

# Jeffrey E. Fernandez, PhD, PE, CPE Managing Principal JFAssociates, Inc.

## **Professional Profile**

Dr. Jeffrey Fernandez is the Managing Principal at JFAssociates, Inc. based in the Washington, DC area. He has a MS and PhD in industrial engineering from Texas Tech University. He is a registered professional engineer (PE) and a certified professional ergonomist (CPE) and is known for his expertise in occupational ergonomics and classical industrial engineering. From 1999 to 2003, Dr. Fernandez worked as a senior managing engineer at Exponent, Inc. From 1986 to 1999, Dr. Fernandez was a professor in the Department of Industrial and Manufacturing Engineering, and co-director of the Manufacturing Innovation and Design (MIND) Center, at Wichita State University in Wichita, Kansas. In 1993, Dr. Fernandez served as a Senior Research Associate for the National Research Council (NRC) at the National Institute for Occupational Safety and Health (NIOSH). From 2003 to 2008, he was involved in testing and evaluation for a U.S. Army ATD.

Dr. Fernandez is a fellow of the Institute of Ergonomics & Human Factors, and a member of the Human Factors and Ergonomics Society, the International Society of Occupational Ergonomics and Safety, and the Society for Industrial and Systems Engineering. From 2010-2016 he was on the board of directors of the Board of Certification of Professional Ergonomics (BCPE) and in 2015-2016 he was the President of the Board of Certification of Professional Ergonomics. In 2004-2005, he was the president of the International Society of Occupational Ergonomics and Safety. He has published more than 200 articles nationally and internationally. Dr. Fernandez is co-author of *Applied Occupational Ergonomics: A Textbook – Fourth Edition* and co-author of *Ergonomía Ocupacional: Diseño y Administración del Trabajo*. From 1995-2010, he was the news editor of the *International Journal of Industrial Ergonomics;* and from 1995-2011, he was the managing/executive editor of the *International Journal of Industrial Engineering*. He is on the editorial board of the *EHS Today, Industrial and Systems Engineering Review*, and the *International Journal of Industrial Ergonomics*. At present, Dr. Fernandez is an adjunct professor at the Catholic University of America, Binghamton University, and George Mason University.

## **Credentials and Professional Honors**

PhD, Industrial Engineering, Texas Tech University, 1986MS, Industrial Engineering, Texas Tech University, 1983BE, Mechanical Engineering, NED University of Engineering and Technology, 1982

Licensed Professional Engineer, Texas, #71020 Certified Professional Ergonomist, #263

## Selected Relevant Experience

Consulting experience includes the following industrial sectors:

- Aerospace
- Amusement parks
- Automobile
- Call Centers
- Computer accessories
- Construction trades
- Defense
- Department stores
- Electronic manufacturing
- Energy
- Entertainment
- Financial institutions
- Food processing
- Foundry
- Furniture manufacturing and distribution

- Healthcare
- Hospitality
- Landscaping
- Newspapers
- Parcel and postal
- Pharmaceutical
- Plastics manufacturing
- Railroad
- Retail Stores
- Security
- Small and large assembly
- Telecommunications
- Transportation
- U.S. Government
- Warehouse

Served as an expert on several time and motion projects involving a variety of occupational tasks. Designed study, visited site, collected and analyzed data, prepared reports, and provided litigation support.

Served as a consulting expert for the Wage and Hour Division, U.S. Department of Labor, in an enforcement action against a major meat processor. Worked with the regional solicitor's office (Kansas City) involving time spent on numerous tasks. Inspected the sites, collected and analyzed data, and prepared report.

Served as an expert for a chicken processor in enforcement action brought by the Wage and Hour Division, U.S. Department of Labor. Results of my time study were adopted by both parties in the ultimate settlement agreement.

Served as an expert on several suitable seating projects involving a variety of tasks. Designed study, visited stores, collected and analyzed data, prepared reports, and provided litigation support.

Served as a consulting expert for OSHA on numerous occasions in the ergonomic evaluation of work places as it relates to musculoskeletal disorders (MSDs). Prepared reports and provided litigation support.

Lead a test and evaluation team for a U.S. Army ATD. Designed, planned, conducted numerous evaluations in the field, analyzed data, and presented results in the form of reports and briefs.

Worked with companies to comply with aspects of settlement agreements, involving a number of ergonomics-related OSHA citations. Developed ergonomics programs, redesigned work places, trained employees, developed a focus group, and assisted in designing tools.

Redesigned mechanized and automated equipment and recommended changes in work practices to reduce the risk of injuries for a number of pharmaceutical firms. Addressed issues such as the use of gloves to reduce pinch forces and the overall layout of work cells. Designed a sauce-dispensing machine using human-factors principles for a major pizza corporation. This effort involved emphasis on the size and color of switches and the use of the redundancy principle. Assessed the existing kitchen layout to optimize tasks and reduce injury.

Provided various companies and agencies with assistance in implementing Americans with Disabilities Act (ADA) requirements. Assignments involved the design or redesign of independent living tasks, work-place tasks, and assistive devices for individuals with disabilities (e.g., Down's Syndrome, spinal cord injuries, spina bifida, cerebral palsy).

Provided industrial safety engineering services to companies, including development of safety and health programs on issues such as slips and falls, lockout-tagout, and hazard communication compliance.

Provided traditional industrial engineering services such as time and motion studies, operations research, manufacturing systems design, and systems engineering to a variety of industries to increase productivity (e.g., reduce scrap, reduce transportation cost, reduce down time, balance lines, improve efficiency).

Served as co-founder and co-director of the Manufacturing Innovation and Development (MIND) Center at Wichita State University. The MIND Center is a university/industry partnership that addresses the research and development needs of industries in manufacturing technologies and processes. MIND was launched with support from companies including Boeing, Cessna, Raytheon, Brittain Machine, and KTEC.

Analyzed numerous jobs for a major aircraft manufacturer and agricultural machine manufacturer to determine whether persons with certain medical restrictions could perform required tasks with some or no accommodations. Project involved site inspections and compilation of several comprehensive reports, which were instrumental in settling cases.

Hired by Department of Justice to train EEOC attorneys and investigators on ADA and ergonomics-related issues. Teamed with NIOSH to develop instructional videos for EEOC trainers and to conduct the first train-the-trainer workshop.

Traveled to India on behalf of the U.S. Department of Education and National Institute on Disabilities and Rehabilitation Research to train engineers in rehabilitation engineering, specifically evaluation of work places and designing accommodations for individuals with disabilities.

Assisted in the development of an ergonomics manual for AT&T staff. The manual was a comprehensive document on occupational ergonomics, addressing manufacturing, office, service, and clean-room tasks.

Worked at the National Institute for Occupational Safety and Health (NIOSH) as a National Research Council (NRC) Fellow. During tenure at NIOSH, assisted on a number of projects, including the NIOSH lifting manual, health hazard evaluations, and the development of ergonomic checklists.

Invited to serve on a 1994 U.S. Department of Energy panel to identify and discuss ergonomics research needs in the development of an ergonomics standard. This panel was one of the early efforts in the development of the OSHA ergonomics standard released on November 14, 2000, which was later revoked.

Some corporations and government entities where training was conducted:

- Architect of the Capitol
- Cessna
- Dauphin
- EckAdams
- EEOC
- Farmland Foods
- Federal Reserve Bank
- Hay and Forage
- Intel
- International Monetary Fund
- JI Case
- Koch Industries
- Learjet

- Magnavox
- Marriott
- NTU (live video presentation broadcast)
- Office Depot
- Ohio Bureau of Worker Compensation
- OSHA Training Institute
- Phillips/Magnavox
- Raytheon
- Rubbermaid
- Sanofi-Winthrop
- Textron
- US Department of State
- U-Haul
- World Bank

### **Journal Publications**

Fernandez JE, Marley RJ. The Development and Application of Psychophysical Methods in Upper-Extremity Work Tasks and Task Elements. International Journal of Industrial Ergonomics, 2014; 44(2): 200-206.

Fernandez JE, Ware BF, Marley RJ, Kumar AR. Role of Physical Ergonomics in Litigation. Ergonomics in Design: The Quarterly of Human Factors Applications, 2011; 19: 4-8.

Ibarra-Mejia G, Fernandez JE, Ware BF, Mital A, Gomez-Bull KG, Salinas-Lopez IN, Morales-Zamora A. Sitting and Standing Dynamic Anthropometric Measures of Northern Mexico Workers. International Journal of Industrial Engineering, 2010; 16: 391-398.

Romero R, Noriega S, Fernandez JE, Subramanian A, Varela R, Merino AC. Predictors of SMED Projects: A Case in an Industrial Sector of Juarez, Mexico. International Journal of Industrial Engineering, 2010; 16: 493-500.

Ware BF, Kumar AR, Subramanian A, Fernandez JE. Establishing a framework for office ergonomics data management: a systems framework. International Journal of Industrial Engineering, 2008; 14: 456-462.

Rogers ME, Fernandez JE, Bohlken RM. Training to reduce postural sway and increase functional reach in the elderly. Journal of Occupational Rehabilitation, 2001; 1: 291-298.

Chaparro A, Rogers M, Fernandez JE, Bohan M, Choi SD, Stumpfhauser L. Range of motion of the wrist: Implications for designing computer input devices for the elderly. Disability Rehabilitation Journal, 2000; 22(13/14): 633–637.

Chaparro A, Bohan M, Fernandez JE, Kattel B, Choi SD. Is the trackball a better input device for the older computer user? Journal of Occupational Rehabilitation, 1999; 9: 33–42.

Fredericks TK, Fernandez JE. The effect of vibration on psychophysically derived work frequencies for a riveting task. International Journal of Industrial Ergonomics, 1999; 23(5–6): 415–429.

Kattel B, Fernandez JE. The effects of rivet guns on hand-arm vibration. International Journal of Industrial Ergonomics, 1999; 23(5–6): 595–608.

Marley RJ, Fernandez JE. Work thresholds for repetitive hand-intensive activities. International Journal of Industrial Engineering, 1999; 6(3): 196–202.

Chaparro A, Bohan M, Fernandez JE, Choi SD, Kattel B. The impact of age on computer input device use. International Journal of Industrial Ergonomics, 1999; 24(5): 503–513.

Fernandez JE, Agarwal R, Landwehr H, Poonawala M, Garcia D. The effects of arm supports during light assembly and computer work tasks. International Journal of Industrial Ergonomics, 1999; 24(5): 493–502.

Mital A, Pennathur A, Huston RL, Thompson D, Pittman M, Markle G, Kaber DB, Crumpton L, Bishu RR, Rajurkar KP, Rajan V, Fernandez JE, McMulkin M, Deivanayagam S, Ray PS, Sule D. The need for worker training in advanced manufacturing technology (AMT) environments: a white paper. International Journal of Industrial Ergonomics, 1999; 24(2): 173–184.

Pennathur A, Mital A, Huston RL, Thompson D, Pittman M, Markle G, Kaber DB, Crumpton L, Bishu RR, Rajurkar KP, Rajan V, Fernandez JE, McMulkin M, Deivanayagam S, Ray PS, Sule D. A framework for training workers in contemporary manufacturing environments. International Journal of Comp Integrated Manufacturing (Special Issue on Human Integration in Advanced Manufacturing), 1999; 12(4): 291–310.

Rajan V, Sivasubramanian K, Fernandez JE. Accessibility and ergonomic analysis of assembly product and jigs designs. International Journal of Industrial Ergonomics, 1999; 23(5–6): 473–487.

Fernandez JE, Poonawala, MF. How long should it take to evaluate seats subjectively? International Journal of Industrial Ergonomics, 1998; 22(6): 483–487.

Klein MG, Fernandez JE. The effects of posture, duration, and force on pinching frequency. International Journal of Industrial Ergonomics, 1997; 20(4): 267–275.

Fredericks TK, Fernandez JE, Pirela-Cruz MA. Kienbock's disease: anatomy and etiology. Part 1. International Journal of Occupational Medicine and Environmental Health, 1997; 10(1): 11–17.

Fredericks TK, Fernandez JE, Pirela-Cruz MA. Kienbock's disease: risk factors, diagnosis, and ergonomic intervention. Part 2. International Journal of Occupational Medicine and Environmental Health, 1997; 10(2): 147–157.

Halpern CA, Fernandez JE. The effect of arm posture on peak pinch strength. Journal of Human Ergology, 1996; 25(1): 115–130.

Eksioglu M, Fernandez JE, Twomey JM. Predicting peak pinch strength: artificial neural network (ANN) versus regression. International Journal of Industrial Ergonomics, 1996; 18(5–6): 431–441.

Kattel BP, Fredericks TK, Fernandez JE, Lee DC. The effect of upper extremity posture on maximum grip strength. International Journal of Industrial Ergonomics, 1996; 18(5–6): 423–429.

Malzahn DE, Fernandez JE, Kattel BP. Design oriented functional capacity evaluation: the available motions inventory - review. Disability and Rehabilitation Journal, 1996; 18(8): 382–395.

Turner ML, Fernandez JE, Nelson K. The effect of music amplitude on the reaction to unexpected visual events. Journal of General Psychology, 1996; 123(1): 51–62.

Fernandez JE. Ergonomics in the workplace. Facilities Journal, 1995; 13(4): 20–27.

Marley RJ, Fernandez JE. Psychophysical frequency and sustained exertion at varying wrist posture for a drilling task. Ergonomics, 1995; 38(2):303–325. Davis PJ, Fernandez JE. Maximum acceptable frequencies for females performing a drilling task in

different wrist postures. Journal of Human Ergology, 1994; 23(2): 81–92.

Kim CH, Marley RJ, Fernandez JE, Klein MG. Acceptable work limits for the upper extremities with the psychophysical approach. Journal of Ergonomics Society of Korea, 1994; 13(2): 57–63.

Fredericks TK, Fernandez JE, Rodrigues CC. Psychophysically acceptable weights for a combination lifting task using bags with handles. Journal of Human Ergology, 1994; 23(2):101–109.

Dahalan JB, Fernandez JE. Psychophysical frequency for a gripping task. International Journal of Industrial Ergonomics, 1993; 12(3): 219–230.

Fernandez JE, Pitetti KH. Training of ambulatory individuals with cerebral palsy. Archives of Physical Medicine and Rehabilitation, 1993; 74(5): 468–472.

Kim CH, Fernandez JE. Psychophysical frequency for a drilling task. International Journal of Industrial Ergonomics1993; 12(3): 209–218.

Bonebrake AR, Fernandez JE, Dahalan J, Marley RJ. A treatment for carpal tunnel syndrome: results of a follow-up study. Journal of Manipulative and Physiological Therapeutics, 1993; 16(3): 125-139.

Liu MC, Fernandez JE, Davis PJ. A statistical process control (SPC) approach for carpal tunnel syndrome risk evaluation. Quality Engineering, 1993; 5(3): 375–392.

