledge Management, NASA/KSC, PI: Pam McCauley-Bell, Co-PI: Kotnour, \$50,000.
- [6] Florida Center for Digital Media, University of Central Florida, PI: Moshell, et al., January, 1997. Part of team working on the proposal for a multi-disciplinary center for the study of digital media. (The initial planning grant was funded for \$50,000 and the final proposal was declined).
- [7] UCF Partnership Models for the Next Century, Academic Affairs (UCF), PI: Kotnour, \$30,711, January, 1996.
- [8] Understanding Process Performance for Convention Center Operations, Orange County, McCauley-Bell and Kotnour, 1995.
- [9] County and Group Processes for the Development of a Fire and Rescue Re-Creation Plan, McCauley-Bell and Kotnour, Orange County, 1995.
- [10] Project Management Process Development, Lockheed Martin, 1995.

## K. EXECUTIVE AND TRAINING PROGRAMS

#### 1. Executive Technical Assistance Awards Processed through ORBIT

- [1] CIO Learning Community (Siemens Energy, Harris, Boeing, WDW, Darden, HD Supply, SAIC, CCCI, LMCO), PI: Kotnour, Co-PI: Rich, January, 2012, December, 2012, \$135,000 (through UCF ORBIT).
- [2] CIO Learning Community (Siemens, Harris, WDW, Boeing, Darden, Hughes Supply), PI: Kotnour, Co-PI: Rich, January, 2011, December, 2011, \$105,000 (through UCF ORBIT).
- [3] CIO Learning Community (Siemens, Harris, WDW, Boeing, Darden, Hughes Supply), PI: Kotnour, Co-PI: Rich, January, 2010, December, 2010, \$105,000 (through UCF ORBIT).
- [4] CIO Learning Community (Siemens, Harris, WDW, Boeing, Darden, Hughes Supply), PI: Kotnour, Co-PI: Rich, January, 2009, December, 2009, \$105,000 (through UCF ORBIT).
- [5] CIO Learning Community (Siemens, Harris, WDW, Boeing, Darden, Hughes Supply), PI: Kotnour, Co-PI: Rich, January, 2008, December, 2008, \$120,000 (through UCF ORBIT).
- [6] CIO Learning Community (Siemens, Harris, WDW, Boeing, Darden, Hughes Supply), PI: Kotnour, Co-PI: Rich, January, 2007, December, 2007, \$120,000 (through UCF ORBIT).
- [7] CIO Learning Community (Siemens, Harris, WDW, Boeing, Darden, Hughes Supply), PI: Kotnour, Co-PI: Rich, January, 2006, December, 2006, \$105,000 (through UCF ORBIT).
- [8] CIO Learning Community (Siemens, Harris, WDW, Boeing, Darden, Hughes Supply), PI: Kotnour, Co-PI: Rich, January, 2005, December, 2005, \$75,000 (through UCF ORBIT).
- [9] CIO Learning Community (Siemens, Harris, WDW, Boeing, SAIC, CNL, Darden), PI: Kotnour, Co-PI: Rich, January, 2004, December, 2004, \$105,000 (through UCF ORBIT).
- [10]CIO Learning Community (Siemens, Harris, WDW, Boeing, SAIC), PI: Kotnour, Co-PI: Rich, January, 2003, December, 2003, \$75,000 (through UCF ORBIT).
- [11]Walt Disney World, Strategic Alignment of Systems Engineering and Project Management, PI: Kotnour, June, 2002, December 2002, \$208,347 (through UCF ORBIT).

# 2. Training Partnerships

- [1] Strategy Development (H-1B Technical Training Grant), 2013, \$43,000
- [2] Strategic Project Management: Translating Strategy to IT Projects, Kotnour, Conducted workshop to over 50 senior managers of high-tech corporations as part of the UCF ORBIT program.
- [3] Strategic Project Management, Kotnour, Conducted seminar to over 70 senior managers of hightech corporations as part of the UCF ORBIT program.
- [4] Transformation Success, Kotnour, Spaceport Florida Authority, \$25,500.
- [5] Integrating Strategic Thinking throughout the Strategic Management Process, Kotnour, NASA/KSC, \$43,000. Over 350 KSC employees participated in hands on workshop which included defining a strategic direction, developing objectives, and understanding the enablers to strategic alignment.
- [6] Strategic Project Management, Training provided to representatives of King Abdulaziz City for Science and Technology. Completed for Dr. Hosni of the Industrial Engineering and Management Systems Department of UCF.

## L. PUBLICATIONS AND OTHER SCHOLARLY ACTIVITY

## 1. Books Published

[1] Transforming Organizations: Strategies and Methods, Kotnour, Talyor & Francis, May, 2009.

