

RANDA L. SHEHAB, Ph. D.

Nettie Vincent Boggs Professor
School of Industrial and Systems Engineering
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ACADEMIC QUALIFICATIONS

Ph.D. Industrial Engineering, University of Oklahoma, Norman, August 1995.
M.S. Industrial Engineering, University of Oklahoma, Norman, May 1993.
B.S. Industrial Engineering (with special distinction), University of Oklahoma, Norman,
May 1989.

PROFESSIONAL EXPERIENCE

Director, School of Industrial Engineering, University of Oklahoma, Norman (July 2008
– present).
Professor, School of Industrial Engineering, University of Oklahoma, Norman (effective
July 2008).
Nettie Vincent Boggs Professor of Engineering, University of Oklahoma (September
2014)
Interim Director, School of Industrial Engineering, University of Oklahoma, Norman
(June 2006 – June 2008).
Associate Professor, School of Industrial Engineering, University of Oklahoma, Norman
(July 2003 – June 2008).
Ergonomics Consultant, Sooner Industrial Solutions (April 2010 – Present).
Director, Human Technology Interaction Center, University of Oklahoma, Norman (July
2001 – July 2007).
Assistant Professor, School of Industrial Engineering, University of Oklahoma, Norman
(January 1997 – June 2003).
Ergonomics Consultant, General Motors North American Operations, Warren, MI.
(January 1996 - December 1996).
Adjunct Faculty, School of Business Administration, Oakland University, Rochester, MI.
(September 1996 - December 1996).
Visiting Assistant Professor, School of Industrial Engineering, University of Oklahoma,
Norman (August 1995 - December 1995).
Mission Research Support, NASA Johnson Space Center. Supported PAWS experiment
flown on Life and Microgravity Space Lab (LMS, 1996) and International
Microgravity Laboratory 2 (IML-2, 1994) aboard the space shuttle Columbia.

Research Support, NASA Ames Research Center. Performed research to determine the impact of 17 days continuous bedrest on cognitive performance (June 1995 - August 1995).

USAF Summer Graduate Student Research Program, Brooks AFB, Texas. Evaluated the impact on cognitive performance of various astronaut practice schedules in preparation for NASA-PAWS experiment (June 1992 - August 1992).

AWARDS AND HONORS

Teaching Scholar Award, College of Engineering (2007).

Outstanding Professor, School of Industrial Engineering, University of Oklahoma (1999, 2000, and 2003).

SAE Ralph R. Teetor Educational Award (2000).

University of Oklahoma Outstanding Teaching Award - Engineering and Physical Sciences (1994).

FUNDED RESEARCH

Human External Load Human Factors Study, Co-Principle Investigator, funded by Federal Aviation Administration, Contract No. DTFA-02-93D-93088, \$26,307 (September 1995 - May 1997).

Microgravity Effects on Cognitive Performance Measures Aboard Life and Microgravity Spacelab (LMS), Co-Investigator, funded by NASA through the United States Air Force, Armstrong Laboratory, Brooks AFB, Texas, subcontracted through Systems Research Laboratories, Inc., Contract No. F41624-95-D-6026, Task 0001, Mod. 1, \$36,884 (February 1996 - August 1996) and \$63,073 (June 1996 - September 1997).

Human Factors Support for the National Weather Service Operational Support Facility, Co-Investigator, funded by U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Contract No. NA67RJ0150, \$75,423 (May 1998 – May 1999).

REU on Human Technology Interactions, Co-Principal Investigator, funded by NSF, \$157,428 (June 1999 – May 2002).

Corrosion Growth Rates and Material Testing Data Analysis and Corrosion Modeling, Co-Investigator, funded by ARINC, \$83,074 (February 2000 – October 2000).

Building 3001 Conveyor Study, Co-Principal Investigator, funded by Litton TASC, \$56,882 (March 2000 – June 2000).

Creating a Foundation for Statistics Education, Co-Principal Investigator, funded by the University of Oklahoma's Using Technology for the Improvement of Learning program, \$19,976 (June 2000 - May 2001).