Stubbs NB, Fernandez JE, Glenn WM. Normative data on joint ranges of motion of 25- to 54-year-old males. International Journal of Industrial Ergonomics, 1993; 12(4): 265–272.

Fernandez JE, Uppugonduri KG. Anthropometry of South Indian industrial workmen. Ergonomics, 1992; 35(11): 1393–1398.

Fernandez JE. Strength and range of motion of females with carpal tunnel syndrome. International Journal of Industrial Ergonomics, 1991; 7: 323–326.

Pitetti KH, Fernandez JE, Lanciault MC. Feasibility of an exercise program for adults with cerebral palsy: a pilot study. Adapted Physical Activity Quarterly, 1991; 8(4): 333–341.

Bonebrake AR, Fernandez JE, Marley RJ, Dahalan J, Kilmer KJ. A treatment for carpal tunnel syndrome: evaluation of objective and subjective measures. Journal of Manipulative and Physiological Therapeutics, 1990; 13(9): 507–520.

Fernandez JE, Marley RJ, Eyada OK. ErgoCAD: An ergonomic CAD system. Computers and Industrial Engineering, 1990; 18(13): 313–318.

Fernandez JE, Pitetti KH, Betzen MT. Physiological capacities of individuals with cerebral palsy. Human Factors, 1990; 32(4): 457–466.

Fernandez JE, Stubbs NB. Mathematical modeling and testing of the sit and reach test. International Journal of Industrial Ergonomics, 1989; 3(3): 201–205.

Fernandez JE, Malzahn DE, Eyada OK, Kim CH. Anthropometry of Korean female industrial workers. Ergonomics, 1989; 32(5): 491–495.

Pitetti KH, Fernandez JE, Stubbs NB, Pizarro DC. Field testing: Assessment of the physical fitness of the mild to moderate mentally retarded individuals. Adapted Physical Activity Quarterly, 1988; 5(4): 318–331.

## **Conference Proceedings, Book Chapters, and Others**

Miller BF, Subramanian A, and Fernandez JE, (2022). Ergonomic Guidelines for Hybrid Workspaces. <u>MAFO Ophthalmic Labs & Industry</u>, ISSN 1614-1598, 66527, Volume 18, pp 26-29, February 2022. <u>https://app.mafo-optics.com/en/profiles/ac6fdce54d5e/editions/4872121fef36f79f7232/pages/page/14</u>

Subramanian A, Miller BF, and Fernandez JE, (2020). Ergonomic Recommendations for Remote Work. <u>MAFO Ophthalmic Labs & Industry</u>, ISSN 1614-1598, 66527, Volume 16, pp 28-30, April 2020. <u>https://app.mafo-optics.com/en/profiles/ac6fdce54d5e/editions/dc34c49270def19c0e16/pages/page/15</u>

Subramanian A, Miller BF, and Fernandez JE, (2020). Ergonomics Recommendations for Remote Work. <u>EHS Today</u>, April 2020. <u>https://www.ehstoday.com/health/article/21127667/ergonomics-recommendations-for-remote-work</u>.

Subramanian A and Fernandez JE (2019). A Multi-Platform Application Based Tool to Facilitate Ergonomic Assessments and Problem Identification. <u>Proceedings of the 8th Annual World Conference of</u> <u>the Society for Industrial and Systems Engineering</u>, A. Subramanian, J.E. Fernandez, D.L. Santos, and P.F. Evangelista (eds.), 100, 2019.

Subramanian A and Fernandez JE. (2019). Three Ergonomics Interventions to Prevent Hotel Housekeeping Injury. Lodging Magazine, May 2019. <u>https://lodgingmagazine.com/three-ergonomics-interventions-to-prevent-hotel-housekeeping-injury/</u>

Christian M, Fernandez JE, Subramanian A. (2017). Environmental Ergonomics in An Office Workplace. <u>EHS Today</u>, pp. 25-27, March 2017. <u>https://www.ehstoday.com/health/article/21918327/environmental-ergonomics-in-an-office-workplace</u>

Christian M, Fernandez JE, Ibarra-Mejía G, Marley RJ. (2016). Using the Revised NIOSH Lifting Equation in the Mexican Workplace: Biomechanical, Physiological, and Psychophysical Differences. <u>Proceedings of the 5th Annual World Conference of the Society for Industrial and Systems Engineering</u>. A. Subramanian, J.E. Fernandez, and D.L. Santos (eds.), pp 283-287.

Christian M, Fernandez JE, Subramanian A, Ware BF. (2016). The Impact of Government Health and Safety Initiatives on Healthcare and Ergonomics in the United States. <u>Contemporary Ergonomics and Human Factors 2016</u>, P. Waterson, E. Hubbard, and R. Sims (eds.), Chartered Institute of Ergonomics & Human Factors, pp. 146-152, 2016.

Christian M, Fernandez JE, Ware BF, Subramanian A. (2016). Single- and Dual-Monitor Set-up: Ergonomics Tips. <u>EHS Today</u>, pp. 20-22, April 2016. https://www.ehstoday.com/health/article/21917545/single-and-dualmonitor-computer-setup-ergonomic-tips

Ware BF, Fernandez JE. (2016). Reduce Workplace Injuries, Boost Productivity. Lodging Magazine, March 2016. <u>http://lodgingmagazine.com/reduce-workplace-injuries-boost-productivity/</u>

Christian M, Subramanian, A, Ware BF, Fernandez JE. (2015). Application of Holistic Process Improvement in Healthcare: A Case Study. <u>Proceedings of the 4th Annual World Conference of the Society</u> <u>for Industrial and Systems Engineering</u>. A. Subramanian, J.E. Fernandez, D.L. Santos, and B.F. Ware (eds.), pp 44-45.

Christian M, Subramanian A, Ware BF, Fernandez JE. (2015). The Preponderance of Workplace Injuries in Healthcare Settings and Implications of the Recently Concluded OSHA National Emphasis Program (CPL 03-00-016). <u>Proceedings of the 4th Annual World Conference of the Society for Industrial and Systems Engineering</u>. A. Subramanian, J.E. Fernandez, D.L. Santos, and B.F. Ware (eds.), pp. 293-298.

Ibarra-Mejía G, Fernandez JE, Choi SD, Noriega-Morales SA, Marley RJ. A Survey of Musculoskeletal Pain and Discomfort in Hispanic Construction Workers from the El Paso Del Norte Region. <u>Proceedings of the 27th Annual International Occupational Ergonomics and Safety Conference.</u> R. Wyatt, A. Subramanian, and B.F. Ware (eds.), pp 81-86, 2015.

Subramanian A, Ware BF, Fernandez JE. The Use of Ergonomic Principles within Lean to Improve Human Efficiency in Hospitals. <u>Proceedings of the 27th Annual International Occupational Ergonomics and Safety</u> <u>Conference</u>. R. Wyatt, A. Subramanian, and B.F. Ware F (eds.), pp 130-134, 2015.

Ware BF, Subramanian A, Fernandez JE. Push and Pull Forces of Carts Used by Hotel BanquetsPersonnel. <u>Proceedings of the 27th Annual International Occupational Ergonomics and Safety Conference</u>.R. Wyatt, A. Subramanian, and B.F. Ware (eds.), pp 135-140, 2015.

Subramanian A, Ware BF, Fernandez JE, Harrison ZJ, Wright CD. Lean Tools to Improve Staff Efficiency in the Healthcare Industry-A Case Study. <u>Proceedings of the 3rd Annual World Conference of the Society</u> for Industrial and Systems Engineering. A. Subramanian, S.A. Noriega-Morales, J.E. Fernandez, B.F. Ware and D.L. Santos (eds.), pp. 485-489, 2014.

Ware BF, Fernandez JE, Subramanian A, Noriega A, Lopez S. Housekeeping Cart Push-Pull Forces: A Case Study. <u>Proceedings of the 3rd Annual World Conference of the Society for Industrial and Systems</u> <u>Engineering</u>. A. Subramanian, S.A. Noriega-Morales, J.E. Fernandez, B.F. Ware and D.L. Santos (eds.), pp. 490-492, 2014.

Ware BF, Fernandez JE. Wharehouse Ergonomics: Tips and Techniques to Decrease Injury Risk. <u>EHS</u> <u>Today</u>, pp. 27-29, March 2014.

Ware BF, Subramanian A, Harrison ZJ, Fernandez JE. Injury Trends Among Maid and Housekeeping Personnel in the Leisure and Hospitality Industry. <u>Proceedings of the 2nd Annual World Conference of the</u> <u>Society for Industrial and Systems Engineering</u>. Fernandez JE, Noriega-Morales SA, Subramanian A, Santos DL, and Ware BF(eds.), pp. 496-502, 2013.

Ibarra-Mejía G, Fernandez JE, Marley RJ, Noriega-Morales SA, Ware BF, Torres-Arguelles V. Grip and Pinch Strength in Northern Mexican Adults. <u>Proceedings of the 2nd Annual World Conference of the</u>

Society for Industrial and Systems Engineering. Fernandez JE, Noriega-Morales SA, Subramanian A, Santos DL, and Ware BF(eds.), pp. 169-174, 2013.

Ibarra-Mejía G, Fernandez JE, Ware BF, Marley RJ, Vazquez-Salinas AG. Maximum Pinch Endurance Times in a Sample of Female Adults from Northern Mexico. <u>Proceedings of the 25th Annual International</u> <u>Occupational Ergonomics and Safety Conference 2013</u>. Ware BF, Ray P, Millet B, Ray P, Nimbarte A, and Ibarra-Mejía G. (eds.), pp. 152-156, 2013.

Cordova-Vallejo XM, Fernandez JE, Mendieta GR. Modeling for Anthropometric Data of Combined Populations. <u>Proceedings of the 1st Annual World Conference of the Society for Industrial and Systems</u> <u>Engineering</u>. Fernandez JE, Santos DL, Subramanian A, Schmeidler N, Ware BF, and Kumar AR. (eds.), pp. 73-78, 2012.

Ibarra-Mejía G, Fernandez JE, Marley RJ, Ware BF, Vazquez-Salinas AG, Navarro-Hernández I. Differences in Hand Grip and Key Pinch Strength Between Sitting and Standing Positions in a Sample of Healthy Mexican Young Adults. <u>Proceedings of the 1st Annual World Conference of the Society for</u> <u>Industrial and Systems Engineering</u>. Fernandez JE, Santos DL, Subramanian A, Schmeidler N, Ware BF, and Kumar AR. (eds.), pp. 134-138, 2012.

Marley RJ, Fernandez JE. Psychophysics in Occupational Ergonomics. <u>Proceedings of the 1st Annual</u> <u>World Conference of the Society for Industrial and Systems Engineering</u>. Fernandez JE, Santos DL, Subramanian A, Schmeidler N, Ware BF, and Kumar AR. (eds.), pp. 189-195, 2012.

Kumar AR, Subramanian A, Ware BF, Fernandez JE. Lean Tools and their Applications in an HPI Endeavor. <u>Proceedings of the 1st Annual World Conference of the Society for Industrial and Systems</u> <u>Engineering</u>. Fernandez JE, Santos DL, Subramanian A, Schmeidler N, Ware BF, and Kumar AR. (eds.), pp. 380-385, 2012.

Ibarra-Mejía G, Fernandez JE, Marley RJ, Soto-Díaz CC. Ankle Dorsiflexion, Medial-Lateral Stability, and Perceived Safety in Stairs of Different Slope Angles. <u>Proceedings of the 24<sup>th</sup> Annual International</u> <u>Occupational Ergonomics and Safety Conference 2012</u>. Kumar AR, Millet B, Ray P, and Ware BF. (eds.), pp. 267-272, 2012.

Ibarra-Mejía G, Fernandez JE, Ware BF, Ramírez-Quintana A. The Effect of Arm Support On Upper Extremity Muscle Load in Mexican Adults Performing an Assembly Task. <u>Proceedings of the 16<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice</u>. Kempf M, Rommel S, Fernandez JE, and Subramanian A. (eds.), pp. 236-244, 2011.

Kumar AR, Ware BF, Fernandez JE, Subramanian A, Hunter M. Risk Factors with Using Back Mounted Equipment in Groundskeeping Tasks: A Literature Review. <u>Proceedings of the 16<sup>th</sup> Annual International</u> <u>Conference on Industrial Engineering Theory, Applications and Practice</u>. Kempf M, Rommel S, Fernandez JE, and Subramanian A. (eds.), pp. 298-304, 2011.

Ware BF, Subramanian A, Kumar AR, Fernandez JE. HPI: Holistic Approach to Process Improvement. <u>Proceedings of the 16<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications</u> <u>and Practice</u>. Kempf M, Rommel S, Fernandez JE, and Subramanian A. (eds.), pp. 606-615, 2011.

Ware BF, Kumar AR, Smith T, Baker D, Fernandez JE. The Application of Ergonomics Principles in Groundskeeping Tasks. <u>Proceedings of the 23<sup>rd</sup> Annual International Occupational Ergonomics and Safety</u> <u>Conference 2011</u>. Ware BF, Kumar AR, and Fernandez JE (eds.), pp. 1-8, 2011.

Ibarra-Mejía G, Fernandez JE, Ware BF. The Ergonomics Practice in Mexico: 2011. <u>Proceedings of the 23<sup>rd</sup></u> <u>Annual International Occupational Ergonomics and Safety Conference 2011</u>. Ware BF, Kumar AR, and Fernandez JE (eds.), pp. 185-189, 2011.

Ibarra-Mejía G, Fernandez JE, Ware BF, Mital A, Marley RJ, Gomez-Bull KG, Salinas-Lopez IN. Power and Pinch Grip Assessment in a Group of Healthy Mexican Workers. <u>Proceedings of the 15<sup>th</sup> Annual</u> <u>International Conference on Industrial Engineering Theory, Applications and Practice</u>. Fernandez JE, Mital A, Guerra A, Noriega S, Subramanian A, and Sanchez, J. (eds.), pp. 506-511, 2010.

Ibarra-Mejía G, Fernandez JE, Ware BF, Mital A, Gomez-Bull KG, Salinas-Lopez IN, Morales-Zamora RL. Sitting and Standing Dynamic Anthropometric Measures in a Sample of Mexican Manual Assembly Workers. <u>Proceedings of the 15<sup>th</sup> Annual International Conference on Industrial Engineering Theory,</u> <u>Applications and Practice</u>. Fernandez JE, Mital A, Guerra A, Noriega S, Subramanian A, and Sanchez, J. (eds.), pp. 512-518, 2010.

Ibarra-Mejía G, Fernandez JE, Ware BF, Mital A, Marley RJ, Reyes S. Range of Motion of the Upper Extremity and Spine Joints in Mexican Adults: A Pilot Study. <u>Proceedings of the 15<sup>th</sup> Annual International</u> <u>Conference on Industrial Engineering Theory, Applications and Practice</u>. Fernandez JE, Mital A, Guerra A, Noriega S, Subramanian A, and Sanchez, J. (eds.), pp. 519-523, 2010.