## 2. Refereed Journal Publications

- [1] Kotnour, T., Al-Haddad, S. and Camci, A. (2015) Assessing the factors enabling systematic change. *Journal of Enterprise Transformation*, 5:3, 141-161.
- [2] Al-Haddad, S. & Kotnour, T. (2015). Integrating the organizational change literature: a model for successful change. *Journal of Organizational Change Management*, 28:2, pp. 234-262
- [3] Kotnour, T., Hoekstra, R., Reilly, C., Knight, R., & Selter, J. (2014). Infusing Leadership Education in the Undergraduate Engineering Experience: A Framework from UCF's eli2. *Journal of Leadership Studies*, 7(4), 48-57.
- [4] Kotnour, T. Landaeta, R., Lackey, S. (2011) "Training system impact assessment: a review, reconceptualisation, and extension" *International Journal of Learning Technology*, Vol. 6, No. 4, pp. 384-408.
- [5] Kotnour, T. (2011) "An Emerging Theory of Enterprise Transformations", *Journal of Enterprise Transformation*, vol 1, no. 1, pp. 48 70.
- [6] Kotnour, T. and Bollo, T., (2011) "Strategic Management in a Multi-Program Technology Program Involving Convergence and Divergence of Programs: Observations from NASA" International Journal of Technology Management, Int. J. Technology Management, Vol. 53, Nos. 2/3/4.
- [7] Landaeta, R., Pinto, A., and Kotnour, T. (2009) "Assessing faulty knowledge management systems in project-based organizations," *The International Journal of Knowledge and Learning*, Vol. 5, No. 2, pp. 122-143.
- [8] Decker, B., Landaeta, R., and Kotnour, T. (2009) "Exploring the relationships between emotional intelligence and the use of knowledge transfer methods in the project environment", *Knowledge Management Research and Practice*, Vol. 7, No. 1, pp. 15-37.
- [9] Searcy, C., Landaeta, R., Adcock, A., Marken, J., Dickerson, D., and Kotnour, T. (2008) "Student perception of cooperative learning in a blended engineering course," *World Review of Science, Technology and Sustainable Development*, Vol. 5, No. 3/4, pp. 373-388.
- [10]Landaeta R. and Kotnour T. (2008) "Formal Mentoring: A Human Resource Management Practice that Supports Knowledge Transfer across Projects" *The International Journal of Learning and Intellectual Capital*, Vol. 5, No.3/4, pp. 455-475.
- [11]Kotnour T. and Landaeta R., (2007) "Extending the Cooperative Learning Principles to Multiple Learning Groups & Timeframes: A Case Example," *Journal of Faculty Development*, Vol.21, No.3, pp. 201-216.
- [12]Kotnour, T. G., and Vergopia, C. (2005). "Learning-based project reviews," *Engineering Management Journal*, Vol. 17, No. 4, pp. 30-38.
- [13]Kotnour, T. G., and Farr, J. (2005). "Engineering Management: Past, Present, Future," *IEEE Engineering Management Review*, Vol. 33, No. 3, pp. 39-51.
- [14]Kotnour, T. G., and Farr, J. (2005). "Engineering Management: Past, Present, Future," *Engineering Management Journal*, Vol. 17, No. 1, pp. 15-26.
- [15] Hacker, M., Kotnour, T. G. and Mallak, L. (2001). "Turning Strategic Plans into Reality through Formalizing Deployment Processes: Three U.S. Federal Government Case Studies," *International Journal of Public Sector Management*, Vol. 14, No. 3, pp. 221-242.
- [16]Kotnour, T. G. (2001) "Building Knowledge for and about Large-Scale Organizational Transformations," *International Journal of Operations and Production Management*, Vol. 21, No. 8, pp. 1053-1076.

- [17]Kotnour, T. G. and Kurstedt, H. A. (2000) "Design Parameters of Lessons-Learned Decision Support Systems," *International Journal of Cognitive Ergonomics*, Vol. 4, No. 4, pp. 311-330.
- [18]Kotnour, T. G., (2000) "Organizational Learning Practices in the Project Management Environment," *International Journal of Quality and Reliability Management*, Vol. 17, No. 4/5, pp. 393-406.
- [19]Kotnour, T. G., Matkovich, J., and Ellison, R. (1999). "Establishing a Change Infrastructure through Teams," *Engineering Management Journal*, Vol. 11, No. 3, pp. 25-30.
- [20]Kotnour, T. G. (1999) "Developing and Evaluating an Organizational Learning Process to Continuously Improve Teaching," *IEEE Transactions on Engineering Education*, Vol. 42, No. 4, CD Supplement, paper #15.
- [21]Kotnour, T. G., (1999) "A Learning Framework for Project Management," *Project Management Journal*, Vol. 30, No. 2, pp. 32-38.
- [22]Kotnour, T. G., Barton, S., Jennings, J., and Bridges, R. (1998). "Understanding and Leading Large-Scale Change at the Kennedy Space Center," *Engineering Management Journal*, Vol. 10, No. 2, pp. 17-21.

# 3. Editorial Board/Refereed Review

- [1] Kotnour (2004), Building Project Manager Competence for the Engineering Organization's Success, Florida Engineering Society.
- [2] Kotnour, T. G. and Buckingham (2000) "Initiating University-Industry-Government Partnerships at the NASA/Kennedy Space Center," Research-Technology Management.

# 4. Book Chapters

- [1] Camci, A., & Kotnour, T. "How to Manage Projects in Industry 4.0 Environment: Aligning Management Style With Complexity". In H. Bolat, & G. Temur (Eds.), Agile Approaches for Successfully Managing and Executing Projects in the Fourth Industrial Revolution (pp. 20-39). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-7865-9.ch002 (2019)
- [2] Kotnour & Farr. "Chapter 1: Engineering Management: Past, Present, Future". The Engineering Management handbook (First Edition). American Society of Engineering Management, 2010.
- [3] Kotnour. "Chapter 14: Strategic Management". The Engineering Management handbook (First Edition). American Society of Engineering Management, 2010.
- [4] Bochenek, Iler, Brendle, Kotnour, Ragusa, "A Strategic Science and Technology Planning and Development Process Model", IAMOT (in press)
- [5] Kotnour, T. G. "Knowledge Management," The Technology Management Handbook, CRC Press and IEEE Press, 1998.

# 5. Other Refereed Publications

- Farr, John; Kotnour, Timothy; Vergopia, Catherine (2018). Assessing Graduate Programs in Engineering Management. Proceedings of the International Annual Conference of the American Society for Engineering Management; Huntsville, (2018).
- [2] Kotnour and Bollo, Strategic Management in a Multi-Program Technology Program Involving Convergence and Divergence of Programs: Observations from NASA, PICMET, 2007
- [3] Kotnour and Vergopia, A Framework and Findings for Learning Based Project Reviews, PICMET, 2007
- [4] Landaeta, R., Pinto, C.A., Kotnour T., and Peterson, W. "Analyzing Faulty Project Knowledge Systems: An Empirical Investigation of a R&D organization," American Society for Engineering Management 2006 National Conference.