- A Self-Assessment System for Monitoring Cognitive and Sensorimotor State,** Principal Investigator, funded by NASA EPSCoR Research Initiation Grant, \$18,854 (July 2000 – December 2000).
- Integrated Crew Performance Assessment and Training,** Co-Investigator, funded by NASA, NRA-HEDS-01-00, \$473,085 (Jan 2001 – Dec 2003).
- The Development and Implementation of Adaptable Learning Tools.** Co-Principal Investigator, funded by the University of Oklahoma’s College of Engineering Dean’s Office, \$231,000 (February 2001 – December 2002).
- Analysis of Business Metrics for the Science and Engineering Division of Tinker AFB.** Principal Investigator, funded by CASI 2001 Summer Program \$21,704 (May 2001 – August 2001).
- REU on Human Technology Interactions.** Principal Investigator, funded by National Science Foundation, \$228, 918 (March 2002 – April 2004).
- Development and Evaluation of Remote Manipulator System (RMS) Operator Proficiency and Training Effectiveness Metrics,** Co-Principal Investigator, \$665,888, NASA Office of Biological and Physical Research, Washington, D.C. (April, 2003 to March, 2006).
- Why Does It Work? A Study of Successful Gender Equity in Industrial Engineering at the University of Oklahoma,** Co-Principal Investigator, \$899,562, National Science Foundation PGE/RES (January, 2003 to December, 2005).
- Portraying Success Among URM Engineering Majors,** Principal Investigator, \$1,444,284, National Science Foundation (January, 2005 to December, 2008). Supplement awarded \$272,488 (June, 2008 to December, 2010).
- RET Site: Teachers in the University Learning Engineering Research,** Co-Principle Investigator, \$399,847, National Science Foundation (June, 2006 to August, 2008).
- Workshop: Workshop for Conversations Related to Motivating Interest in Science, Mathematics, and Engineering among Oklahoma K-12 Students,** Co-Principle Investigator, \$49,996, National Science Foundation (September, 2008 to September 2010).
- RET Site: Strengthening a K12 Learning Community through Engineering Research,** Co-Principle Investigator, \$450,000, National Science Foundation (August 2010 to July 2012).
- The Privilege of Student Experiential Learning Engineering Competition Teams (SELECT),** Co-Principle Investigator, \$1,497,843, National Science Foundation (June 2011 to May 2015).
- Vietnam Education Foundation Fellowship,** Co-Principle Investigator, \$28,000, Vietnam Education Foundation, Federal. (August 2013 - August 2018).

PUBLICATIONS

Archival Journal Publications

1. Eddy, D.R., Schiflett, S.G., Schlegel, R.E., and Shehab, R.L. (1998). Cognitive Performance Aboard the Life and Microgravity Spacelab. *Acta Astronautica*, 43.
2. Shehab, R.L., Schlegel, R.E., Schiflett, S.G., and Eddy, D.R. (1998). The NASA Performance Assessment Workstation: Cognitive Performance During Head-Down Bed Rest. *Acta Astronautica*, 43, 223-233.
3. Schlegel, R.E., Shehab, R.L., Fry, T.L., and Grant, H. (1999). Clinical studies of digital wireless phone interference in hearing aids. *The Journal of the Acoustical Society of America*, 106(4, pt. 2), 2138.
4. Shehab, R.L. and Schlegel, R.E. (2000). Applying Quality Control Charts to the Analysis of Single-Subject Data Sequences. *Human Factors*, 42, 604-616.
5. Court, M.C., Tung, L., Shehab, R.L., Rhoads, T.R., and Ashford, T.A. (2003). An Adaptable Learning Environment that is Centred on Student Learning and Knowledge Resolution. *World Transactions on Engineering and Technology Education*, 2(1) .
6. Ong, K.M., Harvey, C.M., Shehab, R.L., and Dechert, J. (2004) Statistical process control chart selection: The effects of graphical characteristics on human performance. *Journal of Production Planning and Control*.
7. Badar, M.A., Raman, S., Pulat, P.S., and Shehab, R.L. (2005). Experimental Analysis of Search-Based Selection of Sample Points for Straightness and Flatness Estimation. *Journal of Manufacturing Science and Engineering*, 127 (1), 96-103.
8. Starr, C., Branson, D., and Shehab, R.L., Farr, C., Ownbey, S., Swinney, J. (2005). Biomechanical Analysis of a Prototype Sports Bra. *Journal of Textile and Apparel, Technology and Management* 4(3).
9. Richardson, S.M., Cramer, J.T., Bemben, D.A., Shehab, R.L., Glover J., and Bemben, M.G. (2006). Effects of Age and ACL Injury on Quadriceps Gamma Loop Function. *Journal of Geriatric Physical Therapy*, 29, 1:06, 27-32.
10. Murphy, T.J., Shehab, R.L., Reed-Rhoads, T., Foor, C.E., Harris, B.J., Trytten, D.A., Walden, S.E., Besterfield-Sacre, M., Hallbeck, S.M., and Moor, W.C. (2007). Achieving Parity of the Sexes at the Undergraduate Level: A Study of Success. *Journal of Engineering Education*, 96(3).
11. Genheimer, S.R., and Shehab, R.L. (2009). A Survey of Industry Advisory Board Operation and Effectiveness in Engineering Education. *Journal of Engineering Education*, 98(2), 169-180.
12. Ling, C., Lopez, M., and Shehab, R.L. (2011). Complexity questionnaires of visual displays: a validation study of two information complexity questionnaires of visual displays. *Human Factors and Ergonomics in Manufacturing and Service Industries*, 00(0), 1-21.
13. Shehab, R.L., Murphy, T.J., and Foor, C.E. (2012). "Do They Even Have That Anymore?": The Impact of Redesigning a Minority Engineering Program. *Journal of Women and Minorities in Science and Engineering*, 18(3), 235-253.