Fernandez JE, Kumar AR, Ware BF, Ibarra-Mejía G. Remote Ergonomic Evaluation: Quality Assurance Process. <u>Proceedings of the 22<sup>nd</sup> Annual International Occupational Ergonomics and Safety Conference</u>. Marley RJ, Kumar AR, Ware BF, and Graver P. (eds.), pp. 123-128, 2010.

Ibarra-Mejía G, Fernandez JE, Ware BF, Mital A, Gomez-Bull KG, Lozano-Regalado RJ. Comparison of Protocols for Estimating Maximal Oxygen Uptake of a Sample of Mexican Subjects. <u>Proceedings of the 22<sup>nd</sup> Annual International Occupational Ergonomics and Safety Conference</u>. Marley RJ, Kumar AR, Ware BF, and Graver P. (eds.), pp. 112-116, 2010.

Ibarra-Mejía G, Fernandez JE, Ware BF, Gomez-Bull KG. Dynamic Anthropometric Measures in a Sample Of Mexican Subjects. <u>Proceedings of the 22<sup>nd</sup> Annual International Occupational Ergonomics and Safety</u> <u>Conference</u>. Marley RJ, Kumar AR, Ware BF, and Graver P. (eds.), pp. 106-111, 2010.

Fernandez JE, Ibarra-Mejía G, Ware BF. Remote Ergonomics Evaluations in the Office. <u>Proceedings of the XIIth International Congress, Ergonomic Society of Mexico (SEMAC)</u>, pp. 151-155, 2010.

Fernandez JE, Ware BF, Kumar AR, Subramanian A. Office Ergonomics Assessment through a Virtual Ergonomist. <u>Proceedings of the 14<sup>th</sup> Annual International Conference on Industrial Engineering Theory,</u> <u>Applications and Practice</u>. Subramanian A, Mital, A, Kumar AR, Ware BF, LaFiandra M, Kattel B, and Fernandez JE. (eds.), pp. 631-636, 2009.

Ibarra-Mejía G, Muñoz GE, Najera ME, Lopez-Jimenez S, Fernandez JE, Marley RJ, Noriega SA. Power and Pinch Grip Assessment in a Group of Healthy Mexican Young Adults. <u>Proceedings of the 21<sup>st</sup> Annual International Occupational Ergonomics and Safety Conference</u>. Marley RJ, Kumar AR, Ware, BF, and Lockhart TE. (eds.), pp. 129-135, 2009.

Ware BF, Fernandez JE. Heart Rate and Rating of Perceived Exertion During a Riveting Task. <u>Proceedings of the 21st Annual International Occupational Ergonomics and Safety Conference</u>. Marley RJ, Kumar AR, Ware, BF, and Lockhart TE. (eds.), pp. 53-56, 2009. Fernandez JE, Marley, RJ. Occupational Ergonomics: Emphasis on Identification or Solutions. <u>Proceedings</u> of the XIth International Congress, Ergonomic Society of Mexico (SEMAC), pp. 69-78, 2009.

Kumar AR, Ware BF, Subramanian A, McClellan S, Noriega E, Fernandez JE. Applications and Ergonomic Guidelines for Dual Monitors. <u>Proceedings of the 13<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice</u>. Fernandez JE, Schamburg J, Kumar AR, Subramanian A, and Evangelista P. (eds.), pp. 351-355, 2008.

Ibarra-Mejía G, Noriega-Morales S, Ware BF, Kumar AR, Subramanian A, Fernandez JE. Ergonomics in Mexico: Standards and their Application. <u>Proceedings of the 13<sup>th</sup> Annual International Conference on</u> <u>Industrial Engineering Theory, Applications and Practice</u>. Fernandez JE, Schamburg J, Kumar AR, Subramanian A, and Evangelista P. (eds.), pp. 465-468, 2008.

Zhao W, Madhavan V, Fernandez JE. Study of the Accuracy of Postures Obtained by Immersive Virtual Reality for Use in Ergonomic Analysis. <u>Proceedings of the 13<sup>th</sup> Annual International Conference on</u> <u>Industrial Engineering Theory, Applications and Practice</u>. Fernandez JE, Schamburg J, Kumar AR, Subramanian A, and Evangelista P. (eds.), pp. 789-799, 2008.

Fernandez JE, Halpern M, Subramanian, A, Kumar AR, Ware BF. Statistical Methods in Time Studies: Industrial Engineering and Health Care. <u>Proceedings of the 13<sup>th</sup> Annual International Conference on</u> <u>Industrial Engineering Theory, Applications and Practice</u>. Fernandez JE, Schamburg J, Kumar AR, Subramanian A, and Evangelista P. (eds.), pp. 618-624, 2008.

Smith TR, Ware BF, Kumar AR, Pittman D, Fernandez JE. Surveys for Armor Usability Testing in Law Enforcement Environments. <u>Proceedings of the 20<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference.</u> Leamon TB, Kumar AR, and Fernandez JE. (eds.), pp. 227-233, 2008.

LaFiandra M, Ware BF, Fernandez JE. A Framework for Soldier Equipment Testing in Military Field Environment. <u>Proceedings of the 20<sup>th</sup> Annual International Occupational Ergonomics and Safety</u> <u>Conference.</u> Leamon TB, Kumar AR, and Fernandez JE. (eds.), pp. 122-126, 2008.

Ware BF, Noriega S, Kumar AR, Sousk JD, Fernandez JE. Ergonomics in Mexico: Issues and Opportunities. <u>Proceedings of the 20<sup>th</sup> Annual International Occupational Ergonomics and Safety</u> <u>Conference.</u> Leamon TB, Kumar AR, and Fernandez JE. (eds.), pp. 223-226, 2008.

Kumar AR, Subramanian A, Farris-Ware B, Alchuru S, Fernandez JE. Establishing a Framework for an Electronic Office Ergonomics Data Management System. <u>Proceedings of the 12<sup>th</sup> Annual International</u> <u>Conference on Industrial Engineering Theory, Applications and Practice</u>. Fernandez JE, Noriega SA, Mital A, Butt SE, and Fredericks TK. (eds.), pp 538-543, 2007.

Mital A, Desai A, Subramanian A, Fernandez JE. Reintroducing "Engineering" In Industrial Engineering. <u>Proceedings of the 11<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications</u> <u>and Practice</u>. Hagiwara M, Ikeda YT, Fernandez JE, and Mital A. (eds.), pp. 459-467, 2006.

Subramanian A, Fernandez JE. Elemental Analysis Techniques: A Comparative Study. <u>Proceedings of the</u> <u>10<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice</u>. Fredericks TK, Butt SE, Fernandez JE, and Mital A. (eds.), pp. 525 - 533, 2005.

Fernandez JE, Ware BF. Selecting Healthy Hand Tools. Occupational Hazards. July 2005.

Ware BF, Amin S, Fernandez JE. Multi-Worker Standing Workstation Accommodations: A Practical Guide. <u>Proceedings of the 19<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference</u>, Lockhart T and Fernandez JE. (eds.), pp 315-319, 2005.

LaFiandra M, Fernandez JE, Harper W, Brunelle S, Stewardson C. Fit, Form and Comfort of a Prototype Integrated Load Carriage and Ballistic Armor System. <u>Proceedings of the 19<sup>th</sup> Annual International</u> <u>Occupational Ergonomics and Safety Conference</u>, Lockhart T and Fernandez JE. (eds.), pp 339-343, 2005.

LaFiandra M, Fernandez JE, Harper W, Brunelle S, Stewardson C. Accuracy Effects of a Prototype Integrated Load Carriage and Ballistic Armor System. <u>Proceedings of the 19<sup>th</sup> Annual International</u> <u>Occupational Ergonomics and Safety Conference</u>, Lockhart T and Fernandez JE. (eds.), pp 344-350, 2005.

Polzin J, McDonough B, Tomann A, Fernandez J, Tolliver D. The Effects of the Soldier Uniform and Equipment on Mobility. <u>Proceedings of the 8<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice</u>. Fredericks TK, Butt SE, Pennathur A, Fernandez JE, and Mital A. (eds.), pp. 258-263, 2003.

Fredericks TK, Fernandez JE, Choi SD, Kumar A, The Effect of Lifting Dominance and Height on Maximum Acceptable Weight of Lift for Asymmetrical Lifting and Lowering Tasks. <u>Advances in</u> <u>Occupational Ergonomics and Safety 6</u>, Strassser H and Bubb H. (eds.), pp. 239-243, 2003.

Fernandez JE, Fredericks TK, Choi SD, Kumar A, Marley RJ. The Effect of Time Study Methods on Accuracy. <u>Advances in Industrial Engineering, Theory, Applications and Practice 7</u>, Cho KK, Hwang HS and Moon IK. (eds.), pp. 226-229, 2002.

Rogers ME, Fernandez JE, Bohlken RM. Differences in balance among young, middle-aged, and older adults. <u>Advances in Occupational Ergonomics and Safety 5</u>, Potvin J. (ed.), 2002.

Kattel BP, Fernandez JE, Bardhan T. Rating of Perceived Exertion (RPE) as an Aid in the Evaluation of Vibrating Hand Tools. <u>Advances in Occupational Ergonomics and Safety 5</u>, Potvin J. (ed.), 2002.

Eksioglu M, Fernandez JE. A Model for Impairment Evaluation of the Wrist due to the Loss of Wrist Range of Motion. <u>Advances in Industrial Engineering, Theory, Applications and Practice 6</u>. Fernandez JE, Marley RJ, Pennathur A, Mital A, Fredericks TK, and Fuentes AA. (eds.), 2001.

Rogers ME, Fernandez JE, Bohlken RM. Postural sway in older adults: Effects of reduced visual sensation. <u>Occupational Ergonomics and Safety 4</u>, Bittner AC, Champney P, and Morrissey SJ. (eds.), pp. 331–336, 2001.

Rogers ME, Fernandez JE, Bohlken RM. Postural sway in middle-age adults. <u>Occupational Ergonomics</u> and Safety 4, Bittner AC, Champney P, and Morrissey SJ. (eds.), pp. 337–343, 2001.

Kattel BP, Fernandez JE. Handtool evaluation: A software approach. <u>Occupational Ergonomics and Safety 4</u>, Bittner AC, Champney P, and Morrissey SJ. (eds.), pp. 193–200, 2001.

Fernandez JE, Marley RJ, Farris BA. A conceptual model for MSD risk assessment. <u>Advances in</u> <u>Industrial Engineering Theory, Applications and Practice V</u>, Chern M, Sheu D, and Wang M. (eds.), 2000.

Chaparro A, Bohan M, Scarlett D, Fernandez JE, Choi S. The effect of age on computer input device use: performance and ratings of perceived exertion. SAE Technical Paper Series #1999-01-1604, 1999.

D'Souza V, Bernbeck M, Fernandez JE, Rogers ME. Postural sway in individuals aged 20–39 Years. <u>Advances in Industrial Engineering Theory</u>, <u>Applications and Practice IV</u>. Chen JG and Mital A. (eds.), 1999.

Fernandez JE, Marley RJ, Fredericks TK, Klien MG. Psychophysically acceptable limits expressed as a percentage of sampling intervals. <u>Occupational Ergonomics and Safety 3</u>, Lee G. (ed.), pp. 101–104, 1999.

Bohan M, Choi S, Chaparro A, Fernandez JE, Rogers MA. Normative data on select joint range of motion and grip strength of elderly males and females. <u>Occupational Ergonomics and Safety 3</u>, Lee G. (ed.), pp. 379–383, 1999.

Farris BA, Fernandez JE. The effects of damping during a riveting task. <u>Advances in Industrial</u> <u>Engineering Theories</u>, <u>Applications and Practice III</u>, Tseng M. (ed.), 1998.

Fredericks TK, Fernandez JE. The effect of wrist posture on attenuation of vibration in hand-arm system. <u>Contemporary Ergonomics 1998</u>, Hanson MA. (ed.), Taylor and Francis, pp. 492–496, 1998.

Kattel BP, Fernandez JE. Criteria for selection of hand tools in the aircraft manufacturing industry: A review. <u>Contemporary Ergonomics 1998</u>, Hanson MA. (ed.), Taylor and Francis, pp. 498–502, 1998.

Poonawala M, Fernandez JE. Effect of arm support to aid light assembly work. <u>Advances in Occupational</u> <u>Ergonomics and Safety 1998</u>, Kumar S. (ed.), pp. 479–482, 1998.

Bohan M, Chaparro A, Fernandez JE, Kattel BP, Choi S. Cursor-control performance of older adults using two computer input devices. <u>Advances in Occupational Ergonomics and Safety 1998</u>, Kumar S. (ed.), pp. 541–544, 1998.

Farris BA, Landwehr H, Fernandez JE, Agarwal R. Evaluation of the placement of mouse pads. Advances in Occupational Ergonomics and Safety 1998, Kumar S. (ed.), pp. 487–490, 1998.

Garcia DT, Wong S, Fernandez JE, Agarwal R. Effect of arm support on muscle activity. <u>Advances in</u> <u>Occupational Ergonomics and Safety 1998</u>, Kumar S. (ed.), pp. 483–486, 1998.

Kattel BP, Fernandez JE, Weddle R. The effect of types and size of rivet gun on hand–arm vibration. Advances in Occupational Ergonomics and Safety 1998, Kumar S. (ed.), pp. 503–506, 1998.

Mital A, Ayoub MM, Casali JG, Kleiner BM, Fernandez JE, Resnick ML. Ergonomics issues beyond the year 2000. <u>Proceedings Industrial Engineering Research Conference</u>, 1998.

Devlin KM, Fernandez JE, Agarwal R. The effect of grip span on the force exerted by individual fingers. Advances in Occupational Ergonomics and Safety 1997, pp. 305–308, 1997.

Farris BA, Fernandez JE, Agarwal R. The effect of wrist posture on the force exerted by individual fingers. Advances in Occupational Ergonomics and Safety 1997, pp. 301–304, 1997.

Garcia DT, Fernandez JE, Agarwal R. Implementation of arm supports as an aid to office computer tasks. Advances in Occupational Ergonomics and Safety 1997, pp. 429–432, 1997.

Rajan VN, Fernandez JE, Kadir S. Virtual reality based system for accessibility and ergonomic analyses of floor assembly jigs. <u>Advances in Occupational Ergonomics and Safety 1997</u>, pp. 147–150, 1997.

Fernandez JE, Kattel BP, Gokhale CM. Evaluation of the headwand used by persons with disability. <u>Proceedings 13th Triennial Congress of the International Ergonomics Association</u>, Volume 4, pp. 551–553, 1997.