- [5] Camci, A., Kotnour, T., "Effects of Major Stakeholder Issues in Projects", Proceedings of American Society for Engineering Management, 27th National Conference, Huntsville, Alabama, October 25 - 28, 2006
- [6] Camci, A., Kotnour, T., "Technology Complexity in Projects: Does Classical Project Management Work?", Proceedings of PICMET '06 Conference, Istanbul, Turkey, July 8 - 13, 2006.
- [7] Landaeta, R., & Kotnour, T. (2005).Knowledge management systems. Proceedings of the 2005 National Conference of the American Society for Engineering Management, 194-199.
- [8] Bochenek, Iler, Brendle, Kotnour, Ragusa, & Melissa Fennell (2005). A Strategic Science and Technology (S&T) Planning and Development Process Model, IAMOT.
- [9] Bochenek, Kotnour; Ragusa (2005). Driving Change from the Middle in High-Tech Organizations: An Approach and Lessons Learned from a Military Science & Technology Development Organization, PICMET.
- [10]Kotnour, T. G. and Landaeta, "Building Engineering Management Case Studies," American Society of Engineering Management, Washington DC, October 2004.
- [11]Kotnour, T., Camci, A., "Community Practice and Academia: Lessons Learned from an IT Community of Practice ", 11th International Conference on Industry, Engineering, and Management Systems, March 14-16, 2005
- [12]Kotnour, T. G. and Landaeta, R. "Identifying Steps and Approaches for Managing Knowledge in Projects", Industrial Engineering and Management Systems Conference, 2003.
- [13]Kotnour, T. G. and Camci, A. "Complexity Paradigm and Project Management", Industrial Engineering and Management Systems Conference, 2003.
- [14]Kotnour, T. G. and Vergopia, C. "Project Management Maturity Models", Industrial Engineering and Management Systems Conference, 2003.
- [15]Kotnour, T. G. and Landaeta, R. "Developing a Theory of Knowledge Management Across Projects", Industrial Engineering Research Conference 2002.
- [16]Kotnour, T., Camci, A., "Processes and Tools for Successful Strategic Project Management" Annual IIE Research Conference and Exhibition, Orlando, Florida, May 19-22 2002.
- [17]Kotnour, T.G. and Lyons, J. L. "Strategic Management Challenges and Lessons Learned from KSC's Transformation", Institute of Industrial Engineers, Orlando, Florida, 2002.
- [18]Kotnour, T. G. "Achieving Visions through Strategic Project Management", Institute of Industrial Engineers, Orlando, Florida, 2002.
- [19]Kotnour, T. G. and Hjelm, M. "Learning in Projects," Third European Conference on Organizational Knowledge, Learning, and Capabilities." Greece, March, 2002.
- [20]Kotnour, T. G., McIlrath, B., and Hjelm, M. "Project Management of Industry-University Partnerships," American Society of Engineering Management, Huntsville, October 2001.
- [21]Kotnour, T. G. and Starr, S. "Demonstrating and Evaluating an Action Learning Approach to Improving Project Management Competence," American Society of Engineering Management, Huntsville, October 2001.
- [22]Lueders, K. and Kotnour, T. G. "Integrating Project Manager's Development with the Delivery of Projects," American Society of Engineering Management, Huntsville, October 2001.
- [23]Kotnour, T. G. "Understanding an Organization's Knowledge Management, Learning, and Project Management Competence," American Society of Engineering Management, Washington D.C., October 2000.
- [24]Kotnour, T. G. and Britton, K. "The Project Manager as a Knowledge Broker," American Society of Engineering Management, Washington D.C., October 2000.
- [25]Kotnour, T. G. "Measuring Organizational Learning Practices in the Project Management Environment," American Society of Engineering Management, Virginia Beach, VA, October 1999.

- [26]Kotnour, T. G. "Understanding Industry-Government-University Technology Development Partnership Needs in the Aviation/Aerospace Industry," Portland International Conference of Management of Engineering and Technology, July, 1999.
- [27]Kotnour, T. G., "Building Knowledge for and About Large Scale Organizational Transformations," American Society of Engineering Management, Virginia Beach, VA, October 1998.
- [28]Sturek, F. and Kotnour, T. "Successfully Applying Strategic Management," American Society of Engineering Management, Virginia Beach, VA, October 1998.
- [29]Kotnour, T. G. "Organizational Learning in a Project Environment," American Society of Engineering Management, Virginia Beach, VA, October 1997.
- [30]Kotnour, T. G., Orr, C., Spaulding, J., and Guidi, J., "Determining the Benefit of Knowledge Management Activities", (Invited Session) 1997 IEEE International Conference on Systems, Man, Cybernetics (October 12-15, 1997), Orlando, Florida.
- [31]Kotnour, T. G. and Barton, S. "The Development of an Organizational Transition Framework: The Application of Change Models to the Kennedy Space Center," Portland International Conference of Management of Engineering and Technology, July, 1997.
- [32]Barton, S. and Kotnour, T. G. "Engaging Researchers to Help Organizational Planning: Lessons Learned from KSC's Ongoing Transition Management Project," Portland International Conference of Management of Engineering and Technology, July, 1997.
- [33]Kotnour, T. G. "Determining the Benefits of Knowledge Management Activities," IEEE International Conference on Systems, Man, & Cybernetics, Orlando, Fl, Oct., 1997.
- [34]Kotnour, T. G., "Supporting Organizational Learning in a Manufacturing Environment," Industrial Engineering Research Conference, Minneapolis, MN, May 1996.
- [35]Taylor, L., Kotnour, T. G., Smibert, A., Wight, E., Earle, S., and Daub, J., "Determining Organizational Learning Performance: Evaluating the U. S. Department of Energy's (DOE) National Technology Information Exchange Workshops," Waste Management '95 Symposium, March, 1995.
- [36]Kotnour, T. G., Coleman, J. A., Batrouny, G. B., Shaw, M., and Kurstedt, H. A., "Analysis of Stakeholder Concerns for the Environmental Restoration and Waste Management Program," Waste Management '94 Symposium, February, 1994.

# 6. Conference Chairs and Invited Participation

- [1] Invited Panelist—Using Lessons Learned to Improve Project Quality. The Decision Sciences Institute Annual Conference, November 2019.
- [2] Invited Panelist—Developing and Leading Graduate Engineering Management Programs. The International Annual Conference of the American Society for Engineering Management, October 2018.
- [3] Keynote Presenter, American Society of Engineering Management, October 2014.
- [4] Invited Presenter, "Institutionalizing Strategic Thinking and Management Process", IIE ISERC, May 2012.
- [5] Invited Presenter, "Performance Measurement", IIE IERC, May 2008.
- [6] Invited Presenter, "Conducting Research in the EM Field", ASEM, October 2006.
- [7] Invited Presenter, "Publishing in the EM Field", ASEM, May 2006.
- [8] Invited Presenter, "So You Want to be a Project Manager", Society of Women Engineers, May, 2006
- [9] Invited Presenter, "Strategic Management", Society of Women Engineers, May, 2006
- [10]Invited Presenter, "Publishing in the EM Field", ASEM, October 2005.
- [11]Invited Presenter, "Authorship Guidelines", ASEM, October 2005.