14. Cheong, Y.K., Ling, C., and Shehab, R.L. (2013). Effects of Age and Psychomotor Ability on Kinematics of Mouse-Mediated Aiming Movement. *Ergonomics* 56(6), pp. 1006-1020.
15. Ling, C., Harnish, A., and Shehab, R.L. (2013). Educational Apps: Using Mobile Applications to Enhance Student Learning of Statistical Concepts. *Human Factors and Ergonomics in Manufacturing & Service Industries*.
16. Hardre, P.L., Shehab, R.L., Ling, C., Nanny, M., Herron, J., Nollert, M., Refai, H., and Ramseyer, C. (2014) Designing and Evaluating a K-12 STEM Teacher Learning Opportunity in the Research University. *Evaluation and Program Planning* (43C), pp. 73-82.
17. Hardré, P. L., Ling, C., Shehab, R.L., Nanny, M., Nollert, M., Refai, H. (2016). "Situating teachers' developmental engineering experiences in an inquiry-based, laboratory learning environment." *Teacher Development*, 1-26.
18. Ling, C., Stegman, A., Barbhaya, C., and Shehab, R.L. (2016). "Are Two Better Than One? A Comparison Between Single- and Dual-Monitor Work Stations in Productivity and User's Windows Management Style." *International Journal of Human-Computer Interaction*, 1-9.

Peer Reviewed Conference Proceedings

1. Shehab, R.L. and Schlegel, R.E. (1993). A Test of Fitt's Law in a Simulated Driving Environment. In *Proceedings of the Human Factors and Ergonomics Society 37th Annual Meeting* (pp. 559-563), Santa Monica, CA: Human Factors and Ergonomics Society.
2. Shehab, R.L., Schlegel, R.E., and Gilliland, K. (1997). The Use of Statistical Quality Control Charts to Evaluate Changes in Individual Performance. In *Proceedings of the Human Factors and Ergonomics Society 41st Annual Meeting* (pp. 569-573), Santa Monica, CA: Human Factors and Ergonomics Society.
3. Hwang, B.C., Schlegel, R.E., and Shehab, R.L. (1998). Identification of Stable Asymptotic Performance on Computer-Based Cognitive Tests. In *Proceedings of the Human Factors and Ergonomics Society 42nd Annual Meeting* (pp. 826-830), Santa Monica, CA: Human Factors and Ergonomics Society.
4. Srinivasan, S., Schlegel, R.E., Grant, F.H., Shehab, R.L., and Raman, S. (1998). Clinical Assessment of Electromagnetic Compatibility of Hearing Aids and Digital Wireless Phones. In *Proceedings of the Human Factors and Ergonomics Society 42nd Annual Meeting* (pp. 1023-1027), Santa Monica, CA: Human Factors and Ergonomics Society.
5. Shehab, R.L. and Schlegel, R.E. (1999). A Human Factors Perspective on Human External Loads. In *Proceedings of the Human Factors and Ergonomics Society 43rd Annual Meeting*, Santa Monica, CA: Human Factors and Ergonomics Society.
6. Wolfinbarger, K.G. and Shehab, R.L. (2000). A Survey of Ramp Use by Older Adults. In *Proceedings of the Human Factors and Ergonomics Society 44th Annual Meeting*, Santa Monica, CA: Human Factors and Ergonomics Society, CD-Rom.