Malzahn DE, Fernandez JE, Kattel BP, McMulkin ML. Can ergonomic principles be applied to disability accommodation? <u>Proceedings 13th Triennial Congress of the International Ergonomics Association</u>, Volume 4, pp. 566–568, 1997.

Devlin KM, Fernandez JE, Agarwal R, Pendleton MK. The effect of grip span and wrist posture on the force exerted by the middle and index fingers exclusively. <u>Advances in Industrial Engineering</u> <u>Applications and Practice II</u>, Chen JG and Mital A. (eds.), pp. 393–398, 1997.

Farris BA, Fernandez JE, Agarwal R, Sutherland JA. Evaluation of mouse pad placement during typical computer tasks. <u>Advances in Industrial Engineering Applications and Practice II</u>, Chen JG and Mital A. (eds.), pp. 349–354, 1997.

McMulkin ML, Fernandez JE. A review of multi-person lifting capabilities. <u>Advances in Industrial</u> <u>Engineering Applications and Practice II</u>, Chen JG and Mital A. (eds.), pp. 311–316, 1997.

Eksioglu M, Fernandez JE. Artificial neural network-based prediction models for determining maximum acceptable frequency of a drilling task. <u>Advances in Applied Ergonomics</u>, Ozok AF, Salvendy G. (eds.), pp. 646–649, 1996.

Fredericks TK, Fernandez JE. The effect of vibration on maximum acceptable frequency for a riveting task. <u>Advances in Occupational Ergonomics and Safety I</u>, pp. 680–685, Mital A, Krueger H, Kumar S, Menozzi M, and Fernandez JE. (eds.), pp. 680–685, 1996.

Fitzgerald SJ, Kult KM, Skubic CR, Fernandez JE, Poonawala MP. The optimum time to evaluate the comfort rating of seats. <u>Advances in Occupational Ergonomics and Safety I</u>, Mital A, Krueger H, Kumar S, Menozzi M, and Fernandez JE. (eds.), pp. 820–825, 1996.

Kattel BP, Sivasubramanian K, Fernandez JE, McMulkin ML. Evaluation of the force exerted by individual fingers during multidigital gripping task. <u>Advances in Industrial Engineering Applications and Practice I</u>, Chen JG and Mital A. (eds.), pp. 267–272, 1996.

Muppasani AK, Fernandez JE. The effect of adjustment period on maximum acceptable frequency for a drilling task. <u>Advances in Industrial Engineering Applications and Practice I</u>, Chen JG and Mital A. (eds.), pp. 1133–1138, 1996.

Kattel BP, Twomey J, Fernandez JE. Prediction of maximum grip strength from anthropometric and physical characteristics of an individual: an artificial network approach. <u>Advances in Industrial</u> <u>Engineering Applications and Practice I</u>, Chen JG and Mital A. (eds.), pp. 900–905, 1996.

Fernandez JE, Malzahn DE. Humanizing production: an ergonomics approach. <u>Careers and the Engineer</u>, p. 74, 1995.

Fredericks TK, Fernandez JE. The effect of vibration on maximum acceptable frequency for a riveting task: preliminary results. <u>Proceedings Konz/Purswell Occupational Ergonomics Symposium</u>, pp. 27–33, 1995.

Eksioglu M, Fernandez JE, Twomey JM. An artificial neural network (ANN) prediction model for determining peak pinch strength. <u>Advances in Industrial Ergonomics and Safety VII</u>, Bittner A and Champney P. (eds.), Taylor and Francis, pp. 577–584, 1995.

Ford RD, Pope GR, Fernandez JE. The role of an ergonomist in concurrent engineering: an analysis of case studies. <u>Advances in Industrial Ergonomics and Safety VII</u>, Bittner A and Champney P. (eds.), Taylor and Francis, pp. 331–337, 1995.

Fredericks TK, Kattel BP, Fernandez JE. Is grip strength maximum in the neutral posture? <u>Advances in</u> <u>Industrial Ergonomics and Safety VII</u>, Bittner A and Champney P. (eds.), Taylor and Francis, pp. 561–568, 1995.

Fernandez JE, Fredericks TK, Marley RJ. The psychophysical approach in upper extremities work. <u>Contemporary Ergonomics 1995</u>, Robertson SA (ed.), Taylor and Francis, pp. 456–461, 1995.

Fernandez JE. Understanding ergonomics. <u>Proceedings IFMA Fifteenth Annual Conference and Exposition on Facility Management</u>, pp. 459–472, 1994.

Cordova X, Fernandez JE. Conceptual errors in anthropometric percentile values for mixed populations. <u>Advances in Industrial Ergonomics and Safety VI</u>, Aghazadeh F. (ed.), Taylor and Francis, pp. 697–704, 1994.

Kim CH, Fernandez JE. Prediction of drilling frequency at varying working conditions. <u>Proceedings 12th</u> <u>Triennial Congress of the International Ergonomics Association</u>, Volume 2, pp. 41-43, 1994.

Young KR, Fernandez JE. Rehabilitation using the proactive approach for CTD of the upper extremities analysis of case studies. <u>Proceedings 12th Triennial Congress of the International Ergonomics Association</u>, Volume 3, pp. 94–96, 1994.

Kim CH, Marley RJ, Fernandez JE, Klein MG. Acceptable work limits for the upper extremities with the psychophysical approach. <u>Proceedings 3rd Pan-Pacific Conference on Occupational Ergonomics</u>, pp. 312–316, 1994.

Palanisami P, Narasimhan TM, Fernandez JE. The effect of sitting on peak pinch strength. <u>Advances in</u> <u>Industrial Ergonomics and Safety VI</u>, Aghazadeh F. (ed.). Taylor and Francis, pp. 587–594, 1994.

Halpern CA, Fernandez JE. The effect of wrist posture and pinch type on endurance time. <u>The</u> <u>Ergonomics of Manual Work</u>, Marras W, Karwowski W, Smith J, and Pacholski L. (eds.), Taylor and Francis, pp. 323–326, 1993.

Fernandez JE, Pitetti KH, Dahalan J, Kim CH, Marley RJ. Physical work capacity of South Indians using the Schwinn Air-Dyne ergometer. <u>Occupational and Environmental Ergonomics</u>, Sen PN, Das S, and Chattopadhyay H. (eds.), pp. 23–27, 1993.

Fernandez JE, Klein MG, Goodwin DC. Range of motion of the wrist for elementary school children: a comparative study. <u>Advances in Industrial Ergonomics and Safety V</u>, Nielsen R, and Jorgensen K. (eds.), Taylor and Francis, pp. 63-69, 1993.

Fernandez JE, Dahalan JB, Klein MG, Marley RJ. Using the psychophysical approach in hand-wrist work. <u>Proceedings of Ayoub MM Occupational Ergonomics Symposium</u>, pp. 63–70, 1993. Vaidyanathan V, Fernandez JE. Maximum acceptable frequency for males performing drilling tasks. <u>Proceedings Human Factors Society 36th Annual Meeting</u>, pp. 692–696, 1992.

Fernandez JE, Dahalan JB, Klein MG, Young KR, Sporn ER. A program to reduce the risk of carpal tunnel syndrome. <u>Proceedings Kansas Conference on Excellence in Manufacturing</u>, 1992.

Fernandez JE, Malzahn DE, Fredericks TK, Lim CC, Davis PJ. Manual material handling: a review of lifting capacity evaluation. <u>Proceedings Kansas Conference on Excellence in Manufacturing</u>, 1992.

Fernandez JE, Malzahn DE, Lambert BK, Wei LS. Physiological and subjective responses to robots in a noisy environment. <u>Proceedings Second International FAIM 92 Conference</u>, Eyada OK and Ahmad MM. (eds.), pp. 213–223, 1992.

Fredericks TK, Fernandez JE, Rodrigues CC. Predicting the maximum acceptable weight of lift for an asymmetrical combination task. <u>Proceedings Human Factors Society 36th Annual Meeting</u>, pp. 707–711, 1992.

Fernandez JE, Dahalan JB, Fredericks TK, Halpern CA. The effect of deviated wrist posture on pinch strength for females. <u>Advances in Industrial Ergonomics and Safety IV</u>, Kumar S. (ed.), Taylor and Francis, pp. 693–700, 1992.

Kim CH, Marley RJ, Fernandez JE. Prediction models of grip strength at varying wrist positions. <u>Advances in Industrial Ergonomics and Safety IV</u>, Kumar S. (ed.), Taylor and Francis, pp. 783–788, 1992.

Moore B, Dorrel S, Halpern CA, Fernandez JE. The ergonomic evaluation of several chairs: a case study. <u>Advances in Industrial Ergonomics and Safety IV</u>, Kumar S. (ed.), Taylor and Francis, pp. 267–274, 1992.

Rodrigues CC, Fredericks TK, Fernandez JE. Prediction models for asymmetrical lifting combination tasks. <u>Advances in Industrial Ergonomics and Safety IV</u>, Kumar S. (ed.), Taylor and Francis, pp. 875–882, 1992.

Kim CH, Fernandez JE, Halpern CA, Dorrel S. The impact of carpal tunnel syndrome on industry: a literature review. <u>Proceedings Kansas Conference on Excellence in Manufacturing</u>, 1992.

Malzahn DE, Fernandez JE. Universal design and aircraft based transportation systems. <u>Proceedings 1991</u> <u>Aircraft Interiors Conference, 1991</u>.

Marley RJ, Fernandez JE. A psychophysical approach to establish maximum acceptable frequency for hand/wrist work. <u>Advances in Industrial Ergonomics and Safety III</u>, Karwowski W and Yates J. (eds.), Taylor and Francis, pp. 75-82, 1991.

Fernandez JE, Dahalan J, Klein M, Kim CH. Effect of handle diameter on maximum wrist flexion and extension. <u>Advances in Industrial Ergonomics and Safety III</u>, Karwowski W and Yates J. (eds.), Taylor and Francis, pp. 351–357, 1991.

Fernandez JE, Lambert BK, Malzahn DE, Wei LS. Human responses to robots at various speeds with noise. <u>Proceedings 11th Congress of the International Ergonomics Association</u>, pp. 783–785, 1991.

Fernandez JE, Dahalan JB, Halpern CA, Viswanath V. The effect of wrist posture on pinch strength. <u>Proceedings Human Factors Society 35th Annual Meeting</u>, pp. 748–752, 1991. Kim CH, Fernandez JE, Fredericks TK, Lim CC, Ghahramani B. The effect of a clean suit on physical work capacity. <u>Proceedings Human Factors Society 35th Annual Meeting</u>, pp. 743–747, 1991.

Fernandez JE, Marley RJ. Monitoring and screening tests for carpal tunnel syndrome. <u>Contemporary</u> <u>Ergonomics 1990</u>, Lovesey EJ. (ed.), Taylor and Francis, pp. 63–68, 1990.

Masud AS, Fernandez JE. Effects of nurses' schedules on fatigue and quality. <u>Proceedings 1990</u> <u>International Industrial Engineering Conference</u>, pp. 521–526, 1990.

Chambers RM, Fernandez JE, Nandigm S, Palaniswamy V. Human factors: the human interface with aircraft interiors. <u>Proceedings 1990 Aircraft Interiors Conference</u>, 1990.

Fernandez JE, Klein MG, Learned V, Marley RJ. Isokinetic strength of females with carpal tunnel syndrome. <u>Proceedings Human Factors Society 34th Annual Meeting</u>, pp. 795–799, 1990.

Fernandez JE, Marley RJ, Young KR. Results of an ongoing monitoring program for carpal tunnel syndrome. <u>Advances in Industrial Ergonomics and Safety II</u>, Das B. (ed.), Taylor and Francis, pp. 265–272, 1990.

Liu MC, Fernandez JE, Eyada OK. A methodology to develop strategic plans for CIM implementation. <u>Management of Technology II</u>, Khalil T and Bayraktar B. (eds.), pp. 719–726, 1990.

Pitetti KH, Fernandez JE, Betzen MT, Lanciault M. Peak cardiopulmonary responses of ambulatory cerebral palsied adults to four types of exercise. <u>Proceedings RESNA 1990 Annual Conference</u>, pp. 55–56, 1990.

Chambers RM, Fernandez JE, Marley RJ. Noise exposure of plumbers in new home construction: a case study. <u>Advances in Industrial Ergonomics and Safety I</u>, Mital A. (ed.), Taylor and Francis, pp. 559–566, 1989.

Fernandez JE, Malzahn DE, Marley RJ, Bonebrake AR. A study of several performance measures of workers with carpal tunnel syndrome. <u>Proceedings Human Factors Society 33rd Annual Meeting</u>, pp. 728–732, 1989.

Fernandez JE, Pitetti KH, Rowe K, Lanciault MC. Lung capacities of cerebral palsied individuals. <u>Eleventh Annual International Conference of the IEEE Engineering in Medicine and Biology Society</u>, pp. 1697–1698, 1989.

Malzahn DE, Fernandez JE, Marley RJ. Performance of severely disabled adults on simulated assembly tasks. <u>Advances in Industrial Ergonomics and Safety I</u>, Mital A. (ed.), Taylor and Francis, pp. 871–876, 1989.

Zafar HU, Fernandez JE, Kasten RN, Cihangirli M, Cholmondeley JB. Temporary threshold shift during exercising. <u>Advances in Industrial Ergonomics and Safety I</u>, Mital A. (ed.), Taylor and Francis, pp. 551–557, 1989.

Fernandez JE, Ayoub MM. The psychophysical approach: the valid measure of lifting capacity. <u>Trends in</u> <u>Ergonomics/Human Factors V</u>, Aghazadeh F. (ed.), Elsevier Science Publishers, pp. 837–845, 1988.

Malzahn DE, Fernandez JE. The analytic hierarchy process—application to rehabilitation decision making. <u>Proceedings 21st Meeting of Human Factors Society of Canada</u>, pp. 21–24, 1988. Malzahn DE, Fernandez JE. Vocational rehabilitation decision analysis using the analytic hierarchy process. <u>Proceedings RESNA 11th Annual Conference</u>, pp. 8–9, 1988.

Eyada OK, Fernandez JE, Marley RJ, DeGreve TB. Human-machine modeling with AutoCAD. <u>Trends in</u> <u>Ergonomics/Human Factors V</u>, Aghazadeh F (ed.), Elsevier Science Publishers, pp. 71–75, 1988.

Fernandez JE, Pitetti KH, Stubbs NB, Marley RJ, Cihangirli M. A comparison of equations and methods for determining percentage body fat. <u>Proceedings Human Factors Society 32nd Annual Meeting</u>, pp. 558–562, 1988.

Fernandez JE, Akin AD, Collins CL, Virgilio JF. Physiological responses while playing a video game. <u>Trends in Ergonomics/Human Factors V</u>, Aghazadeh F. (ed.), Elsevier Science Publishers, pp. 949–956, 1988.