- [12]Invited Presenter, "So You Want to be a Project Manager", Society of Women Engineers, May, 2005
- [13]Invited Presenter, "Publishing in EMJ", ASEM, October 2002.
- [14]Invited Presenter, "So You Want to be a Project Manager", Society of Women Engineers, May, 2004
- [15]Invite Presenter, "Professional Roadmaps for Professors", ASEM, October, 2002.
- [16]Session Chair, American Society of Engineering Management Conference, October, 2000.
- [17]Panel Chair, NASA Kennedy Space Center Partners in Education and Research Conference, October, 1999.
- [18]Session Chair, American Society of Engineering Management Conference, October, 1999.
- [19]Conference Co-Chair, NASA Kennedy Space Center Partners in Education and Research Conference, October, 1999.
- [20]Session Chair, Portland International Conference of Management of Engineering and Technology, July, 1999.
- [21]Session Organizer, 36<sup>th</sup> Annual Space Congress, Cocoa Beach, FL, April 1999.
- [22]Conference Organizer, NASA Kennedy Space Center Partners in Education and Research Conference, October, 1998.
- [23]Panel Member, "Building Industry/University Partnerships", Kennedy Space Center Partners in Education and Research Conference, October, 1998.
- [24]Session Chair, NASA Kennedy Space Center Partners in Education and Research Conference, October, 1998.
- [25]Session Organizer, 35<sup>th</sup> Annual Space Congress, Cocoa Beach, FL, April 1998.
- [26]Session Chair, American Society of Engineering Management Conference, October, 1997.
- [27]Session Chair, Portland International Conference of Management of Engineering and Technology, July, 1997.
- [28]Invited presentation, Kotnour, T. G. "A Project Management Approach to Organizational Transitions," Industrial Engineering Research Conference, Miami, FL, May 1997.
- [29]Session Chair, Industrial Engineering Research Conference, Minneapolis, MN, May 1996.

# 7. Papers Presented at Scholarly Meetings and Published in Proceedings

- [1] Kotnour, T., Hoekstra, R., Reilly, C., & Selter, J. (2014). Integrating Leadership Education into the Undergraduate Engineering Experience. ASEE Annual Conference, 2014, Indianapolis, IN
- [2] Al-Haddad and Kotnour (2013, May). Preliminary Framework for Aligning Organizational Change. A. Krishnamurthy and W.K.V. Chan, eds. *Proceedings of the 2013 Industrial and Systems Engineering Research Conference*. Paper presented at Institute of Industrial Engineers Annual Conference and Expo. San Juan, Puerto Rico.
- [3] Kotnour & Bollo, Strategic Management in a Multi-Program Technology Program Involving Convergence and Divergence of Programs: Observations from NASA, PICMET, 2007
- [4] Kotnour & Vergopia, A Framework and Findings for Learning Based Project Reviews, PICMET, 2007
- [5] Landaeta, R., Pinto, C.A., & Kotnour T., Peterson, W. "Analyzing Faulty Project Knowledge Systems: An Empirical Investigation of a R&D organization," American Society for Engineering Management 2006 National Conference.
- [6] Camci, A., Kotnour, T., "Effects of Major Stakeholder Issues in Projects", Proceedings of American Society for Engineering Management, 27th National Conference, Huntsville, Alabama, October 25 - 28, 2006
- [7] Camci, A., Kotnour, T., "Technology Complexity in Projects: Does Classical Project Management Work?", Proceedings of PICMET '06 Conference, Istanbul, Turkey, July 8 13, 2006.

- [8] Kotnour, T. G. and Landaeta, "Building Engineering Management Case Studies," American Society of Engineering Management, Washington DC, October 2004.
- [9] Kotnour, T., Camci, A., "Community Practice and Academia: Lessons Learned from an IT Community of Practice ", 11th International Conference on Industry, Engineering, and Management Systems, March 14-16, 2005
- [10]Kotnour, T. G. and Landaeta, R. "Identifying Steps and Approaches for Managing Knowledge in Projects", Industrial Engineering and Management Systems Conference, 2003.
- [11]Kotnour, T. G. and Camci, A. "Complexity Paradigm and Project Management", Industrial Engineering and Management Systems Conference, 2003.
- [12]Kotnour, T. G. and Vergopia, C. "Project Management Maturity Models", Industrial Engineering and Management Systems Conference, 2003.
- [13]Kotnour, T. G. and Landaeta, R. "Developing a Theory of Knowledge Management Across Projects", Industrial Engineering Research Conference 2002.
- [14]Kotnour, T., Camci, A., "Processes and Tools for Successful Strategic Project Management" Annual IIE Research Conference and Exhibition, Orlando, Florida, May 19-22 2002.
- [15]Kotnour, T.G. and Lyons, J. L. "Strategic Management Challenges and Lessons Learned from KSC's Transformation", Institute of Industrial Engineers, Orlando, Florida, 2002.
- [16]Kotnour, T. G. "Achieving Visions through Strategic Project Management", Institute of Industrial Engineers, Orlando, Florida, 2002.
- [17]Nunez, J. and Kotnour, T. G. "Knowledge Management in the Internal Space Station," Space Congress, April 2002.
- [18]Kotnour, T.G. and Hjelm, M. "Understanding Leadership Support for Learning Within Project Teams", The International Conference on Computers and Industrial Engineering and The International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, Florida, March 2001.
- [19]Kotnour, T.G. and McIlrath, B. "Process Alignment to Meet Strategic Goals", The International Conference on Computers and Industrial Engineering and The International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, Florida, March 2001.
- [20]Kotnour, T.G. and Lenzini, J. "Understanding Supply Chain Management of a Spaceport", The International Conference on Computers and Industrial Engineering and The International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, Florida, March 2001.
- [21]Kotnour, T. G., and Lyons, J. "Strategic Management Thinking For Driving Large-Scale Transformation: Processes and Lessons Learned From The Kennedy Space Center", Industrial Engineering Research Conference, Phoenix, Arizona, May 1999.
- [22]Kotnour, T. G. "Measuring Organizational Alignment in a Project Environment", Industrial Engineering Research Conference, Phoenix, Arizona, May 1999.
- [23]Kotnour, T. G., Matkovich, J., Barton, S., and Jennings, J. "The Engineering of Strategic Management Systems," Industrial Engineering Research Conference, Canada, May 1998.
- [24]Kotnour, T. G and Cheema, L. "Measuring Organizational Learning in a Project Environment", Industrial Engineering Research Conference, Canada, May 1998.
- [25]Kotnour, T. G., and Cheema, L. "Defining Partnership Needs for Florida's Aviation/Aerospace Industry and the State Educational System", 35<sup>th</sup> Annual Space Congress, Cocoa Beach, FL, April 1998.
- [26]Baesler, F. F., Sepúlveda, J. A., Thompson, W., and Kotnour, T. G., "Working with healthcare practitioners to improve hospital operations with simulation," Arena Sphere '98 Conference.
- [27]Kotnour, T. G. "A Project Management Approach to Organizational Transitions," Industrial Engineering Research Conference, Miami, FL, May 1997.