7. Eichman, J.J. and Shehab, R.L. (2001). Biomechanical Analysis of Postural Sway in Elderly Adults on Ramps. In *Proceedings of the Human Factors and Ergonomics Society 45th Annual Meeting*, Santa Monica, CA: Human Factors and Ergonomics Society, CD-Rom.
8. Ashford, T.A., Shehab, R.L., Rhoads, T.R., and Court, M.C. (2003). A Survey of Learning Styles of Engineering Students. In *Proceedings of the Human Factors and Ergonomics Society 47th Annual Meeting* (CD-ROM). Santa Monica, CA: Human Factors and Ergonomics Society.
9. Bray, T.M., Shehab, R.L., Schlegel, R.E., Civan, A., and Walker, D.E. (2003). Effectiveness of 2-D Views for 6-D Robotics Simulation Maneuvers. In *Proceedings of the Human Factors and Ergonomics Society 47th Annual Meeting* (CD-ROM). Santa Monica, CA: Human Factors and Ergonomics Society.
10. Cheong, Y.K. and Shehab, R.L. (2003). Building a Web-Features Taxonomy for Web Design Guidelines. In *Proceedings of the Human Factors and Ergonomics Society 47th Annual Meeting* (CD-ROM). Santa Monica, CA: Human Factors and Ergonomics Society.
11. Rhoads, T.R., Murphy, T.J., Shehab, R.L., Meissler, R.E., Walden, S.E., Harris, B.J., Trytten, D., Reynolds, A. (2003). Gender Parity in Industrial Engineering. Paper Presented at the *84th Annual Meeting of the American Educational Research Association*, Chicago, April 2003.
12. Stone, A., Allen, K., Rhoads, T.R., Murphy, T.J., Shehab, R.L., and Saha, C. (2003). The Statistics Concept Inventory: A Pilot Study. *Proceedings of the 33rd ASEE/IEEE Frontiers in Education Conference*, Session T3D-6.
13. Akagi, T.M., Schlegel, R.E., Shehab, R.L., Gilliland, K., Fry, T.L., and Hughes, Q. (2004). Toward the Construction of an Efficient Set of Robot Arm Operator Performance Metrics. In *Proceedings of the Human Factors and Ergonomics Society 47th Annual Meeting* (CD-ROM). Santa Monica, CA: Human Factors and Ergonomics Society.
14. Trytten, D.A., Shehab, R.L., Rhoads, T.R., Fleener, M.J., Harris, B.J., Reynolds, A., Walden, S.J., Moore-Furieux, S.K., Kvach, E., Warram, K.R., and Murphy, T.J. (2004). "Invitel" Engineering: Student Perceptions of Industrial Engineering. In *Proceedings of American Society of Engineering Education Annual Conference and Exposition*, CD-ROM.
15. Cheong, Y.K., Pham, S.T., Phan, L.T., Shehab, R.L. (2005). Does Rotary Pursuit Data Predict Mouse Performance? A Pilot Study. In *Proceedings of the Human Factors and Ergonomics Society 49th Annual Meeting* (CD-ROM).
16. Shehab, R. L., Rhoads, T.R., & Murphy, T.J. (2005). Industrial engineering: Why students come and what makes them stay? In *Proceedings of the 2005 American Society for Engineering Education Annual Conference and Exposition* (CD-ROM), Portland, OR.
17. Murphy, T.J., Shehab, R.L., Rhoads, T.R., & Trytten, D.A. (2006). A Multi-Institutional Study of Student Perceptions of Industrial Engineering. In *Proceedings of the 35th ASEE/IEEE Frontiers in Education Conference*, San Diego, CA.

18. Shehab, R.L., Murphy, T.J., Davidson, J., Foor, C., Reed-Rhoads, T., Trytten, D., Walden, S. (2007). Academic Struggles and Strategies: How Minority Students Persist. In *Proceedings of the 2007 American Society for Engineering Education Annual Conference and Exposition* (CD-ROM), Honolulu, HI.
19. Genheimer, S.R. and Shehab, R.L. (2007). The Effective Industry Advisory Board in Engineering Education - a Model and Case Study. In *Proceedings of the 36th ASEE/IEEE Frontiers in Education Conference*, Milwaukee, WI.
20. Walden, S.E., Shehab, R.L. (2009). Where Successful Latino/a Undergraduates find Community at a Predominately White Research University. In *Proceedings of the 2009 American Society for Engineering Education Annual Conference and Exposition* (CD-ROM), Austin, TX.
21. Foor, C.E., Shehab, R.L. (2009). "I Feel Like Forest Gump": Mixed-Race Native American Students Lose Anonymity and Find Community in a College of Engineering. In *Proceedings of the 2009 American Society for Engineering Education Annual Conference and Exposition* (CD-ROM), Austin, TX.
22. Hughes, Q., Shehab, R.L. (2010). What They Say Matters: Parental Impact on Pre-College Academic Identity of Successful African American Engineering Students. In *Proceedings of the 2010 American Society for Engineering Education Annual Conference and Exposition* (CD-ROM), Louisville, KY.
23. Shehab, R.L., Trytten, D.A., and Fitzmorris, C. (2010). Factors Affecting the Successful Completion of an Industrial Engineering Program by Five Students from Rural Communities. In *Proceedings of the 39th ASEE/IEEE Frontiers in Education Conference*.
24. Bouamor, S., Ling, C., Starly, B., Shehab, R. (2010). Multimodal learning interfaces: Assessing the effectiveness of haptic and visual interfaces on student learning of statics. In *Proceedings of the 2011 American Society for Engineering Education Annual Conference and Exposition* (AC 2010-1731).
25. Hughes, Q., Shehab, R.L., Walden, S.E. (2011). Success is different to different people": a qualitative study of how African American engineering students define success. In *Proceedings of the 2011 American Society for Engineering Education Annual Conference and Exposition* (CD-ROM), Vancouver, British Columbia.
26. Harnish, A., Ling, C., Shehab, R.L. (2012). Leveraging the use of mobile applications to increase knowledge retention in a classroom lecture. In *Proceedings of the Human Factors and Ergonomics Society 56th Annual Meeting* (CD-ROM).
27. Foor, C.E., Walden, S.E., Shehab, R.L., and Trytten, D.A. (2013). 'We weren't intentionally excluding them... just old habits': women, (lack of) interest and an engineering student competition team. In *Proceedings of the 42nd ASEE/IEEE Frontiers in Education Conference*.
28. Foor, C.E., Walden, S.E., Trytten, D.A., and Shehab, R.L. (2013). You choose between Team A, good grades, and a girlfriend- you get to choose two!'- How a culture of exclusion is constructed and maintained in an engineering design competition team. In *Proceedings of the 42nd ASEE/IEEE Frontiers in Education Conference*.