Fernandez JE, Cihangirli M, Hommertzheim DL, Sabuncuoglu I. The effects of input devices on task performance. <u>Trends in Ergonomics/Human Factors V</u>, Aghazadeh F. (ed.), Elsevier Science Publishers, pp. 83–89, 1988.

Malzahn DE, Fernandez JE, Marley RJ, Dahalan J. A multivariate analysis of directional movement time. <u>Trends in Ergonomics/Human Factors V</u>, Aghazadeh F. (ed.), Elsevier Science Publishers, pp. 759–765, 1988.

Malzahn DE, Fernandez JE, Kim CH. An ethnic anthropometric survey as an educational tool. <u>Trends in</u> <u>Ergonomics/Human Factors V</u>, Aghazadeh F. (ed.), Elsevier Science Publishers, pp. 395–400, 1988.

Pitetti KH, Fernandez JE, Stubbs NB, Stafford JA. Evaluating the cardiovascular fitness of Downs Syndrome individuals. <u>Trends in Ergonomics/Human Factors V</u>, Aghazadeh F. (ed.), Elsevier Science Publishers, pp. 941–947, 1988.

Pitetti KH, Fernandez JE, Pizarro DC, Stubbs NB, Stafford JA. The cardiovascular fitness of non-Downs Syndrome, moderately mentally retarded individuals as an additional indice for job placement. <u>Trends in Ergonomics/Human Factors V</u>, Aghazadeh F. (ed.), Elsevier Science Publishers, pp. 999–1005, 1988.

Pitetti KH, Jackson JA, Mays MJ, Fernandez JE, Stubbs NB. Comparison of the physiological profile of Down's and non-Down's Syndrome mentally retarded individuals. <u>Proceedings 21st Meeting Human</u> Factors Society of Canada, pp. 45–48, 1988.

Malzahn DE, Fernandez JE. Effects of orientation to the body and input device on task performance. <u>Proceedings RESNA 10th Annual Conference</u>, pp. 32–34, 1987.

Fernandez JE, Marley RJ, Stubbs NB. Lifting physical work capacity as a function of frequency. <u>Proceedings Human Factors Society 31st Annual Meeting</u>, pp. 1331–1335, 1987.

Fernandez JE, Ayoub MM. Maximum acceptable weight lifted over extended periods. <u>Trends in</u> <u>Ergonomics/Human Factors IV</u>, Asfour SS. (ed.), Elsevier Science Publishers, pp. 917–923, 1987.

Cihangirli M, Malzahn DE, Fernandez JE. Effects of gender, hand superiority and position on rotary performance rates of able-bodied individuals. <u>Trends in Ergonomics/Human Factors IV</u>, Asfour SS. (ed.), Elsevier Science Publishers, pp. 219–226, 1987.

Glover K., Malzahn DE, Fernandez JE. Switch manipulation time as a function of gender, hand superiority and position: Design considerations for rehabilitation engineers. <u>Trends in Ergonomics/Human Factors IV</u>, Asfour SS. (ed), Elsevier Science Publishers, pp. 1087–1094, 1987.

Marley RJ, Malzahn DE, Fernandez JE. Potential factors in movement time: implication for function evaluation of individuals with disabilities. <u>Trends in Ergonomics/Human Factors IV</u>, Asfour SS.(ed.), Elsevier Science Publishers, pp. 1103–1110, 1987.

## Books

Fernandez JE and Marley RJ. <u>Applied Occupational Ergonomics: A Textbook</u>, Fourth Edition. Society for Industrial and Systems Engineering Press, 2013.

Fernandez JE and Marley RJ. <u>Applied Occupational Ergonomics: A Textbook</u>, Third Edition. International Journal of Industrial Engineering Press, 2011.

Fernandez JE, Marley RJ, Noriega SM, and Ibarra, GM. <u>Ergonomía Ocupacional: Diseño y</u> <u>Administración del Trabajo</u>, International Journal of Industrial Engineering Press, 2008.

Fernandez JE and Marley RJ. <u>Applied Occupational Ergonomics: A Textbook</u>, Second Edition. International Journal of Industrial Engineering Press, 2007.

Fernandez JE and Marley RJ. <u>Applied Occupational Ergonomics: A Textbook</u>. Kendall-Hunt Publishing, 1998.

### **Books and CD Proceedings Edited**

Subramanian A, Fernandez JE, Santos DL, Evangelista, PF, and Kempf, M. Proceedings of the 9th Annual World Conference of the Society for Industrial and Systems Engineering, 2020.

Subramanian A, Fernandez JE, Santos DL, and Evangelista, PF. Proceedings of the 8th Annual World Conference of the Society for Industrial and Systems Engineering, 2019.

Córdova X, García G, Camacho, Suárez C, Sonia Avilés C, Fernandez JE, and Subramanian A. Proceedings of the 2019 International Conference on Industrial Engineering, 2019.

Subramanian A, Santos DL, and Fernandez JE. Proceedings of the 7th Annual World Conference of the Society for Industrial and Systems Engineering, 2018.

Subramanian A, Fernandez JE, and Santos DL. Proceedings of the 6th Annual World Conference of the Society for Industrial and Systems Engineering, 2017.

Subramanian A, Fernandez JE, and Santos DL. Proceedings of the 5th Annual World Conference of the Society for Industrial and Systems Engineering, 2016.

Subramanian A, Fernandez JE, Santos DL, and Ware BF. Proceedings of the 4th Annual World Conference of the Society for Industrial and Systems Engineering, 2015.

Subramanian A, Noriega-Morales SA, Fernandez JE, Ware BF, and Santos DL. Proceedings of the 3rd Annual World Conference of the Society for Industrial and Systems Engineering, 2014.

Subramanian A, Ware BF, Ibarra G, Wyatt R, and Fernandez JE. Proceedings of the 26<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference, 2014.

Fernandez JE, Noriega-Morales SA, Subramanian A, Santos DL, and Ware BF. Proceedings of the 2nd Annual World Conference of the Society for Industrial and Systems Engineering, 2013.

Fernandez JE, Subramanian A, Santos D, Schmeidler N, Ware BF, and Kumar AR. Proceedings of the 1st Annual World Conference of the Society for Industrial and Systems Engineering, 2012.

Kempf M, Rommel S, Fernandez JE, and Subramanian A. Proceedings of the 16<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2011.

Ware BF, Kumar AR, and Fernandez JE. Proceedings of the 23<sup>rd</sup> Annual International Occupational Ergonomics and Safety Conference, 2011.

Fernandez JE, Mital A, Guerra A, Noriega S, Subramanian A, and Sanchez, J. Proceedings of the 15<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2010.

Subramanian A, Mital A, Kumar AR, Ware BF, LaFiandra M, Kattel B, and Fernandez JE. Proceedings of the 14<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2009.

Fernandez JE, Schamburg J, Kumar AR, Subramanian A, and Evangelista P. Proceedings of the 13<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2008.

Leamon TB, Kumar AR, and Fernandez JE. Proceedings of the 20<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference, 2008.

Fernandez JE, Noriega S, Mital A, Butt SE, and Fredericks TK. Proceedings of the 12<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2007.

Hagiwara M, Ikeda YT, Fernandez JE, and Mital A. Proceedings of the 11<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2006.

Fredericks TK, Butt SE, Fernandez JE, and Mital A. Proceedings of the 10<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2005.

Lockhart T and Fernandez JE. Proceedings of the 19<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference, 2005.

Butt SE, Fredericks TK, Mason AJ, Fernandez JE, and Mital A. Proceedings of the 9<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2004.

Fredericks TK, Butt SE, Pennathur A, Fernandez JE, and Mital A. Proceedings of the 8<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2003.

Fernandez JE, Marley RJ, Pennathur A, Mital A, Fredericks TK, and Fuentes AA. Advances in Industrial Engineering Theory, Applications and Practice 6, 2001.

Mital A, Krueger H, Kumar S, Menozzi M, and Fernandez JE. Advances in Occupational Ergonomics and Safety I, 1996.

## **Published Abstracts**

Subramanian A, and Fernandez JE. (2019). A Multi-Platform Application Based Tool to Facilitate Ergonomic Assessments and Problem Identification. Proceedings of the 8th Annual World Conference of the Society for Industrial and Systems Engineering. A. Subramanian, J.E. Fernandez, D.L. Santos, and P.F. Evangelista (eds.).

Kapellusch JM, Allread GW, Potvin J, Fernandez JE. (2016). Panel Discussion in Honor of Dr. Tom Waters: The NIOSH Lifting Equation - Part I: A Review of its Validation and Implications for Interpretation. <u>Proceedings of the Human Factors and Ergonomics Society Annual Meeting</u>, pp. 961-962.

Kumar AR, Ware BF, and Fernandez JE. Virtual Office Ergonomics Evaluation: A Cost Effective Green Office Implementation Method. <u>The Proceedings of Capital Science 2010</u> - A Conference presented by the Washington Academy of Sciences and its Affiliated Societies and hosted by The National Science Foundation, 2010.

Subramanian A, Bishu RR, Fernandez JE, Subramanian D. Does Lean-Six Sigma Effort Help Predict The Quality of The Product And Increase Profitability? <u>The Proceedings of Capital Science 2010</u> - A Conference presented by the Washington Academy of Sciences and its Affiliated Societies and hosted by The National Science Foundation, 2010.

Dirksen DE, Bohan M, Choi SD, Roberson AL, Rogers NL, Fernandez JE, Rogers ME. Shoulder range of motion of 65–79 year-old adults. <u>Proceedings American College of Sport Medicine Central States Annual Meeting</u>, 1999.

Dirksen DE, Rogers ME, Rogers NL, Bohan M, Choi SD, Fernandez JE. Upper extremity joint mobility in physically active older adults. <u>Proceedings American College of Sport Medicine Annual Meeting</u>, 1999.

Shores JD, Bohlken RM, Fernandez JE, Rogers ME. Effect of a 10-week balance training program on functional reach in older adults aged 61–77. <u>Proceedings American College of Sport Medicine Central States Annual Meeting</u>, 1999.

Fernandez JE, Davis PJ, Young KR. Monitoring and controlling cumulative trauma disorders (CTD) in the office environment: an ergonomics approach. <u>Annals of Biomedical Engineering</u>, Volume 22, p. 67, 1994.

Fernandez JE, Pitetti KH, Dahalan J, Kim CH, Marley RJ. Physical work capacity of South Indians using the Schwinn Air-Dyne. <u>Proceedings International Symposium on Ergonomics, Occupational Health,</u> <u>Safety and Environment</u>, pp. 3/1, 1991.

Pitetti KH, Fernandez JE, Stubbs NB, Stafford JA. Cardiovascular response of non-Downs and Downs Syndrome mentally retarded individuals to exercise. <u>Proceedings American College of Sport Medicine</u> <u>Annual Meeting</u>, May 1988.

#### **Technical Reports**

Fernandez JE, Ware BF, Kumar AR, Hunter M Subramanian A. An Ergonomic Evaluation of Tasks at the Architect of the Capitol (AOC). Final Report, Washington, DC, 2011.

Fernandez JE, Ware BF, Alchuru S. An Ergonomic Evaluation and Review of the Office Workstations. Final Report to The Federal Reserve Board. Washington, DC, 2007.

Fernandez JE. Ergonomics 101 - The Basics: What Retailers Need to Know. Final Report to NACS. Alexandria, VA, 2000.

Fernandez JE, Farris BA, Choi SD, Rajagopal PP. Ergonomic evaluation at Larksfield Place. Final Report, 1998.

Fernandez JE, Farris BA, Garcia DT, Gopalan S, Varraprasad M, Pendleton MK. An ergonomic evaluation at Early Head Start. Final Report, Wichita, KS, 1997.

Fernandez JE, Garcia DT, Choi SD, Devlin KM, Farris BA, Khatiwada R, Krishnasamy S, Landwehr HR, Moorjani S, Pendleton MK, Rajagopal P, Sutherland JA, Wong SL. An ergonomic study of USD 259: School Service Center. Final Report, 1997.

Fernandez JE, Farris BA, Devlin KM. Ergonomic evaluation of an office workstation at NIAR. Final Report, 1996.

Fernandez JE, Kattel BP, Farris BA, Devlin KM. Ergonomic evaluation at Narmac Industries. Final Report, 1996.

Fernandez JE, Kattel BP, Khan K, Devlin KM, Farris BA. An ergonomic study of office workstations at AZTEC Marking Co., Inc. Final Report to Mid America Manufacturing Technology Center, 1996.

Fernandez JE, Kattel BP, Khan K, Poonawala M, Sivasubramanian K. Task analysis of eleven selected jobs at Case Corporation. Final Report to Case Corporation, Wichita, KS, 1996.

Fernandez JE, Kattel BP, Poonawala M, Sivasubramanian K, Farris BA. Ergonomic evaluation of Avery Labeler and Locahane micro isolator. Final Report to Sanofi Winthrop, McPherson, KS, 1996.

Fernandez JE, Kattel BP, Sivasubramanian K, Govindarajulu SK, Manne V, Garcia DT, Devlin KM, Farris BA. Ergonomic evaluation of the Bausch and Strobel and Shields and Strunck filling machines. Final Report to Sanofi Winthrop, McPherson, KS, 1996.

Fernandez JE, Devlin KM, Farris BA, Garcia DT, Dao C. An ergonomic study of an office workstation at the Sedgwick County Purchasing Office. Final Report, 1996.

Fernandez JE, Kattel BP, Poonawala M, Gurumurthy S, She R, Devlin KM, Farris BA. An ergonomic evaluation and review of Brite Voice Systems, Inc. Phase 2, Final Report, 1995.

Fernandez JE, Kattel BP, Kumar S, Kadiresan S, Aryal B, Gokhale CM, Devlin KM, Farris BA. Ergonomic analysis of the Presentation Department at The Wichita Eagle. Final Report, 1995.

Fernandez JE, Lee DC, Kattel BP, Poonawala MF, Kumar S, Devlin KM, Gokhale C. An ergonomics study for AZTEC Marking Co., Inc. Final Report to Mid America Manufacturing Technology Center, Wichita, KS, 1995.

Fernandez JE, Devlin KM, Farris BA. Ergonomic evaluation of an office workstation at University Computing. Final Report, 1995.

Fernandez JE, Eksioglu M, Kattel BP. An ergonomic evaluation and review of L.D. Supply, Inc. Final Report, 1995.

Fernandez JE, Fredericks TK, Eksioglu M, Kattel BP. An ergonomic evaluation and review of Brite Voice Systems, Inc. Final Report, 1995.

Malzahn DE, Fernandez JE, Kattel BP. Participatory worksite accommodation: assessment, design, and evaluation. Annual report for the Rehabilitation Engineering Research Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1995.