- [28]Kotnour, T. G. and Proctor, M. "Processes and Tools to Support Knowledge Management in a Virtual Organization," Proceedings of IEEE Engineering Management Society Conference, October, 1996.
- [29]Kotnour, T. G. and Kurstedt, H. A., "A Data-to-Information Chain of Management Tools for Organizational Learning," Southeastern Chapter of The Institute of Management Sciences, October, 1994.
- [30]Kotnour, T. G., Koball, B., Batrouny, G. B., Shaw, M., and Harvey, A., "Gleaning Information from Open-Ended Data," Southeastern Chapter of The Institute of Management Sciences, October, 1993.
- [31]Williams, K. E., and Kotnour, T. G., "An Electronic Performance Support System for Organizational Learning," Computers and Industrial Engineering, 25(1-4), pp. 93-97, 1993.
- [32]Williams, K. E., and Kotnour, T. G., "A Knowledge Center for Group Problem Solving and Formulating Planned Strategy," Southeastern Chapter of The Institute of Management Sciences, October, 1992.
- [33] Williams, K. E., Deighan, J., and Kotnour, T. G., "Knowledge Acquisition for Group Problem Solving Systems," Computers and Industrial Engineering, 23(1-4), pp. 459-462, 1992.
- [34]Kotnour, T. G., and Williams, K. E., "Automated Knowledge Acquisition for Second Generation Knowledge Base Systems: A Conceptual Analysis and Taxonomy," Southeastern Chapter of The Institute of Management Sciences, October, 1991.

## 8. Technical Reports Submitted to Research Sponsors

- [1] Kotnour, T.G. Series of Reports for the 2008 UCF CIO Community of Practice.
- [2] Kotnour, T.G. Series of Reports for the 2007 UCF CIO Community of Practice.
- [3] Kotnour, T.G. Series of Reports for the 2006 UCF CIO Community of Practice.
- [4] Kotnour, T.G. Series of Reports for the 2005 UCF CIO Community of Practice.
- [5] Kotnour, T.G. Series of Reports for the 2004 UCF CIO Community of Practice.
- [6] Kotnour, T.G. Series of Reports for the 2003 UCF CIO Community of Practice.
- [7] Kotnour, T. G. "Integrating Strategic Thinking Throughout the KSC Strategic Management Process: Participant Data and Observations," August, 1999.
- [8] Kotnour, T. G. "Integrating Strategic Thinking Throughout the KSC Strategic Management Process: Interpretations and Recommendations," August, 1999.
- [9] Kotnour, T. G. "A Strategic Framework for Evaluating KSC University Programs," July, 1999.
- [10]Kotnour, T. G., Wanielista, M., Cheema, L., and Buckingham, G. "Partnership Issues for Florida's Aviation/Aerospace Industry and Education System," April, 1998.
- [11]Kotnour, T. G., Thompson, W., Sepulveda, J. "Implementing Lessons Learned in the Orlando Regional Healthcare System," 1998.
- [12]Kotnour, T. G. "Engineering Strategic Management at the Kennedy Space Center," NASA/ASEE Technical Report, 1997.
- [13]Kotnour, T. G. "Project Management Framework to Organizational Transitions," NASA/ASEE Technical Report, 1996.
- [14]Management Systems Laboratories, "Why Do People Perform Unsafe Behaviors? A Review of the Scientific Literature Concerning Underlying Factors Affecting the Performance of Unsafe Acts in the Workplace," project report for research grant (Westinghouse Hanford Corporation, MSJ-SRV-287290), March, 1994.
- [15]Management Systems Laboratories, "Strategic Planning Comparison Study," project report for research grant (U. S. Department of Energy's Office of Environmental Restoration and Waste Management, Grant No. DE-FG02-88DP48058), October, 1993.

- [16] Management Systems Laboratories, "EM-30 Stakeholder Analysis," project report for research grant (U. S. Department of Energy's Office of Environmental Restoration and Waste Management, Grant No. DE-FG02-88DP48058), June, 1993.
- [17] Williams, K. E., and Kotnour, T. G., "A Review of Knowledge-Acquisition Methods," Office of Naval Research Technical Report (Contract No. N00014-91-J-1500), 1993.
- [18]Kotnour, T. G., "Intelligent Management Tool to Aid Problem Solving, Decision Making, and Planning," unpublished working paper for research grant (U. S. Department of Energy's Office of New Production Reactors, Special Research Grant No. DE-FG02-91NP00119), January, 1992.