29. Leonard, S.E., Percy, B.M., Shehab, R.L., and Walden, S.E. (2013). Minority Student Informed Retention Strategies. In *Proceedings of the 42nd ASEE/IEEE Frontiers in Education Conference*.
30. Shehab, R., Wolfinbarger, K. G., Huang, S.M. (2014). "Amusement Park Engineer: An Industrial and Systems Engineering Activity for High School Students." In *Proceedings of the Industrial and Systems Engineering Research Conference*.
31. Rui, P., Shehab, R., Trytten, D., Foor, C. E., Walden, S. (2016). "Advisor Perspectives on Diversity in Student Design Competition Teams." In *Proceedings of the 2015 American Society for Engineering Education Annual Conference and Exposition* (CD-ROM), New Orleans, LA.
32. Wolfinbarger, K. G., Shehab, R. (2015). "What Behaviors and Characteristics Do Engineering Student Competition Team Members Associate with Leadership" In *Proceedings of the 122nd ASEE Annual Conference and Exposition*, Seattle, Washington DOI: 18260, 11592.
33. Pan, R. C., Shehab, R., Foor, C. E., Trytten, D., Walden, S. (2015). "Building Diversity in Engineering Competition Teams by Modeling Industry Best-Practice." In *Proceedings of the 122nd ASEE Annual Conference and Exposition*, Seattle, Washington DOI: 10.18260/p.23644.
34. Trytten, D., Pan, R., Foor, C. E., Shehab, R., Walden, S. (2015). "Inclusion or Exclusion? The Impact of the Intersection of Team Culture, Student Identity and Pathway on Team Diversity." In *Proceedings of the 122nd ASEE Annual Conference and Exposition*, Seattle, Washington DOI: 10.18260/p.24273.
35. Walden, S., Foor, C. E., Pan, R., Shehab, R., Trytten, D. (2015). "Leadership, Management, and Diversity: Missed Opportunities Within Student Design Competition Teams." In *Proceedings of the 122nd ASEE Annual Conference and Exposition*, Seattle, Washington DOI: 10.18260/p.24396.
36. Shehab, R., Walden, S., Wellborn, E. E. (2015). "Motivating Factors for Choosing Engineering as Reported by Racial and Ethnic Minority Students." In *Proceedings of the 122nd ASEE Annual Conference and Exposition*, Seattle, Washington DOI: 10.18260/p.24507.
37. Pan, R., Shehab, R., Trytten, D., Foor, C. E., Walden, S. (2016). "Barriers to Broadening Participation in Engineering Competition Teams." In *Proceedings of the 2015 American Society for Engineering Education Annual Conference and Exposition* (CD-ROM), New Orleans, LA.

Other Publications

1. Schlegel, R.E. and Shehab, R.L. (1992). Evaluation of Astronaut Practice Schedules for the International Microgravity Laboratory (IML-2). Final Report, 1992 USAF/RDL Graduate Student Research Program sponsored by the Air Force Office of Scientific Research, Research & Development Laboratories, Culver City, California.
2. Schlegel, R.E., Gilliland, K., and Shehab, R.L. (1993). Microgravity Effects on Cognitive Performance Measures - Practice Schedules to Acquire and Maintain