Fernandez JE, Davis PJ, Kumar A, Sanjeev M, Thiyagarajan S, Kesmankit P, Jithavech T. An ergonomics study for Laurco Fabrics. Final Report to Mid America Manufacturing Technology Center, Wichita, KS, 1994.

Fernandez JE, Cordova XV, Davis PJ, Kesmankit P. Office workstation analysis. Final Report to Graduate School, Wichita State University, Wichita, KS, 1994.

Malzahn DE, Fernandez JE, Davis PJ. Participatory worksite accommodation: assessment, design, and evaluation. Annual report for the Rehabilitation Engineering Research Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1994.

Fernandez JE. Occupational ergonomics. Rehabilitation Engineering Tech Brief Issue 4. Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1993.

Fernandez JE, Viswanath V. Maximum acceptable drilling frequency to reduce the risk of carpal tunnel syndrome. Annual report for the Rehabilitation Engineering Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1993.

Parker MG, Fernandez JE. Health hazard evaluation at the Cuyahoga County public library. NIOSH Report HHE 93-0456, Cincinnati, OH, 1993.

Fernandez JE. Maximum acceptable drilling frequency to reduce the risk of carpal tunnel syndrome. Annual report for the Rehabilitation Engineering Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1992.

Fernandez JE, Kim CH, Dahalan JB, Klein MG, Fredericks TK, Lim CC, Halpern C, Davis PJ. Ergonomic analysis of Cessna facilities. Final Report to Cessna Aircraft, Wichita, KS, 1992.

Fernandez JE, Dahalan JB, Klein MG, Fredericks TK, Lim CC, Kumar A, Palanisami P, Fierro AM. Ergonomic evaluation of Northern States Beef facility. Final Report to OSHA, Omaha, NE, 1992.

Fernandez JE. Physiological capacities for work of persons with neurophysical impairment. Annual report for the Rehabilitation Engineering Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1991.

Fernandez JE, Betzen M. Physiological capacities for work of persons with neurophysical impairment. Annual report for the Rehabilitation Engineering Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1990.

Masud AS, Fernandez JE. Process operations analysis of the Farmland Foods' Wichita plant. Final Report to Farmland Foods, Inc., Wichita, KS, 1990.

Ayoub MM, Fernandez JE, Masud AS. Staffing and scheduling of the computerized forwarding system. Final report to the US Postal Service, 1990.

Chambers RM, Fernandez JE, Nandigm S, Palaniswamy V. Human factors: the human interface with aircraft interiors. Report #90-18. National Institute for Aviation Research, The Wichita State University, Wichita, KS, 1990.

Masud AS, Fernandez JE, Zafar HU. Effects of nurses schedules on fatigue and quality. Final report to St. Joseph Medical Center, Wichita, KS, 1990.

Fernandez JE, Betzen M. Physiological capacities for work of persons with neurophysical impairment. Annual report for the Rehabilitation Engineering Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1989.

Fernandez JE, Betzen M, Lanciault MC. Physiological capacities for work of persons with neurophysical impairment. <u>Rehabilitation R & D Reports 1989</u>, p. 156. Department of Veterans Affairs, 1989.

Fernandez JE, Malzahn DE, Dahalan J. Predetermined time standards for severely handicapped workers. Annual report for the Rehabilitation Engineering Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1988.

Malzahn DE, Fernandez JE, Sabuncuoglu I, Cihangirli M. Analysis of functional abilities of neurologically impaired populations. Annual report for the Rehabilitation Engineering Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1988.

Malzahn DE, Fernandez JE, Cihangirli M, Marley RJ. Definition and prediction of job-related performance characteristics for persons with neurological impairments. Annual report for the Rehabilitation Engineering Center, Cerebral Palsy Research Foundation of Kansas, Wichita, KS, 1988.

Fernandez JE, Malzahn DE, Dahalan J. Predetermined time standards for severely handicapped workers. Annual report for the Rehabilitation Engineering Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1987.

Malzahn DE, Fernandez JE, Sabuncuoglu I, Heidari A. Definition and prediction of job-related performance characteristics for persons with neurological impairments. Annual report for the Rehabilitation Engineering Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1987.

Malzahn DE, Fernandez JE, Marley RJ, Cihangirli M. Analysis of functional abilities of neurologically impaired populations. Annual report for the Rehabilitation Engineering Center, Cerebral Palsy Research Foundation of Kansas, Inc., Wichita, KS, 1987.

Ayoub MM, Smith JL, Selan JL, Chen HC, Fernandez JE, Lee YH, Kim HK. Manual material handling in unusual postures—Phase II. Institute for Ergonomics Research, Texas Tech University, Lubbock, TX, 1986.

Ayoub MM, Fernandez JE. Work physiology. Research report from the Institute of Ergonomics Research, Texas Tech University, Lubbock, TX, 1985.

Ayoub MM, Smith JL, Selan JL, Chen HC, Lee YH, Kim HK, Fernandez JE. Manual material handling in unusual postures—Phase I. Institute for Ergonomics Research, Texas Tech University, Lubbock, TX, 1985.

Ayoub MM, Fernandez JE, Smith JL. Design of workplace. Research report from the Institute of Ergonomics Research, Texas Tech University, Lubbock, TX, 1984.

## Presentations

Application of Ergonomics: A Journey from Academia to Consulting, Invited Speech presented at the 31st Annual International Occupational Ergonomics and Safety Conference, New Orleans, LA, June 2019.

The constraints of applying ergonomic guidelines in Latin America, Keynote Speech presented at the 2019 International Conference on Industrial Engineering, Quito, Ecuador, February 2019.

Occupational Ergonomics: Problem Identification and Practical Solution, Presented at the 2019 International Conference on Industrial Engineering, Quito, Ecuador, February 2019.

Professional Human Factors/Ergonomics Certification, Presented at the 29th Annual International Occupational Ergonomics and Safety Conference, Seattle, WA, June 2017.

The NIOSH Lifting Equation - Part I: A Review of its Validation and Implications for Interpretation. Presented at the Human Factors Society 60th Annual Meeting, Washington, DC, September 2016.

The Value of Certification for HF/E Professionals. Presented to the Psychology Department, George Mason University, Fairfax, VA, March 2016.

Industrial and Systems Engineering Applications. Presented to the Systems Engineering Department, The United States Military Academy, West Point, NY, February 2016.

Push and Pull Forces of Carts Used by Hotel Banquets Personnel. Presented at the 27th Annual International Occupational Ergonomics and Safety Conference, Nashville, TN, May 2015.

Physical Ergonomics. Presented to the Psychology Department, George Mason University, Fairfax, VA, February 2015.

Case Studies in Industrial and Systems Engineering. Presented to the Systems Engineering Department, The United States Military Academy, West Point, NY, January 2015.

Industrial Engineering Applications. Presented to the Fraunhofer-Institut für Produktionstechnik und Automatisierung IPA, August 2014.

Industrial Engineering: The Sky is the Limit. Presented at the Universidad Autónoma de Ciudad Juárez, Juárez, Mexico, May 2013.

Differences in Hand Grip and Key Pinch Strength Between Sitting and Standing Positions in a Sample of Healthy Mexican Young Adults. Presented at the 1st Annual World Conference of the Society for Industrial and Systems Engineering, Alexandria, VA, September 2012.

Ankle Dorsiflexion, Medial-Lateral Stability, and Perceived Safety in Stairs of Different Slope Angles. Presented at the 24<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference, Fort Lauderdale, FL, June 2012.

An Ergonomic Evaluation of Tasks at the Architect of the Capitol (AOC). Presented at Architect of the Capitol, Washington, DC, August 2011.

The Application of Ergonomics Principles in Groundskeeping Tasks. Presented at the 23<sup>rd</sup> Annual International Occupational Ergonomics and Safety Conference, Baltimore, MD, June 2011.

Evaluating an Office Workstation. Presented at NEOCON East, Baltimore, MD, October 2010.

Process Improvement: The Holistic Approach. Presented at the Foro de Ingenieria AMAC 2010, Juárez, Mexico, July 2010.

Ergonomics: How Do We Reduce the Risk of Injury? Presented at the State Employee Risk Management Administration Annual Conference, Baltimore, MD, May 2010.

Remote Ergonomics Evaluations of Office Workstations. Presented at the Health and Safety Laboratory, Buxton, United Kingdom, April 2010.

Industrial Ergonomics Workshop. Presented at the Universidad Autónoma de Ciudad Juárez, Juárez, Mexico, March 2010.

Work Related Musculoskeletal Disorders: Types, Risk Factors, Identification, and Solutions Workshop. Presented at the XIth International Congress, Ergonomic Society of Mexico (SEMAC), Juárez, Mexico, April 2009.

Musculoskeletal Disorders: Identification and Abatement. Presented the 20th Annual Chesapeake Region Safety Council's Conference & Expo, Laurel, MD, September 2009.

Occupational Ergonomics Workshop. Presented at the Xth International Congress, Ergonomic Society of Mexico (SEMAC), Juárez, Mexico, April 2008.

FFW ATD C4ISR On the Move 2006 Results. Presented at US Army Training and Doctrine Command, Analysis Center, Monterey, CA, February 2008.

Evaluation of Office Workstations. Presented at the IX International Congress, Ergonomic Society of Mexico, Mexico City, Mexico, April 2007.

Guidelines for Hand Tool Design. Presented at the IX International Congress, Ergonomic Society of Mexico, Mexico City, Mexico, April 2007.

Industrial Engineering Experiences. Presented at Industrial Engineering, Montana State University, Bozeman, MT, April 2007.

Ergonomics Applied to MSDs and Nerve Disorders (Course 2250). Presented at the OSHA Training Institute, Arlington Heights, IL, April 2007.

Reintroducing "Engineering" In Industrial Engineering. Presented at the 11<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, Nagoya, Japan, October 2006.

Diverse Industrial Engineering Experiences. Presented at College of Engineering, Wichita State University, Wichita, KS, October 2006.

Application Opportunities in Ergonomics. Presented at the VIII International Congress, Ergonomic Society of Mexico, Juárez, Mexico, April 2006.

Video Analysis in Ergonomic Analysis. Presented at the VIII International Congress, Ergonomic Society of Mexico, Juárez, Mexico, April 2006.

Elemental Analysis Techniques: A Comparative Study. Presented at the 10<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, Clearwater FL, December 2005.

Multi-Worker Standing Workstation Accommodations: A Practical Guide. Presented at the 19<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference, Las Vegas, NV, June 2005.

Fit, Form and Comfort of a Prototype Integrated Load Carriage and Ballistic Armor System. Presented at the 19<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference, Las Vegas, NV, June 2005.

Accuracy Affects of a Prototype Integrated Load Carriage and Ballistic Armor System. Presented at the 19<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference, Las Vegas, NV, June 2005.

Diverse IE Experiences: Litigation and Military. Presented at College of Engineering, Western Michigan University, Kalamazoo, MI, March 2005.

Ergonomic Principles for Designing Workspaces. Presented at United States Department of State, Rosslyn, VA, October 2004.

The Effects of the Soldier Uniform and Equipment on Mobility. Presented at Annual International Conference on Industrial Engineering Applications and Practice, Las Vegas, NV, December 2003.

Differences in balance among young, middle-aged, and older adults. Presented at Annual International Occupational Ergonomics and Safety Conference, Toronto, Canada, June 2002.

Rating of Perceived Exertion (RPE) as an Aid in the Evaluation of Vibrating Hand Tools. Presented at Annual International Occupational Ergonomics and Safety Conference, Toronto, Canada, June 2002.

Postural sway in older adults: Effects of reduced visual sensation. Presented at Annual International Occupational Ergonomics and Safety Conference, Fairfax, VA, June 2001.

Postural sway in middle-age adults. Presented at Annual International Occupational Ergonomics and Safety Conference, Fairfax, VA, June 2001.

Handtool evaluation: A software approach. Presented at Annual International Occupational Ergonomics and Safety Conference, Fairfax, VA, June 2001.

Back Injuries. Presented at the Risk Managers meeting of International Mass Retail Association (IMRA), Rosslyn, VA, June 2001.

Ergonomics in the hotel industry. Presented at the Risk Managers meeting of American Hotel and Motel Association (AHMA) Chicago, IL, June 2001.

Office Ergonomics and Future Regulations: What will it Mean for You? Presented at the Annual NEOCON Conference, Chicago, IL, June 2001.

Industrial Ergonomics and OSHA's Final Ergonomics Standard. Presented at In-Cheon University, In-Cheon, Korea, December 2000.

OSHA's Final Ergonomics Standard. Presented at KOSHA, Seoul, Korea, December 2000. Industrial Ergonomics and OSHA's Final Ergonomics Standard. Presented at Dong-A University, Pusan, Korea, December 2000.

A Conceptual Model for MSD Risk Assessment. Presented at Fifth Annual International Conference on Industrial Engineering Applications and Practice, Hsinchu, Taiwan, December 2000.

Postural sway in individuals aged 20–39 years. Presented at the Fourth Annual International Conference on Industrial Engineering Applications and Practice, San Antonio, TX, November 1999.

Normative data on select joint range of motion and grip strength of elderly males and females. Presented at the Annual International Occupational Ergonomics and Safety Conference, Orlando, FL, June 1999.

Psychophysically acceptable limits expressed as a percentage of sampling intervals. Presented at the Annual International Occupational Ergonomics and Safety Conference, Orlando, FL, June 1999.

The use of the psychophysical approach in work-related musculoskeletal disorders of the upper extremity. Presented at the National Institute for Occupational Safety and Health, Centers for Disease Control, Cincinnati, OH, June 1999.

The effects of damping during a riveting task. Presented at the Third Annual International Conference on Industrial Engineering Applications and Practice, Hong Kong, December 1998.

Cursor-control performance of older adults using two computer input devices. Presented at the Annual International Occupational Ergonomics and Safety Conference, Ypsilanti, MI, June 1998.

Effect of arm support on muscle activity. Presented at the Annual International Occupational Ergonomics and Safety Conference, Ypsilanti, MI, June 1998.

Effect of arm support to aid light assembly work. Presented at the Annual International Occupational Ergonomics and Safety Conference, Ypsilanti, MI, June 1998.

Evaluation of the placement of mouse pads. Presented at the Annual International Occupational Ergonomics and Safety Conference, Ypsilanti, MI, June 1998.

The effect of types and size of rivet gun on hand-arm vibration. Presented at the Annual International Occupational Ergonomics and Safety Conference, Ypsilanti, MI, June 1998.

Criteria for selection of hand tools in the aircraft manufacturing industry: a review. Presented at the Ergonomic Society 1998 Annual Conference, Cirencester, England, April 1998.

The effect of wrist posture on attenuation of vibration in hand-arm system. Presented at the Ergonomic Society 1998 Annual Conference, Cirencester, England, April 1998.

A review of multi-person lifting capabilities. Presented at the Second Annual International Conference on Industrial Engineering Applications and Practice, San Diego, CA, November 1997.