# 9. Professional Presentations

- Al-Haddad and Kotnour (2014, June 1-4). An alignment model for successful organizational change: preliminary results. Institute of Industrial Engineers (IIE) Annual Conference and Expo, 2014, Montreal, Canada (Presentation).
- [2] Al-Haddad and Kotnour (2012, May) Integrating Change Management Literature: A Model for Successful Organizational Change. Institute of Industrial Engineers (IIE) Annual Conference and Expo, 2012, Orlando, FL (Presentation).
- [3] "IT Cost Reduction: IT Cost Savings through a Knowledge Sharing Community: Observations from the UCF CIO Community of Practice", The Information Management Forum, March, 2009.
- [4] "Learning-Based Project Reviews", presented to PM Challenges Conference, February 2007.
- [5] "Learning-Based Project Reviews", presented to PM Challenges Conference, March 2005.
- [6] "Strategic Program and Management", presented to IEMS Advisory Board, Spring 2003.
- [7] "Transformation Management", presented to Boeing/NMA, Spring 2001.
- [8] "Leadership and Visioning," presented to UCF College of Engineering's Dean's Leadership Team, Fall, 1999.
- [9] "Visioning for UCF Excellence in Engineering Education 2000," presented to UCF College of Engineering's Dean's Leadership Society, Fall, 1998.
- [10] "Management Systems Analysis to Understand Logistics Management Tools," presented to KSC Logistics, Fall, 1998.
- [11]"Assessing Qualitative Assignments and Exams to Ensure Objectivity" for the College of Engineering, 1998.
- [12] "Partnership Issues between Florida's Aviation/Aerospace Industry and Educational System", presented to the NASA/KSC BOR working group, April 27, 1998.
- [13] "Understanding the Relationship between Florida's Aviation/Aerospace Industry and Educational System", presented to the Florida Aviation/Aerospace Alliance Task Force, April 21, 1998.
- [14] "The (Mis)Use of Lessons Learned in Project Management: An Organizational Learning Framework for Project Environments" to the local chapter of the Project Management Institute on April 11, 1997.
- [15]"A Project Management Framework to Kennedy Space Center's Transition" to Brevard Community College/TQM Information Exchange working group on January 23, 1997.
- [16] "The Industrial Engineering of Strategic Management Systems," UCF/IEMS, Research Exchange Workshops, March, 20, 1998/
- [17] "Understanding Organizational Learning in a Project Environment," UCF/IEMS Research Exchange Workshops, April 11, 1997.
- [18] "Integrating Research and Organizational Problem Solving: The Development of a Project Management Approach to KSC's Change", UCF/IEMS, Research Exchange Workshops, September, 20, 1996.
- [19] "Research Issues in Organizational Learning," UCF/IEMS, Research Exchange Workshop, Fall, 1995.

## **10. Other Publications**

- [1] Kotnour, T. G. "Understanding and Leading Large-Scale Organizational Change," NASA-KSC Partners in Education and Research, October, 1998.
- [2] Kotnour, T. G. "Aerospace Research and Educational Needs and Activities in the State of Florida," NASA-KSC Partners in Education and Research, October, 1998.
- [3] Matkovich, J. and Kotnour, T. G. "Effective Organizational Performance Tools Used in the Aviation and Aerospace Industries," NASA-KSC Partners in Education and Research, October, 1998.
- [4] Kotnour, T. G. and Lyons, S. "Strategic Management to Drive Change", NASA Technical Briefs, 1998.
- [5] Kotnour, T. G. and Matkovich, J. "Customer Satisfaction in a Project, Technical Organization," NASA Technical Briefs, 1998.
- [6] Kotnour, T. G. and Orr, C. "Organizational Learning Process to Support the NASA Test Director," NASA Technical Briefs, 1997.
- [7] Kotnour, T. G. and Barton, S. "Organizational Change Models", NASA Technical Briefs, 1997.

### **M. INDVIDUAL STUDENT GUIDANCE**

## 1. PhD Dissertations Supervising (In Progress)

- [1] Ben Park
- [2] Stephen Davis

## 2. PhD Dissertations Supervised (Completed)

- [1] Serrina Hadad, April 2012, Aligning Change Method with the Organizational Change Type for Successful Change
- [2] Brig Bjorn, May 2012, Critical Success Factors for Evolutionary Acquisition Implementation
- [3] Erick Tucker, Summer 2010, Knowledge Management Determinants of Continuance Behavior: Evaluating the Air Force Knowledge Now Knowledge Management System
- [4] Bob Beaver, Summer 2009, Individual & Group Strategies for Organizational Learning in an AEC Firm
- [5] Catherine Vergopia, Fall 2008, Project Management Maturity Models
- [6] Rey Diaz, Spring 2007, Integrated Management System Evolutions
- [7] Alper Camci, Summer, 2006, Project Management Styles
- [8] Jose Nunez, Summer, 2005, Knowledge Management in International Projects: The Case of the International Space Station
- [9] Rafael Landeata, Winter 2003, Knowledge Management Across Projects

## 3. PhD Dissertations Supported as Committee Member

- [1] Denton Gibson, Winter 2019, Factors Affecting Systems Engineering Rigor in Launch Vehicle Organizations
- [2] Eric Sola, Spring 2016, An Experimental Investigation of the State of Creativity, Critical Thinking, and Creativity in Undergraduate Engineering Students
- [3] Invited Doctoral Committee Member, Geert Lettens, Royal Military Academy, Belgium, 2008-2009
- [4] Grant Cates, Fall 2004, Improving Project Management With Simulation And Completion Distribution
- [5] Gregg Buckingham, Spring 2002, Effects of Mentoring on Science Education
- [6] Labiche Ferreira, 2000, Crash quality- an approach for evaluating spending on quality improvement initiatives
- [7] Linda Welsh, Summer, 1998, Features of Total Quality Management Training and Their Relationships to Effective TQM Implementation in K-12 Educational Organizations.
- [8] Hani Aburas, Summer 2002, Design, Simulation, and Optimization of a Fully Dynamic Process Control Procedure.

#### 4. MS Theses Supervised (Completed)

- [1] Bonnie McIlrath, Summer 2002, Processes and Tools for Organizational Alignment
- [2] Mirja Hjelm, Summer 2002, Knowledge Management in the Project Management Environment
- [3] Jennifer Off, Summer 2000, Deploying an Integrated Management System
- [4] Josh Lenzini, Summer 2000, Supply Chain Management of Spaceports
- [5] Frank D. Sturek, August, 1998, How Does a Traditionally Managed Organization Successfully Apply Strategic Management?
- [6] Robert Gaucher, August, 1998, The Effect of Lessons Learned on Organizational Learning and Performance

### 5. MS Theses Supported as Committee Member

- [1] Scott Sandback, 2001, The Exploitation of Emerging Game Console Systems for Utilization as Low-End Simulation Platforms
- [2] Raymond K. Compton, Spring, 2000, A Conceptual Model of PC-Based Simulation in Support of Military Training
- [3] Lesley Cheema, April, 1999, A Methodology for Sampling Reduction in High-Volume Manufacturing
- [4] Wayne Stilwell, Summer, 1998, Organizational Learning in a Novel Environment
- [5] Michael James Lipinski, Spring, 1998, Virtual Simulation Effectiveness for the Training of Teamwork

## N. EDUCATIONAL PROGRAM DEVELOPMENT, DELIVERY, AND ASSESSMENT

These efforts are the core of the created Engineering Leadership & Innovation Institute (eli2).