- Performance Stability. Final Report, SRL PO#G1764, Technical Report AL-CF-TR-1994-0040, Armstrong Laboratory, Brooks AFB Texas.
3. Schlegel, R.E., Shehab, R.L., S.G. Schiflett, D.R. Eddy, and K. Gilliland (1994). Astronaut Baseline Practice Schedules for the NASA Performance Assessment Workstation (PAWS). *Aerospace Medical Association 65th Annual Scientific Meeting*, San Antonio, Texas, A28 (abstract).
 4. French, J., Schiflett, S., Eddy, D.R., Schlegel, R.E. Shehab, R.L. (1995). Shuttle Crew Subjective Fatigue Assessment During the IML-2 Mission. *Aerospace Medical Association 66th Annual Scientific Meeting*, Anaheim, California, A27, (abstract).
 5. Schiflett, S.G., Eddy, D.R., French, J., Schlegel, R.E. and Shehab, R.L. (1995). Performance Assessment Workstation (PAWS). Final Report, IML-2 Mission, National Aeronautics and Space Administration, Life Sciences Project Division, Johnson Space Center, Houston, TX.
 6. Schiflett, S.G., Eddy, D.R., Schlegel, R.E., French, J. and Shehab, R.L. (1995). Astronaut Performance During Preflight, In-Orbit and Recovery. *Aerospace Medical Association 66th Annual Scientific Meeting*, Anaheim, California, A27 (abstract).
 7. Schlegel, R.E., Shehab, R.L., Gilliland, K., Eddy, D.R., and Schiflett, S.G. (1995). Microgravity Effects on Cognitive Performance Measures - Practice Schedules to Acquire and Maintain Performance Stability. Final Technical Report, AL/CG-TR-1994-0040.
 8. Schlegel, R.E., Shehab, R.L., S.G. Schiflett, D.R. Eddy and French, J.R. (1995). Relating Astronaut Performance on the NASA PAWS to the Performance of a Ground-Based Reference Group. *Aerospace Medical Association 66th Annual Scientific Meeting*, Anaheim, California, A47 (abstract).
 9. Schlegel, R.E., Shehab, R.L., S.G. Schiflett, French, J.R. and D.R. Eddy (1995). The NASA Performance Assessment Workstation: Astronauts vs. a Ground-Based Reference Group. In *Proceedings of the 11th IAA Man-in-Space Symposium*, Toulouse, France.
 10. Shehab, R.L., Schlegel, R.E., and Gilliland, K. (1995). The Use of Statistical Quality Control Techniques in Readiness-to-Perform Testing, *Proceedings of the Konz/Purswell Occupational Ergonomics Symposium*, Lubbock, Texas, 109-114.
 11. Schlegel, R.E., Shehab, R.L., Schiflett, S.G. and Eddy, D.R. (1996). Microgravity Effects on Standardized Cognitive Performance Measures. *Life and Microgravity Spacelab Bedrest Study* (ed. S. Arnaud), NASA Ames Research Center Publication.
 12. Schlegel, R.E., Shehab, R.L., Schiflett, S.G., Eddy, D.R., Cardenas, R. and Neville, K.J. (1996). NASA PAWS Assessment of Cognitive Performance During Prolonged Bedrest. *Aerospace Medical Association 67th Annual Scientific Meeting*, Atlanta, Georgia, A15 (abstract).
 13. Shehab, R.L., Schlegel, R.E. and Schiflett, S.G. (1996). Reanalysis of the NASA PAWS IML-2 Data Using Statistical Quality Control Techniques. *Aerospace Medical Association 67th Annual Scientific Meeting*, Atlanta, Georgia, A15 (abstract).

14. Eddy, D.R., Schiflett, S.G., Schlegel, R.E., and Shehab, R.L. (1997). Cognitive Performance Aboard the Life and Microgravity Spacelab. In *Proceedings of the 12th Man in Space Symposium: The Future of Humans in Space*, Washington, D.C., 107.
15. Schiflett, S.G., Eddy, D.R., Schlegel, R.E. and Shehab, R.L.(1997). *Performance Assessment Workstation (PAWS)*, Final Report, LMS Mission, National Aeronautics and Space Administration, Life Sciences Project Division, Johnson Space Center, Houston, TX.
16. Schlegel, R.E., Shehab, R.L., Schiflett, S.G. and Eddy D.R. (1997). The NASA Performance Assessment Workstation: Cognitive Performance During Head-Down Bedrest. In *Proceedings of the 12th Man in Space Symposium: The Future of Humans in Space*, Washington, D.C., 106.
17. Shehab, R.L. and Schlegel, R.L. (1997). *A Human Factors Perspective on Human External Loads*. Final Report, DTFA-02-93-D-93088, Task DTFA-02-95-T-80473, Federal Aviation Administration, Civil Aeromedical Institute, Oklahoma City, Oklahoma, May 1997. (Washington, D.C.: Office of Aviation Medicine, DOT/FAA/AM-98/13, 1997).
18. Eddy D.R., Schiflett, S.G., Schlegel, R.E., and Shehab, R.L. (1999). Cognitive Performance in Seven Shuttle Astronauts. In *Proceedings of the First Biennial Space Biomedical Investigators' Workshop* (pp. 145-147). Houston, TX, January 11-13, 1999.
19. Harvey, C.M., Dechert, J., and Shehab, R.L. (1999). Integrating Engineering: Bridging IE Course Material. In *Industrial Engineering Research '99 Conference Proceedings* (CD-ROM), Phoenix, AZ: Institute of Industrial Engineers.
20. Hendartono, A., Pulat, P.S., and Shehab, R.L. (1999). Computational Approach to Global Optima for Unconstrained Optimization Problems. In *Industrial Engineering Research '99 Conference Proceedings* (CD-ROM), Phoenix, AZ: Institute of Industrial Engineers.
21. Schlegel, R.E., Shehab, R.L., Schiflett, S.G., and Eddy D.R. (1999). NASA Performance Assessment Workstation: A Tool for Astronaut Cognitive Performance Evaluation. In *Proceedings of the First Biennial Space Biomedical Investigators' Workshop*, (pp.154-157). Houston, TX, January 11-13, 1999.
22. Shehab, R.L., Schlegel, R.E., Schiflett, S.G., and Eddy D.R. (1999). Cognitive Performance Assessment with a Bed Rest Analog for Microgravity. In *Proceedings of the First Biennial Space Biomedical Investigators' Workshop* (pp.158-161). Houston, TX, January 11-13, 1999.
23. Shehab, R.L., Harvey, C.M., Hwang, B.C., Eichman, J., and Schlegel, R.E. (1999). Improving White Collar Productivity at the National Weather Service. In *Industrial Engineering Research '99 Conference Proceedings* (CD-ROM), Phoenix, AZ: Institute of Industrial Engineers.
24. Ashford, T.S., Shehab, R.L., Rhoads, T.R., and Court, M. (2002). Comparison of Learning Style Theories. *Proceedings of the 37th ASEE Midwest Section Conference*, CD-Rom.