Are ergonomic chairs designed for the small individual? Presented at the Second Annual International Conference on Industrial Engineering Applications and Practice, San Diego, CA, November 1997.

Evaluation of mouse pad placement during typical computer tasks. Presented at the Second Annual International Conference on Industrial Engineering Applications and Practice, San Diego, CA, November 1997.

The effect of grip span and wrist posture on the force exerted by the middle and index fingers exclusively. Presented at the Second Annual International Conference on Industrial Engineering Applications and Practice, San Diego, CA, November 1997.

Office ergonomics. Presented at the 48th Annual Kansas Safety and Health Conference, Wichita, KS, October 1997.

Ergonomics and workplace principles. Presented at the 48th USDA 259 Service Center, Wichita, KS, September 1997.

Ergonomic and safety issues in the workplace. Presented at the 48th KDHR Safety Conference, Independence, KS, August 1997.

Can ergonomic principles be applied to disability accommodation? Presented at the 13th Congress of the International Ergonomics Association, Tampere, Finland, July 1997.

Evaluation of the headwand used by persons with disability. Presented at the 13th Congress of the International Ergonomics Association, Tampere, Finland, July 1997.

Implementation of arm supports as an aid to office computer tasks. Presented at the Annual International Occupational Ergonomics and Safety Conference, Washington, DC, June 1997.

The effect of grip span on the force exerted by individual fingers. Presented at the Annual International Occupational Ergonomics and Safety Conference, Washington, DC, June 1997.

The effect of wrist posture on the force exerted by individual fingers. Presented at the Annual International Occupational Ergonomics and Safety Conference, Washington, DC, June 1997.

Virtual reality based system for accessibility and ergonomic analyses of floor assembly jigs. Presented at the Annual International Occupational Ergonomics and Safety Conference, Washington, DC, June 1997.

The ergonomics standard. Presented at the Meeting of the Wichita Chapter of IFMA, Wichita, KS, April 1997.

The effect of adjustment period on maximum acceptable frequency for a drilling task. Presented at the First Annual International Conference on Industrial Engineering Applications and Practice, Houston, TX, December 1996.

Evaluation of the force exerted by individual fingers during multidigital gripping task. Presented at the First Annual International Conference on Industrial Engineering Applications and Practice, Houston, TX, December 1996.

Prediction of maximum grip strength from anthropometric and physical characteristics of an individual: an artificial network approach. Presented at the First Annual International Conference on Industrial Engineering Applications and Practice, Houston, TX, December 1996.

How to evaluate tasks and propose solutions? Presented at the National Ergonomics Exposition and Conference, Los Angeles, CA, October 1996.

The effect of vibration on maximum acceptable frequency for a riveting task. Presented at the Annual International Occupational Ergonomics and Safety Conference, Zurich, Switzerland, July 1996.

The optimum time to evaluate the comfort rating of seats. Presented at the Annual International Occupational Ergonomics and Safety Conference, Zurich, Switzerland, July 1996.

Combating cumulative trauma disorders. Presented at the National Ergonomics Exposition and Conference, Chicago, IL, April 1996.

Healthy workplace design. Presented at the Ohio South/Kentucky Chapter of the American Society of Interior Designers, Cincinnati, OH, March 1996.

Ergonomics and the workplace. Presented at the American Welding Society, Wichita Chapter, Wichita, KS, January 1996.

Ergonomics and workplace principles. Presented at the Physical Therapy Department, Wichita State University, Wichita, KS, November 1995.

Manual materials handling. Presented at the 46th Annual Kansas Safety and Health Conference, Wichita, KS, October 1995.

Office ergonomics workshop. Presented at the Office of University Conferences WSU, Wichita, KS, August 1995.

An artificial neural network (ANN) prediction model for determining peak pinch strength. Presented at the Annual International Industrial Ergonomics and Safety Conference, Seattle, WA, June 1995.

Identification, prevention, and control of upper extremity disorders workshop. Presented at the Annual International Industrial Ergonomics and Safety Conference, Seattle, WA, June 1995.

Is grip strength maximum in the neutral posture? Presented at the Annual International Industrial Ergonomics and Safety Conference, Seattle, WA, June 1995.

The role of an ergonomist in concurrent engineering: an analysis of case studies. Presented at the Annual International Industrial Ergonomics and Safety Conference, Seattle, WA, June 1995.

The effect of vibration on maximum acceptable frequency for a riveting task: preliminary results. Presented at the Konz/Purswell Occupational Ergonomics Symposium, Lubbock, TX, April 1995.

The psychophysical approach in upper extremities work. Presented at the Ergonomic Society 1995 Annual Conference, Canterbury, England, April 1995.

Workplace ergonomics workshop. Presented at the Division of Continuing Education, Texas Tech University, Dallas, TX, March 1995.

Undergraduate and graduate studies at Wichita State University. Presented in Bombay, India, January 1995.

Undergraduate and graduate studies at Wichita State University. Presented in Karachi, Pakistan, and in Madras, India, December 1994.

Acceptable work limits for the upper extremities with the psychophysical approach. Presented at the 3rd Pan-Pacific Conference on Occupational Ergonomics, Seoul, Korea, November 1994.

Understanding ergonomics. Presented at the Fifteenth Annual Conference and Exposition on Facility Management, St. Louis, MO, November 1994.

Ergonomics and the federal standard. Presented at the Meeting of the Wichita Chapter of IFMA, Wichita, KS, October 1994.

Monitoring and controlling cumulative trauma disorders (CTD) in the office environment: an ergonomics approach. Presented at the Annual Meeting of the Biomedical Engineering Society, Tempe, AZ, October 1994.

Understanding ergonomics. Presented at the Annual Meeting of the Biomedical Engineering Society, Tempe, AZ, October 1994.

Occupational ergonomics workshop. Presented at the Division of Continuing Education, Wichita State University, Wichita, KS, August 1994.

Prediction of drilling frequency at varying working conditions. Presented at the 12th Congress of the International Ergonomics Association, Toronto, Canada, August 1994.

Rehabilitation using the proactive approach for CTD of the upper extremities—analysis of case studies. Presented at the 12th Congress of the International Ergonomics Association, Toronto, Canada, August 1994.

Ergonomics standard review. Presented at the American Society of Safety Engineers, Wichita Chapter, Wichita, KS, July 1994.

Conceptual errors in anthropometric percentile values for mixed populations. Presented at the Annual International Industrial Ergonomics and Safety Conference, San Antonio, TX, June 1994.

The effect of sitting on peak pinch strength. Presented at the Annual International Industrial Ergonomics and Safety Conference, San Antonio, TX, June 1994.

The new ergonomics standard. Presented at the Meeting of the Wichita Chapter of the American Industrial Hygiene Association, Wichita, KS, June 1994.

New federal ergonomic criteria. Presented at Montana State University, Bozeman, MT, April 1994.

Cumulative trauma disorders. Presented to the Wichita Area Rehabilitation Professionals, Wichita, KS, March 1994.

NIOSH's proposed ergonomics standard. Presented at the Industrial Engineering Department, Texas Tech University, Lubbock, TX, February 1994.

Office ergonomics. Presented at the Design Engineering, Cessna Aircraft Company, Wichita, KS, February 1994.

Understanding ergonomics. Presented to the Classified Employees, Wichita State University, Wichita, KS, February 1994.

Ergonomics in the workplace. Presented at the Society of Manufacturing Engineers (SME)- Hutchinson Chapter, Hutchinson, KS, January 1994.

The future of factory/office ergonomics. Presented at the 1993 BIFMA Management Information Conference, Palm Springs, CA, November 1993.

Status of NIOSH/OSHA ergonomic regulatory activity. Presented at the 44th Annual Kansas Safety and Health Conference, Wichita, KS, October 1993.

Ergonomics. Presented at the 3M Aerospace Conference, Wichita, KS, September 1993.

Evaluation of risk for CTD. Presented to Boeing Computer Services, Wichita, KS, September 1993. Office ergonomics. Presented at the College of Fine Arts and at the Office of the Registrar, Wichita State University, Wichita, KS, September 1993.

Using the psychophysical approach in hand-wrist work. Presented at the Division of Safety and Hygiene, Bureau of Workers' Compensation, Dayton, OH, July 1993.

Development of a NIOSH criteria document on ergonomics. Presented at the JoInternational Meeting of the Tri-State and Southern Ohio Chapters of the Human Factors and Ergonomics Society, Lebanon, OH, June 1993.

Range of motion of the wrist: a comparative study. Presented at the Annual International Industrial Ergonomics and Safety Conference, Copenhagen, Denmark, June 1993.

The effect of wrist posture and pinch type on endurance time. Presented at the 1993 IEA World Conference, Warsaw, Poland, June 1993.

Cumulative trauma disorders - an ergonomics perspective. Presented at the National Rehabilitation Hospital, Washington, DC, May 1993.

Ergonomics. Presented at the Suppliers Associate Relations Meeting, Ahresty Wilmington Corporation, Wilmington, OH, May 1993.

Office ergonomics. Presented to Boeing Computer Services, Wichita, KS, May 1993.

Ergonomics for individuals with disabilities. Presented to the Rehabilitation Engineering Group, Andrews Machine Works, Erlanger, KY, April 1993.

Office ergonomics. Presented to the Ergonomics Steering Committee, Boeing Commercial Aircraft Company, Wichita, KS, April 1993.

Using the psychophysical approach in hand-wrist work. Presented at the Ayoub MM Occupational Ergonomics Symposium, Lubbock, TX, April 1993.

The use of the psychophysical approach in hand-wrist work. Presented at the National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control, Morgantown, WV, March 1993.

Ergonomics: maximize abilities - minimize costs. Presented to the Rehabilitation Engineering Group, Andrews Machine Works, Erlanger, KY, February 1993.

Maximum acceptable frequency for males performing drilling tasks. Presented at the Human Factors Society 36th Annual Meeting, Atlanta, GA, October 1992.

Predicting the maximum acceptable weight of lift for an asymmetrical combination task. Presented at the Human Factors Society 36th Annual Meeting, Atlanta, GA, October 1992.

Management of an ergonomic program. Presented at the Cessna Aircraft Company, Wichita, KS, September 1992.

A workshop in occupational ergonomics: fitting the task to the individual. Presented at the Department of Industrial Engineering, Wichita State University, Wichita, KS, September 1992.

Physiological and subjective responses to robots in a noisy environment. Presented at the Second International FAIM 92 Conference, Washington, DC, July 1992.

The effect of deviated wrist posture on pinch strength for females. Presented at the Annual International Industrial Ergonomics and Safety Conference, Denver, CO, June 1992.

The ergonomic evaluation of several chairs: a case study. Presented at the Annual International Industrial Ergonomics and Safety Conference, Denver, CO, June 1992.

Prediction models for asymmetrical lifting combination tasks. Presented at the Annual International Industrial Ergonomics and Safety Conference, Denver, CO, June 1992.

Prediction models of grip strength at varying wrist positions. Presented at the Annual International Industrial Ergonomics and Safety Conference, Denver, CO, June 1992.

The ergonomics of cumulative trauma disorders. Presented at the Willis Corroon AcuNet Seminar, Wichita, KS, April 1992.

Variable selection in regression models using principals components. Presented at the Fourth Annual Conference on Applied Statistics, Manhattan, KS, April 1992.

Manual material handling: A review of lifting capacity evaluation. Presented at the Kansas Conference on Excellence in Manufacturing, Wichita, KS, April 1992.

A workshop in occupational ergonomics. Presented to the Industrial Engineering Department, Montana State University, Bozeman, MT, December 1991.

Cumulative trauma disorders. Presented at the National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control, Cincinnati, OH, November 1991.

Manual material handling. Presented at the 42nd Annual Kansas Safety and Health Conference, Wichita, KS, November 1991.

Universal design and aircraft based transportation systems. Presented at the 1991 Aircraft Interiors Conference, Wichita, KS, October 1991.

The effect of wrist posture on tip pinch strength. Presented at the Human Factors Society 35th Annual Meeting, San Francisco, CA, September 1991.

The effect of a clean suit on physical work capacity. Presented at the Human Factors Society 35th Annual Meeting, San Francisco, CA, September 1991.

A workshop in ergonomics: Fitting the task to the individual. Presented at the Division of Continuing Education, Wichita State University, Wichita, KS, August 1991.

Ergonomic principles in workplace and tool design. Presented at the HCA Wesley Medical Center, Wichita, KS, August 1991.

Office ergonomics. Presented at the Engineering Department, KG & E, Wichita, KS, August 1991.

Human responses to robots at various speeds with noise. Presented at the 11th Congress International Ergonomics Association, Paris, France, July 1991.

A psychophysical approach to establish maximum acceptable frequency for hand/wrist work. Presented at the Annual International Industrial Ergonomics and Safety Conference, Lake Tahoe, NV, June 1991.

Carpal tunnel syndrome issues in the communications industry. Presented at the Annual International Industrial Ergonomics and Safety Conference, Lake Tahoe, NV, June 1991.

Effect of handle diameter on maximum wrist flexion and extension. Presented at the Annual International Industrial Ergonomics and Safety Conference, Lake Tahoe, NV, June 1991.

Ergonomic principles in workplace design. Presented at the American Society of Safety Engineering, Wichita Chapter, Wichita, KS, and at the Industrial Engineering Department, Cessna Aircraft Company, Wichita, KS, May 1991.

History of ergonomics. Presented at the American Society of Safety Engineers, Wichita Chapter, Wichita, KS, May 1991.

Ergonomic principles in workplace design. Presented at the Institute of Industrial Engineering Seminar, Wichita, KS, March 1991.

Industrial ergonomics workshop. Presented at the Division of Continuing Education, Wichita State University, Wichita, KS, February 1991.

Ergonomic principles in workplace design for the disabled. Presented at the National Spastic Society of India, Bombay, India, January 1991.

Physical work capacity of South Indians using the Schwinn Air-Dyne. Presented at the International Symposium on Ergonomics, Occupational Health, Safety and Environment, Bombay, India, January 1991.

Vocational rehabilitation in the United States. Presented at the National Seminar on Vocational Rehabilitation, Bombay, India, December 1990.

History of ergonomics and carpal tunnel syndrome. Presented to IAM/Boeing Health and Safety Institute, Wichita, KS, October 1990.

Isokinetic strength of females with carpal tunnel syndrome. Presented at the Human Factors Society 34th Annual Meeting, Orlando, FL, October 1990.

History of ergonomics and carpal tunnel syndrome. Presented to the Safety Group, McConnell Air Force Base, Wichita, KS, June 1990.

Peak cardiopulmonary responses of ambulatory cerebral palsied adults to four types of exercise. Presented at the RESNA 1990 Annual Conference, Washington, DC, June 1990.

