

PROFESSIONAL VITA
JANET S. DUFEK

Professor
Department of Kinesiology and Nutrition Sciences
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EDUCATION

- Ph.D. University of Oregon, Eugene, Oregon, 1988
Kinesiology; Biomechanics (concentration); Integrated Exercise Science
(support area)
- M.S. Illinois State University, Normal, Illinois, 1982
Kinesiology (Scientific Foundations)
- B.S. (Summa Cum Laude) University of Wisconsin-Superior, Superior, Wisconsin, 1981
Physical Education (major); Health Education (minor)

PROFESSIONAL EXPERIENCE

- 2016 – present Associate Dean, School of Allied Health Sciences, University of Nevada,
Las Vegas, Las Vegas, Nevada
- 2016 – present Adjunct Professor, School of Medicine, University of Nevada, Las Vegas,
Las Vegas, Nevada
- 2016 – present Adjunct Professor, Department of Biomechanics, University of Nebraska at
Omaha, Omaha, Nebraska
- 2014 - present Associate Graduate Faculty, Department of Mechanical Engineering,
University of Nevada, Las Vegas, Las Vegas, Nevada
- 2014 - present Professor, Department of Kinesiology and Nutrition Sciences, University of
Nevada, Las Vegas, Las Vegas, Nevada
- 2009 - 2014 Associate Professor, Department of Kinesiology and Nutrition Sciences,
University of Nevada, Las Vegas, Las Vegas, Nevada

2004 - 2009 Visiting Research Associate Professor, Department of Kinesiology, University of Nevada, Las Vegas, Las Vegas, Nevada

2000 - 2004 Adjunct Associate Professor, Department of Kinesiology, University of Nevada-Las Vegas, Las Vegas, Nevada

1995 - present Research Scientist, Human Performance & Wellness, Inc., Eugene, Oregon

2001 - 2004 Courtesy Associate Professor, Department of Exercise and Movement Science, University of Oregon, Eugene, Oregon

1996 - 2000 Courtesy Research Associate, Office of the President, University of Oregon, Eugene, Oregon

1991- 2011 Vice President, BioDynamics Foundation, Eugene, Oregon

1989 - 1996 Assistant Professor, Department of Exercise and Movement Science (Biomechanics); University of Oregon, Eugene, Oregon

1989 Visiting Lecturer, Department of Exercise and Sport Science (Biomechanics); Oregon State University, Corvallis, Oregon

1988 - 1989 Visiting Assistant Professor, Department of Physical Education and Human Movement Studies (Biomechanics); University of Oregon, Eugene, Oregon

1987 - 1988 Instructor, Talented and Gifted Summer Education Program, University of Oregon, Eugene, Oregon

1984 - 1988 Graduate Research Assistant and Teaching Fellow, Department of Physical Education and Human Movement Studies University of Oregon, Eugene, Oregon

1982 - 1984 Research Assistant/Video Technician, Olympic Training Center, Colorado Springs, Colorado

1981 - 1982 Graduate Assistant, Department of Health, Physical Education and Recreation, Illinois State University, Normal, Illinois

1980 - 1981 Substitute Teacher, Ashland Public School System, Ashland, Wisconsin

GRANTS and CONTRACTS

Dufek, J.S. Cross-Country Ski In-Boot Forces. The Langer Biomechanics Group, \$455, 1986.

Dufek, J.S. & Bates, B.T. Biomechanical Characteristics of Lower Extremity Function During Walking, Running and a Transition Pace. Rockport Walking Institute, \$2,500, 1988.

Dufek, J.S. Interface of Perturbation and Force Platforms. Faculty Research Grant, University of Oregon, \$100, 1989.

Bates, B.T., **Dufek, J.S.** & Robertson, R.N. Evaluation and Training Proposal: Chain and Webbing Tasks. Bohemia, Inc., (via BioDynamics Foundation), \$850, 1990.

Dufek, J.S. Lower Extremity Modeling During Landings. Faculty Research Grant, University of Oregon, \$100, 1990.

Dufek, J.S. & Bates, B.T. Human Data Collection: Mid- and Final Reach Positions. Renton Boeing, (via BioDynamics Foundation), \$2,500, 1990.

Bates, B.T. & **Dufek, J.S.** Equipment Grant. Precor USA, \$9,500, 1991.

Bates, B.T. & **Dufek, J.S.** Biomechanical Analyses of Barcode Scanning. Spectra-Physics Scanning Systems, Inc., (via BioDynamics Foundation), \$12,750, 1991.

Dufek, J.S. Design and Construction of an Impact Tester Support Stand. Faculty Research Grant, University of Oregon, \$100, 1991.

Dufek, J.S. Professional Travel Grant, National Osteoporosis Foundation, \$500, 1991.

Dufek, J.S. Ariel Performance Analysis Workstation for Undergraduate Laboratories. Williams Professorship Recognition Program for Undergraduate Education, University of Oregon, \$3,975, 1991-92.