25. Bartosovsky, A., Dominguez, M., and Shehab, R.L. (2002). The Effects of Technology on Note Taking in the Classroom. *Proceedings of the 37th ASEE Midwest Section Conference*, CD-Rom.
26. Ng, K.L., Shehab, R.L., Rhoads, T.R., Court, M., and Holt, J. (2002). Influence of Computer-based Instruction on Learning. In *Proceedings of the 37th ASEE Midwest Section Conference*, CD-Rom.
27. Schlegel, R. E., Shehab, R., Gilliland, K., Fry, T., Walker, D., & Bray, T. (2003). Remote Manipulator System Operator Training and Performance Metrics. *HABITATION: International Journal for Human Support Research*, 9, (3/4) (Abstract).
28. Harris, B. J., Walden, S. E., Trytten, D. A., Shehab, R. L., Rhoads, T. R., & Murphy, T.J. (2005). Balancing on the tightrope: Maintaining gender parity in a successful undergraduate engineering program. In *Proceedings of the 2005 WEPAN/NAMEPA National Conference* (CD-ROM), Las Vegas, NV.
29. Ellis, R.D., Mayhorn, C., and Shehab, R.L. (2006). Human Factors Engineering and Ergonomics – The Profession. In *Encyclopedia of Gerontology, 2nd Edition* (J.E. Birren, ed.).
30. Wolfenbarger, K.G., Shehab, R.L., Richards, C., Krehbiel, C., Lalman, D., Hassell, J. (2007). A comparison of techniques for electronic cattle identification. In *Industrial Engineering Research '07 Conference Proceedings*. (CD-ROM), Phoenix, AZ: Institute of Industrial Engineers.
31. Harvey, D., Ling, C., and Shehab, R.L. (2010). Comparison of Student's Learning Style in STEM Disciplines. In *Industrial Engineering Research '10 Conference Proceedings*. (CD-ROM), Cancun, MX: Institute of Industrial Engineers.
32. Mintmire, E., Ling, C., and Shehab, R. (2013). Usability evaluation of a Paratransit management system. In *Industrial and Systems Engineering Research 2013 Conference Proceedings*. (CD-ROM), San Juan, Puerto Rico, Institute of Industrial Engineers.
33. Trytten, D., Foor, C. E., Murphy, T. J., Shehab, R., Walden, S., Pan, R. C. (2014). Unseen Differences: Students' complex individual identities require engineering educators to enter unfamiliar territory. *ASEE Prism*, 24(3), 42.

PRESENTATIONS

1. Microgravity Effects on Cognitive Performance Measures, NATO Research & Technology Organization Mission to DLR (Institute of Aviation and Space Medicine) Department of Aviation and Space Psychology, Hamburg, Germany, June 3, 1998. (with R.E. Schlegel).
2. Readiness-to-Perform Testing as an Application of Cognitive Performance Testing, NATO Research & Technology Organization Mission to DLR (Institute of Aviation and Space Medicine) Department of Aviation and Space Psychology, Hamburg, Germany, June 5, 1998. (with R.E. Schlegel).
3. Ergonomics and Design, American Society of Interior Designers, Oklahoma City, OK., February 15, 2000.