Results of an ongoing monitoring program for carpal tunnel syndrome. Presented at the Annual International Industrial Ergonomics and Safety Conference, Montreal, Canada, June 1990.

Effects of nurses schedules on fatigue and quality. Presented at the 1990 International Industrial Engineering Conference, San Francisco, CA, May 1990.

Human factors: the human interface with aircraft interiors. Presented at the 1990 Aircraft Interiors Conference, Wichita, KS, April 1990.

Monitoring and screening tests for carpal tunnel syndrome. Presented at the Ergonomic Society 1990 Annual Conference, Leeds, England, April 1990.

History of ergonomics. Presented to Health Strategies, HCA Wesley Medical Center, Wichita, KS, and the Psychiatric Research Institute, St. Francis Regional Medical Center, Wichita, KS, February 1990.

Lung capacities of cerebral palsied individuals. Presented at the Eleventh Annual International Conference of the IEEE Engineering in Medicine & Biology Society, Seattle, WA, November 1989.

A study of several performance measures of workers with carpal tunnel syndrome. Presented at the Human Factors Society 33rd Annual Meeting, Denver, CO, October 1989.

Noise exposure of plumbers in new home construction: a case study. Presented at the Annual International Industrial Ergonomics and Safety Conference, Cincinnati, OH, June 1989.

Performance of severely disabled adults on simulated assembly tasks. Presented at the Annual International Industrial Ergonomics and Safety Conference, Cincinnati, OH, June 1989.

Temporary threshold shift during exercising. Presented at the Annual International Industrial Ergonomics and Safety Conference, Cincinnati, OH, June 1989.

A comparison of equations and methods for determining percentage body fat. Presented at the Human Factors Society 32nd Annual Meeting, Anaheim, CA, October 1988.

The analytic hierarchy process—application to rehabilitation decision making. Presented at the 21st Meeting of Human Factors Association of Canada, Edmonton, Canada, September 1988.

Comparison of the physiological profile of Down's and non-Down 's syndrome mentally retarded individuals. Presented at the 21st Meeting of Human Factors Association of Canada, Edmonton, Canada, September 1988.

A multivariate analysis of directional movement time. Presented at the Annual International Industrial Ergonomics and Safety Conference, New Orleans, LA, June 1988.

An ethnic anthropometric survey as an educational tool. Presented at the Annual International Industrial Ergonomics and Safety Conference, New Orleans, LA, June 1988.

Evaluating the cardiovascular fitness of Downs Syndrome individuals. Presented at the Annual International Industrial Ergonomics and Safety Conference, New Orleans, LA, June 1988.

Human-machine modeling with AutoCAD. Presented at the Annual International Industrial Ergonomics and Safety Conference, New Orleans, LA, June 1988.

Physiological responses while playing a video game. Presented at the Annual International Industrial Ergonomics and Safety Conference, New Orleans, LA, June 1988.

The cardiovascular fitness of non-Downs Syndrome, moderately mentally retarded individuals as an additional indice for job placement. Presented at the Annual International Industrial Ergonomics and Safety Conference, New Orleans, LA, June 1988.

The effects of input devices on task performance. Presented at the Annual International Industrial Ergonomics and Safety Conference, New Orleans, LA, June 1988.

The psychophysical approach: the valid measure of lifting capacity. Presented at the Annual International Industrial Ergonomics and Safety Conference, New Orleans, LA, June 1988.

Vocational rehabilitation decision analysis using the analytic hierarchy process. Presented at the RESNA 11th Annual Conference, Montreal, Canada, June 1988.

Cardiovascular response of non-Downs and Downs Syndrome mentally retarded individuals to exercise. Presented at the American College of Sport Medicine Annual Meeting, Dallas, TX, May 1988.

Lifting physical work capacity as a function of frequency. Presented at Human Factors Society 31st Annual Meeting, New York, NY, October 1987.

Effects of gender, hand superiority and position on rotary performance rates of able-bodied individuals. Presented at the Annual International Industrial Ergonomics and Safety Conference, Miami, FL, June 1987.

Effects of orientation to the body and input device on task performance. Presented at the RESNA 10th Annual Conference, San Jose, CA, June 1987.

Maximum acceptable weight lifted over extended periods. Presented at the Annual International Industrial Ergonomics and Safety Conference, Miami, FL, June 1987.

Potential factors in movement time: implication for function evaluation of individuals with disabilities. Presented at the Annual International Industrial Ergonomics and Safety Conference, Miami, FL, June 1987.

Switch manipulation time as a function of gender, hand superiority and position: design considerations for rehabilitation engineers. Presented at the Annual International Industrial Ergonomics and Safety Conference, Miami, FL, June 1987.

Manual material handling—an ergonomic overview. Presented at the Industrial Engineering Departmental Seminar, Wichita, KS, June 1987.

Lifting in unusual postures. Presented at the Second Annual South Texas Symposium on Human Factors and Ergonomics, San Antonio, TX, May 1986.

### **Research Experience**

Principal Investigator, Grip and Push Forces – Aluminum and Inconel Drilling, sponsored by Boeing Commercial Aircraft Company, Wichita, KS (1999).

Principal Investigator, Vibration and Damping in Drilling, sponsored by Boeing Commercial Aircraft Company, Wichita, KS (1999).

Principal Investigator, Biomechanical Forces Associated with Mechanical Drilling, sponsored by Boeing Commercial Aircraft Company, Wichita, KS (1998).

Principal Investigator, Ergonomic Evaluation of Aircraft Seats, sponsored by Cessna Aircraft Company, Wichita, KS (1998).

Principal Investigator, Range of Motion of the Elderly, sponsored by ORA, Wichita State University (1998–1999).

Co-Investigator, The Effects of a 10-week Exercise Intervention Program in Older Adults, sponsored by ORA, Wichita State University (1998–1999).

Principal Investigator, Development of an Industry Standard for Riveting Hand Tools, sponsored by Cessna Aircraft Company, Wichita, KS (1997–1998).

Co-Investigator, Participatory Worksite Accommodation: Assessment, Design, and Evaluation - Phase 5, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1997–1998).

Co-Investigator, Participatory Worksite Accommodation: Assessment, Design, and Evaluation - Phase 4, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1996–1997).

Principal Investigator, Task Analysis of Eleven Selected Jobs at Case Corporation, sponsored by Case Corporation, Wichita, KS (1996).

Co-Investigator, Participatory Worksite Accommodation: Assessment, Design, and Evaluation - Phase 3, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1995–1996).

Principal Investigator, Ergonomic Analysis of Office Workstations, sponsored by LD Supply, Inc., Wichita, KS (1995).

Principal Investigator, Ergonomic Analysis of the Presentation Department at The Wichita Eagle, sponsored by The Wichita Eagle, Wichita, KS (1995).

Principal Investigator, Ergonomic Analysis of Workstations - Phase 2, sponsored by Brite Voice Systems, Inc., Wichita, KS (1995).

Principal Investigator, Ergonomic Analysis of Workstations - Phase 1, sponsored by Brite Voice Systems, Inc., Wichita, KS (1994–1995).

Co-Investigator, Participatory Worksite Accommodation: Assessment, Design, and Evaluation - Phase 2, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1994–1995).

Co-Investigator, Participatory Worksite Accommodation: Assessment, Design, and Evaluation - Phase 1, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1993–1994).

Principal Investigator, Maximum Acceptable Drilling Frequency to Reduce the Risk of Carpal Tunnel Syndrome - Phase 2, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1993–1994).

Principal Investigator, Maximum Acceptable Drilling Frequency to Reduce the Risk of Carpal Tunnel Syndrome - Phase 1, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1992–1993).

Principal Investigator, An Ergonomic Program for Cessna Aircraft Company, sponsored by Cessna Aircraft Company, Wichita, KS (1991–1992).

Principal Investigator, Physiological Capacities for Work of Persons with Neurophysical Impairment - Phase 4, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1991–1992).

Principal Investigator, Physiological Capacities for Work of Persons with Neurophysical Impairment - Phase 3, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1990–1991).

Principal Investigator, AT&T Ergonomics Manual, sponsored by AT&T and Texas Tech University, Lubbock, TX, (1990).

Co-Investigator, Human Performance Requirement Evaluation, sponsored by Beech Aircraft, Wichita, KS.

Co-Investigator, Process Operations Analysis of the Farmland Foods' Wichita Plant, sponsored by Farmland Foods, Inc., Wichita, KS (1990).

Principal Investigator, Physiological Capacities for Work of Persons with Neurophysical Impairment - Phase 2, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1989–1990).

Principal Investigator, Staffing and Scheduling of the Computerized Forwarding System, sponsored by U.S. Postal Service and Texas Tech University, Lubbock, TX (1989).

Principal Investigator, Physiological Capacities for Work of Persons with Neurophysical Impairment - Phase 1, sponsored by the Cerebral Palsy Research Foundation of Kansas, Inc. (1988–1989).

Co-Investigator, Definition and Prediction of Job-Related Performance Characteristics for Persons with Neurological Impairments, sponsored by National Institute on Disability and Rehabilitation Research and Cerebral Palsy Research Foundation of Kansas, Inc. (1987–1988).

Principal Investigator, Predetermined Time Standards for Severely Handicapped Workers, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1987–1988).

Co-Investigator, Definition and Prediction of Job-Related Performance Characteristics for Persons with Neurological Impairments, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1986–1987).

Principal Investigator, Lifting Physical Work Capacity at Different Frequencies, sponsored by Wichita State University Research Office (1986–1987).

Co-Investigator, Predetermined Time Standards for Severely Handicapped Workers, sponsored by National Institute on Disability and Rehabilitation Research, U.S. Department of Education, and Cerebral Palsy Research Foundation of Kansas, Inc. (1986–1987).

## Science Advisory Boards/Panels

- Reviewer of proposals for the Centers for Disease Control and Prevention
- Reviewer of proposals for the Workers' Compensation Board of British Columbia, Canada
- Northern Virginia Community College, Engineering Technology Advisory Committee (2012-Present)
- IIE Transactions on Occupational Ergonomics and Human Factors: Advisory Panel (2011-2019)

## **Editorships and Editorial Review Boards**

- Occupational Hazards Editorial Board (1999-2006)
- EHS Today (2006-Present)
- International Journal of Industrial Engineering: Managing Editor (1995-1999), Executive Editor (2000-2011)
- International Journal of Industrial Ergonomics: News Editor (1995-2010), Editorial Board (2011-Present)
- Industrial and Systems Engineering Review: Editorial Board (2012-Present)

## **Peer-Reviewer**

- Applied Ergonomics
- Computers and Industrial Engineering
- Ergonomics
- Experimental Aging Research
- Human Factors
- Industrial and Systems Engineering Review
- International Journal of Industrial Ergonomics
- International Journal of Industrial Engineering
- IIE Transactions
- IIE Transactions on Occupational Ergonomics and Human Factors
- Industrial and Systems Engineering Review (ISER)

## **Memberships and Professional Service Activities**

- Wichita State University, General Committees
  - Institutional Review Board (member 1996–1999)
  - Return to Work Committee (member 1993–1998)
  - Safety Committee (member 1992–1999)
  - Steering Committee on Assessment (member 1991–1993)
  - Chemical Hygiene Committee (member 1990–1995)
  - Library Appeals Committee (member 1990–1991, 1988–1989; Chair 1989–1990)
  - Ad-Hoc Committee on Assessment (member 1988–1989)
- Wichita State University, College of Engineering Committees
  - Tenure and Promotion Committee for ME and AE (member 1997–1998, 1996–1997)
  - Awards Committee (member 1997)
  - Engineering Graduate Committee (member 1994–1997, 1987–1989)
  - Tenure and Promotion Committee (member 1992–1995)
  - Assessment Committee (Chair 1990–1991; member 1988–1990)
  - Recruitment Committee (member 1986–1988)
  - Retrenchment Committee (member 1986–1988)
- Department of Industrial and Manufacturing Engineering Committees
  - Faculty Search Committee (member 1998, 1996, 1986–1988; Chair 1994)
  - Graduate Coordinator (1994–1997, 1987–1989)
  - Ergonomics/Human Factors Track Coordinator (1993–1999, 1987–1991)
  - Graduate Policy Committee (member 1991–1992; Chair 1987–1989)
  - Assessment Committee (Chair 1989–1992)
  - Faculty Advisor of IIE (1986–1990)
- Annual International Industrial Ergonomics and Safety Conference, Arrangement Chairman (1992, 1996)
- Wichita Asian Association (President 1990–1991; member 1989–1993)
- Wichita State University, Pakistani Students Association, Faculty Advisor (1986–1999)
- Society of Work Sciences (SWS), Board of Directors (1999-2002)
- Barkley Home Owners Association, Board of Directors (2004-2007, 2011-2016)
- Annual International Industrial Ergonomics and Safety Conference, Conference Chairman (2005, 2008)
- Annual Conference of the International Journal Industrial Engineering, Conference Chairman/ Cochairman (2001, 2003, 2005, 2007, 2008, 2009, 2010, 2011)
- Annual Industrial and Systems Engineering World Conference, Conference Chairman/ Co-chairman (2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021)
- Board of Certification in Professional Ergonomics (BCPE), Board of Directors (2010-2016, President 2015-2016), Exam Committee (2018-Present).

## **Professional Honors/Awards**

- Distinguished Service Award, Board of Certification in Professional Ergonomics (BCPE), 2019
- Engineering Sciences Award, The Washington Academy of Sciences, 2012
- Elected Fellow of the Institute of Ergonomics & Human Factors, 2012
- Academy of Industrial Engineers, Industrial Engineering Department at Texas Tech University, 2003

- M.M. Ayoub Award (Distinguished Service in Ergonomics), Society of Work Sciences (SWS) of the Institute of Industrial Engineers (IIE), 2000
- Participated in the Third Invited International Symposium on Ergonomic Guidelines and Problem Solving, held in Zurich, which was sponsored by NIOSH and the Swiss ETH, 1996
- NIAR Fellow, College of Engineering, Wichita State University, 1995–1999
- Dwane and Velma Wallace Outstanding Educator Award towards Excellence in Continuing Education, College of Engineering, Wichita State University, 1995
- Boeing Fellow, College of Engineering, Wichita State University, 1992–1995
- Participated in the Second Invited International Symposium on Ergonomic Guidelines and Problem Solving, held in Copenhagen, which was sponsored by NIOSH and the Swedish NIOH, 1993
- Dwane and Velma Wallace Outstanding Educator Award towards Excellence in Research, College of Engineering, Wichita State University, 1991

# **Professional Affiliations**

- Alpha Pi Mu
- Human Factors and Ergonomics Society
- Institute of Ergonomics & Human Factors (formerly Ergonomics Society)
- Institute of Industrial Engineering (1983-2015)
- International Society for Occupational Ergonomics and Safety (President, 2004-2005)
- Society for Industrial and Systems Engineering
- Tau Beta Pi