Dufek, J.S. & Bates, B.T. Equipment Grant. Ariel Life Systems, Inc., \$73,015, 1991-92.

Bates, B.T. & **Dufek, J.S.** Equipment Grant. Penny & Giles, Inc. and BioDynamics Foundation, \$3,200, 1992.

Bates, B.T. & **Dufek, J.S.** Equipment Grant. Ariel Life Systems, Inc., \$75,000, 1992.

Bates, B.T. & **Dufek, J.S.** Equipment Grant. Tekscan, Inc., \$2,000, 1992.

Bates, B.T. & **Dufek, J.S.** Equipment Evaluation Project. Precor USA and BioDynamics Foundation, \$15,000, 1992.

Bates, B.T. & **Dufek, J.S.** Laboratory General Operating Funds. BioDynamics Foundation, \$4,000, 1992.

Dufek, J.S. & Bates, B.T. Qualitative Analyses of Checker and Checkstand Performance. Spectra-Physics, Inc., (via BioDynamics Foundation), \$1,600, 1992.

Bates, B.T. & **Dufek, J.S.** Equipment Grant. Tekscan, Inc., \$17,500, 1993.

Bates, B.T. & **Dufek, J.S.** Laboratory General Operating Funds. BioDynamics Foundation, \$3,000, 1993.

Bates, B.T. & **Dufek, J.S.** Laboratory General Operating Funds. BioDynamics Foundation, \$1,000, 1994.

Dufek, J.S. Computer Hardware Grant (via BioDynamics Foundation), \$2,115, 1994.

Dufek, J.S. Professional Travel Grant. National Association for Sport and Physical Education, \$700, 1994.

Dufek, J.S. Three-dimensional Coordinate Data: Animation of Sport Movements. Dynamix^R, (via BioDynamics Foundation), \$4,000, 1994.

King, M.J. & **Dufek, J.S.** Carpel Tunnel Syndrome: A Risk Comparison of Three Models of Supermarket Scanners. Spectra-Physics, Inc., \$1080, 1994.

Dufek, J.S. Computer Hardware Grant (via BioDynamics Foundation), \$2,165, 1995.

Dufek, J.S. Professional Travel Grants (2). American Institute of Biological Sciences (via BioReview), \$3,100, 1995.

Dufek, J.S. Biomechanical Evaluation of Lower-Extremity Bracing System. Oregon Orthotic System, Inc., \$6,000, 1995-96.

Dufek, J.S. Professional Travel Grant. United Information Services, \$2,600, 1996.

Dufek, J.S. Biomechanical Evaluation of Hand-Held Scanners. PSC Spectra Physics, Inc., \$9,850, 1996.

Dufek, J.S. Mechanical Evaluation of Women's Walking Shoes. Easy Spirit and LMPM, Inc., \$3,200, 1997.

Dufek, J.S. Mechanical Evaluation of Women's Walking Shoes. Easy Spirit and LMPM, Inc., \$4,320, 1998.

Dufek, J.S. Mechanical Evaluation of Women's Walking Shoes. Easy Spirit and LMPM, Inc., \$14,400, 1998.

Dufek, J.S. Forefoot Evaluation of Women's Dress Pumps. Easy Spirit and LMPM, Inc., \$3,900, 1998.

Dufek, J.S. Bates, B.T. and Mercer, J.A. Evaluation of Shock-Absorbing Running Shoes. Human Performance & Wellness, Inc. and Bio-Dynamics Foundation, \$600, 2005-2006.

Mangus, B.C., **Dufek, J.S.**, Mercer, J.A., Wilson, K. & Krum, L. Etiology of Knee Joint Laxity: Gender Considerations. University of Nevada, Las Vegas Stimulation, Implementation, Transition and Enhancement Award, \$6,355, 2005-2006.

Mercer, J.A., **Dufek, J.S.**, & Mangus, B.C. Effects of Maturation on Impact Attenuation Characteristics During Running in Females. University of Nevada, Las Vegas Center of Excellence in Women's Health, School of Nursing, via the Department of Education, \$15,890, 2005-2006.

House, A.J., Mangus, B.C. & **Dufek, J.S.** Examining Lumbopelvic Movement During Retro-Locomotion in Athletes with Low Back Pain. Far West Athletic Trainers Association, \$465, 2006.

Mercer, J.A., Mangus, B.C., Rubley, M.D. & **Dufek, J.S.** Shock Attenuation Characteristics of Children Runners. National Athletic Trainers Association, \$28,517, 2006-2008.

Mercer, J.A. & **Dufek, J.S.** Acquisition and Installation of a Dual Force Platform Mounting System. University of Nevada, Las Vegas, Research Infrastructure Award Program, \$5,295, 2007.