4. Caregiver Interventions for Alzheimer's Patients, Human Factors and Ergonomics Society 44th Annual Meeting, San Diego, CA., July 31, 2000. (with L.K. Swim).
5. Predicting Speech Intelligibility for Hearing Aid Users in the Presence of Digital Wireless Phone Interference, Human Factors and Ergonomics Society 44th Annual Meeting, San Diego, CA., August 2, 2000. (with T.L. Fry, R.E. Schlegel, and F.H. Grant).
6. Cognitive Performance of Seven Astronauts During Space Flight, Human Factors and Ergonomics Society 44th Annual Meeting, San Diego, CA., August 3, 2000 (with R.E. Schlegel and B.C. Hwang).
7. Ergonomics and Design, American Society of Interior Designers, Oklahoma City, OK, February 15, 2000.
8. The Aging Workforce: Research Implications for the Workplace, OUHSC Department of Occupational and Environmental Medicine, Oklahoma City, OK, March 2, 2001.
9. Evaluation of a Prototype Sports Bra, International Textile and Apparel Association Annual Conference, New York, NY, August 7, 2002. (with C. Starr, D. Branson, C. Farr, S. Ownbey (2002).
10. Developing Metrics to Evaluate NASA RMS Training Performance, The IIE Industrial Engineering Research Conference, Portland, OR, 2003 (with T.L. Fry, R.E. Schlegel, and K. Gilliland).
11. Gender Parity in Industrial Engineering Rhoads, the 84th Annual Meeting of the American Educational Research Association, Chicago, 2003 (with T.R. Rhoads, T.J. Murphy, R.E. Meissler, S.E. Walden, B.J. Harris, D. Trytten, and A. Reynolds).
12. Integrated Crew Performance Assessment and Training, Bioastronautics Investigators' Workshop, Galveston, TX, 2003 (with R.E. Schlegel, and K. Gilliland).
13. Remote Manipulator System Operator Training and Performance Metrics, HABITATION 2004 (jointly held with NASA Bioastronautics Investigators' Workshop), Orlando, Florida (with R.E. Schlegel, K. Gilliland, T.L. Fry, D. Walker, & T. Bray).
14. A Methodology for Quantifying Robotic Operator Performance, Invited Presentation to Human Factors Symposium, Orlando, Florida (with R.E. Schlegel, K. Gilliland, T.L. Fry, T. Akagi, T. Bray, L. Deaton, A. Bartosovsky), July 8, 2004.
15. Why Does It Work? A Study of Successful Gender Parity in Industrial Engineering at the University of Oklahoma. Presentation to NSF HRD Joint Annual Meeting (with T.J. Murphy, B.A. Harris), March 2004, Arlington.
16. Workplace Organization, workshop presentation for Lean Implementer's Training, Tinker AFB, OK, 2004-2006.
17. Package Opening: An Evaluation of Opening Tools for the Elderly Population. Proceedings of the Human Factors and Ergonomics Society 49th Annual Meeting, 2005 (CD-ROM). (with C. Saha).

18. Portraying Success of URM Engineering Majors – Preliminary Findings. Presentation at NSF STEP PI Grantees Meeting (with S.E. Walden, J. Davidson, T.J. Murphy, T.R. Rhoads, D.A. Trytten, and C.E. Foor), April 2006.
19. Portraying Success of URM Engineering Majors. Presentation at NSF STEP PI Grantees Meeting (with S.E. Walden, J. Davidson, T.J. Murphy, T.R. Rhoads, D.A. Trytten, and C.E. Foor), March 2007.
20. ASEE Big XII STEP Workshop. Presentation at American Society for Engineering Education Annual Conference and Exposition (with S.E. Walden and C.E. Foor), June 2009.
21. Using Qualitative Data to Bring Positive Culture into Engineering Programs. Workshop at Frontiers in Education (with S.E. Walden, D.A. Trytten, C.E. Foor and T.J. Murphy), October 2010.
22. When Bad Things Happen to Good MEP Programs: Successfully adapting to institutional change. National Association of Multicultural Engineering Program Advocates (NAMEPA) (with S.E. Walden, D.A. Trytten, and C.E. Foor), 2010.

PROFESSIONAL SERVICE

- Senior Vice President-Academics, Institute of Industrial and Systems Engineers, 2015-2017
- Chair, Outreach Advisory Subcommittee, Human Factors and Ergonomics Society, 2012-2013
- Chair / Co-Chair, IIE New Faculty Colloquium, 2014 /2013
- Track Chair, Education Track, Industrial Engineering Research Conference (2010).
- Chair, Innovations in Curriculum Committee, Council of Industrial Engineering Academic Department Heads (CIEADH) (2010).
- Chair, Aging Technical Group, Human Factors and Ergonomics Society (2007-2009).
- Member, Innovations in Curriculum Committee, Council of Industrial Engineering Academic Department Heads (CIEADH) (2007-2008).
- Textbook Concept Reviewer for CRC Press, LLC (2004).
- Program Chair, Aging Technical Group, Human Factors and Ergonomics Society 48th Annual Meeting (October 2003 – September 2004).
- Textbook Reviewer for Prentice Hall (1999).
- NASA Life Sciences Peer Review Panel (June 1998, June 1999).
- Reviewer for ASEE, IERC, FIE and HFES conference proposals.
- Reviewer for HFES and Computers in Industrial Engineering journals.