## 1. Undergraduate Course Development & Taught

- [1] EGS 3030 Engineering Leadership I
- [2] EGS 3031 Engineering Leadership II
- [3] EGS 4950 Engineering Leadership Capstone Course

### 2. Undergraduate Special Programs Developed & Delivered (The "All Get Some, Some Get All" Program)

- [1] Created a Curriculum Based on Industry Needs & Best Practices
- [2] Established Minor & Certificate
- [3] Developed New Courses (EGS 3030, 3031, 4950)
- [4] Built the Maker Spaces (Harris Gathering Lab, Idea Lab, TI Innovation Lab)
- [5] Developed Professional Development Workshops Including
  - a. Senior Design Boot Camp
  - b. The New Engineer's Leadership Skills: You Have a Choice on the Type of Engineer You Want to Be
  - c. It's Not that Hard...Being Accountable for Your Academic Career
  - d. It's Not that Hard...Be Mission and Strategy Driven
  - e. It's Not that Hard...Being Vulnerable
  - f. It's Not that Hard...The 7 R's to Being Present in Your Professional Life
- [6] Built Guidance Packages for Industry Involvement (Speakers Up Close and Development Circles)
- [7] Built Student Resources (Career Roadmap and Skills Self-Assessment)
- [8] Built a Student-Led Team (eli2 Student Interns and Committee)
- [9] Built Community Building Experiences (Hope and Proud Breakfasts)
- [10]Established the Infrastructure to Run (Staff and Processes)
- [11]Built a Robust Assessment Process (Course Specific assessments)

#### 3. Undergraduate Program Assessment Process

- [1] Course specific survey development
- [2] Integrated semester program delivery scorecard and improvement plan
- [3] See program overview and impact video: http://www.cecs.ucf.edu/eli2/wpcontent/uploads/2020/02/UCF-eli2-Undergrad2.mp4
- [4] See impact assessment report: http://www.cecs.ucf.edu/eli2/wpcontent/uploads/2018/08/eli2\_Undergrad\_Impact\_Assessment\_Story\_vAugust\_2018.pdf

### 4. Graduate Course Development & Taught

- [1] EIN 5140 Project Engineering
- [2] EIN 6326 Technology Strategy
- [3] EIN 6182 Engineering Management
- [4] EIN 6950 MS Capstone
- [5] EIN 5117 Management Information Systems

### 5. Graduate Programs Developed & Delivered

- [1] Established market-based executive style program in Solution Deliver/Project Management & Systems Engineering
  - 1) Fall 2020 Orlando cohort (LMCO, KSC, Raytheon, Kratos)
  - 2) May 2018 Orlando cohort (WDW, Siemens Power Generation, LMCO, KSC, Raytheon).
  - 3) May 2016 Orlando cohort (WDW, Siemens Power Generation, LMCO, KSC, Raytheon)
  - 4) May 2014 Orlando cohort (WDW, Siemens Power Generation, LMCO, KSC, Raytheon, Northrup Grumman)
  - 5) January 2012 Orlando cohort (WDW, Siemens Power Generation, LMCO, KSC, L3, CSX)
  - 6) Summer 2010 KSC cohort
  - 7) January 2010 Harris cohort
  - 8) May 2009 Harris cohort
  - 9) January 2009 Cohort (WDW, Siemens, LMCO, Boeing, KSC, ASRC, CNL)
- [2] Led the establishment new stand-alone degree—MS Engineering Management
- [3] Supported development of new MSSE online program
- [4] Supported development of MS Data Analytics cohort program

These cohorts have generated a projected \$5,800,000 through April 2020.

#### 6. Graduate Program Assessment Process

- [1] Course specific survey development
- [2] Overall cohort assessment
- [3] Alumni post-graduation impact assessment
- [4] Sponsor impact assessment
- [5] See program overview and impact video: <u>http://www.cecs.ucf.edu/eli2/wp-</u> <u>content/uploads/2020/02/UCF-eli2-MSEM.mp4</u>
- [6] See impact assessment report: <u>http://www.cecs.ucf.edu/eli2/wp-</u> <u>content/uploads/2018/08/The20eli220MSEM20Story\_August\_2018.pdf</u>

#### 7. Diverse Faculty Development

- [1] Mentoring of junior faculty
- [2] Encouraged and supported senior faculty retooling
- [3] Developed cadre of "professors of practice"/adjunct pool
- [4] Wrote external tenure review letters

## O. PHILANTHROPHIC RELATIONSHIP BUILDING

Note: These activities and outcomes were partnered with the Dean's Office and Development Office. These outcomes are joint outcomes.

### 1. Funded Projects & Support

In partnership with the CECS Dean's Office and UCF Foundation, eli<sup>2</sup> since 2010 has been supported with \$1.17M of philanthropic and direct giving from

- Individuals—provided \$163,401 in financial resources
- Corporations—provided \$1,006,000 in financial resources.

Duke Energy Foundation, L3 Harris Foundation, and L3 Harris Corporation have been and continue to be significant benefactors to eli<sup>2</sup>.

#### 2. Capabilities & Programs Created through Funded Projects & Support

Through the above resources, eli<sup>2</sup> has been able to create a portfolio of capabilities including:

- [1] Maker Spaces (Harris Gathering Lab, Idea Lab, and TI Innovation Lab)
- [2] Engineering Leadership Minor
- [3] Engineering Leadership Certificate
- [4] Leadership in Engineering Seminar Courses
- [5] Engineering Leadership Capstone Course
- [6] Senior Design Boot Camps
- [7] Development Circles
- [8] A Repeatable Impact Assessment and Improvement Process.

#### 3. Level of Active Engagement by Industry

[1] Over 100 leaders participating in the Leader's Up-Close Speakers Series, Industry Mentors participating in Development circles, and Industrial Scholars in graduate cohort.

## **P. SERVICE ACTIVITIES**

## 1. National Service

- [1] Editor of the Engineering Management Journal, 2001-2009
  - Specific accomplishments during my tenure as the editor included:
    - Enhanced the presence of the journal by being placed on the Web of Science citation service
    - Developed special issues with leading organizations such as NASA
    - Developed special issue on the founding of the Engineering Management profession by developing case histories with the founders of the profession
    - Developed and implemented a strategic plan for the journal
    - Develop a set of tools and papers to help authors be successful by providing explicit guidelines on how to write and publish EMJ case studies
    - Enhanced journal operations by developing standard tools
    - Procured an on-line submission and review tool
    - Expanded Associate Editors including international associate editors
    - Enhanced the presence of the journal with *EMJ* articles published in the IEEE EMR
    - Increased the backlog of articles to be published
- [2] Series Editor, Complex Systems Engineering & Management (CRC Press), 2008-Present
- [3] Editorial Board, Human Factors and Ergonomics in Manufacturing and Service Industries, 2008-Present
- [4] Associate Editor, Journal for Enterprise Transformation, 2008-2017
- [5] Completed tenure and promotion reviews for other universities
- [6] Member, ASEM Program Accreditation Board, 2005-Present
- [7] Committee Chair, American Society of Engineering Management, Corporate Affiliate Program, 1999-2001

#### 2. University and Departmental Committee Assignments

- [1] Special Project—Fiscal Innovation Approach for the University, Fall 2017
- [2] Chair, UCF Collective Impact (Strategic Planning)-Thematic 5/metric 9 Operational Efficiency Task Team, 2017
- [3] Chair, TIP evaluation committee for the College of Engineering & Computer Science, 2016
- [4] Chair, Faculty search committee for Engineering Management faculty, 2015-2016
- [5] Member, Promotion & Tenure committee for the College of Engineering & Computer Science, 2015-2016
- [6] Member, QEP for UCF, 2015-2016
- [7] Member, College Promotion & Tenure Committee, 2011
- [8] IEMS Department Evaluation Standards Committee, 2011
- [9] IST Department Evaluation Standards Committee, 2011
- [10] Director, Engineering Leadership & Innovation Institute, 2009-Present
- [11] Director, Professional Engineering Management Program, 2008-Present
- [12]IEMS Graduate Committee, 2008-Present
- [13]Office of Sponsored Research: Facilitation of strategic meetings, 2007-2008
- [14]Office of Sponsored Research: Development of strategic plan concepts to move to the next level of research, 2005
- [15]IEMS Strategic Plan, 2005
- [16]IEMS EM search committee chair, 2005
- [17]IEMS Research committee, 2005

- [18]IEMS Dept. culture and excellence committee, 2005
- [19] IEMS Faculty Search Committee, 2003.
- [20]IEMS Chair Search, 2001.
- [21]IEMS Research Committee, 2001.
- [22] University Faculty Center for Teaching and Learning Director Search, 2001.
- [23]Departmental ABET/Assessment Coordinator, responsible for developing/implementing documentation and assessment for ABET/SACS reviews, 2000--2002.
- [24]Departmental Assessment Coordinator, responsible for developing/implementing assessment for ABET/SACS reviews, 1999-2000.
- [25]Engineering Management Working Group, Chair of committee to address strategic issues in the UCF Engineering Management Program, 1999-Present.
- [26]University Library Committee, 1998-1999.
- [27]University representative and lead member for the Interagency Agreement with NASA as a result of an agreement between NASA/KSC and the Florida Board of Regents, State University System, 1997-1998.
- [28] Departmental Graduate Curriculum Committee, 1998-1999.
- [29] Departmental Faculty Search Committee, 1998.
- [30]Departmental Research Committee, 1997-98.
- [31] Departmental Student Advisory Board Committee, 1997-98.
- [32] Departmental Awards Committee, 1995-1996.
- [33]Departmental Scribe, 1995-1997.
- [34]Florida Center for Teaching and Learning, worked to bring in an outside speaker on quality in the classroom.
- [35] Minority Student Mentor.
- [36]Founding faculty advisor the student chapter of the Project Management Institute. This chapter was developed in partnership with the senior local chapter and AT&T.
- [37] University library representative for the IEMS Department, 1996-1999.

# 3. Professional Association Memberships and Offices Held

- [1] American Society of Engineering Management, member, 1997 Present (with some gaps).
  - Editor of the Engineering Management Journal, 2001-2009.
  - Member, ASEM Program Accreditation Board, 2005-2010
  - Committee Chair, American Society of Engineering Management, Corporate Affiliate Program, 1999-2001
  - Session chair for conference, October 1997, 1999, 2000.
- [2] Institute of Industrial Engineers, member, 1987 2000.
  - Session chair for Industrial Engineering Research Conference, May 1996.
  - Reviewed three papers for the Industrial Engineering Research Conference, May 1996.
  - Reviewed one paper for the "Computers and Industrial Engineering Journal", 1996.
  - Chairman, 1990 IIE Midwest Regional Student Conference, 1989-90, Directed and organized conference hosted at Bradley University involving 13 universities and over 170 participants, industry sponsored 70%.
  - President, Institute of Industrial Engineers, Bradley University Chapter, 1988.
- [3] Project Management Institute, member, 1995 2000.
  - Vice-President of Membership for local chapter.
  - Founding faculty advisor for the student chapter at UCF.
  - Co-sponsor of teleconference "Achieving Behavioral Excellence in Project Management" teleconference on March 21, 1996 with the Central Florida Chapter of the Project Management Institute (PMI). My role included coordinating activities with the Division of Continuing Education and the PMI chapter, conducting marketing of the program, and facilitating group discussions before and after the teleconference with participants.
- [4] Institute of Electrical and Electronics Engineers-Engineering Management Society, member, 1994-1999.
  - Organizing committee of the IEEE International Conference on Systems, Man, and Cybernetics.
  - Wrote a research article ("Improving Project Performance through Organizational Learning") for the Canaveral Section's newsletter.
- [5] Institute for Operations Research and the Management Sciences, member, 1992-1998.
- [6] American Society of Engineering Education, member, 1995-2003.
- [7] Served on the local committee for the 1998 International Association for Management of Technology conference.

#### 4. Community Service Activities

- [1] Community Service Group. Participated in week-long community service project conducting construction and interaction with youth, 1994.
- [2] Floyd County School District. Designed and developed transition services with Floyd County Special Education Coordinator, 1992.
- [3] Peoria Police Department. Analyzed and recommended scheduling process and manpower requirements, annual savings of \$100,000, 1989.