Mercer, J.A., **Dufek, J.S.**, Stergiou, N., Mangus, B.C., Tandy, R.C. & Henry, J. Motion-Capture System Maintenance Award. University of Nevada, Las Vegas, President's Research Award, \$10,000, 2007-2009.

Dufek, J.S. Impact Characteristics of Running Shoes. StrideRite via BioDynamics Foundation, \$1,500, 2007.

Neumann, E.S., **Dufek, J.S.**, O'Toole, B., and Wallmann, H.W. Helios Brace Performance and Production. Hereditary Neuropathy Foundation, Ortho Rehab Designs and University of Nevada, Las Vegas Applied Research Initiative Award, \$131,576, 2008-2010.

Dufek, J.S. Aldridge, J.M., and Melcher, G.G., A Retro Locomotion Protocol to Reduce Postural Sway: Implications for Fall Prevention in Older Adults. Bertec Corporation Competitive Equipment Loan Program, \$6,100, 2008-2009.

Dufek, J.S. Acquisition of High Speed Video Camera. BioDynamics Foundation, \$17,343, 2008.

Dufek, J.S. High Speed Videographic Measurement of Footwear. HPW Biomechanics, \$7,000, 2008.

Dufek, J.S. APAS-Mobile Software Grant. Ariel Dynamics, Inc., \$7,000, 2009.

Dufek, J.S. Bertec Balance-Check Screener with Safety Harness Equipment Grant. Bertec Corporation, \$3,500, 2009.

Candela, L., **Dufek, J.S.**, Mercer, J.A. and Putney, L. Translating the Diabetes Prevention Program to Middle and High School Students. School of Nursing/School of Allied Health Sciences Obesity-Related Award, \$30,345, 2009-2010.

Dufek, J.S. Effects of Footwear on Walking Variability. Easy Spirit and HPW Biomechanics, \$3,500, 2010.

Dufek, J.S. Rearfoot Component Impact Characteristics after 200 Miles of Wear. Stanton & Cia, S.A. and HPW Biomechanics, \$500, 2010.

Dufek, J.S. and Hickman, R. Strategic Plan Graduate Research Assistant. Office of Research and Graduate Studies, University of Nevada, Las Vegas. \$36,000, 2010-2013.

Dufek, J.S. and Wallmann, H. Collaborative Research Award, School of Allied Health Sciences, University of Nevada, Las Vegas, (release-time award), 2010.

Dufek, J.S. Mentored Research Meeting. University Faculty Travel Committee. University of Nevada, Las Vegas, \$750, 2011-12.

Dufek, J.S. and Hickman, R. Software Grant, Msqr-ver50, CIR Systems, Inc., \$9,875, 2011.

McClellan, J.R. and **Dufek, J.S.** Footwear Grant. Altra Footwear, \$800, 2011-12.

Ryan-Wenger, N., **Dufek, J.S.** and Wang, W. Development of a Taxonomy of Human, Environmental, Biomechanical, and System Factors that Contribute to Pediatric Fall-Related Injuries. American Nurses Foundation, \$10,000 (UNLV Sub-Award: \$5850), 2011-2013.

Dufek, J.S. and Mefferd, K. Determination of Head Injury Severity during Pediatric Patient Falls. Nevada INBRE; Idea Network of Biomedical Research Excellence, \$5,000, 2012.

Dufek, J.S. and Bailey, J. Relating Collision Reduction Strategies to Changes in Joint and Leg Compliance across Modes of Human Locomotion. Nevada INBRE; Idea Network of Biomedical Research Excellence, \$5,000, 2012.

Dufek, J.S., Ryan-Wenger, N.A. and Yucha, C. Pediatric Patient Falls: Biomechanical and Ergonomic Contributors to Occurrence and Injury Severity. Faculty Opportunity Award, University of Nevada, Las Vegas, \$20,000, 2012-14.

Hickman, R. and **Dufek, J.S.** Large Amplitude Training for Children with Cerebral Palsy: A Planning and Feasibility Study. American Academy for Cerebral Palsy and Developmental Medicine via Pedal-With-Pete Foundation, \$25,000, 2012-13.

Hickman, R., **Dufek, J.S.** and Lee, S-P. UNLV Kids Research Outreach to Community Clinicians (UNLV KidsROCC). School of Allied Health Sciences, University of Nevada, Las Vegas, \$2,554, 2012-2013.

Dufek, J.S. Quantifying Head Injury Severity Following Pediatric Patient Falls. University Faculty Travel Committee. University of Nevada, Las Vegas, \$1,000, 2013.

Dufek, J.S. Mechanical Footwear Testing. Gravity Defyer, \$1,000, 2013.

Dufek, J.S. and Holt, J. Horizontal Landing Strategies in Response to Incremented Loads. Nevada INBRE; Idea Network of Biomedical Research Excellence, \$5,500, 2013.

Dufek, J.S. and Wilson, J. Strategy Responses: Load Perturbations during Landing. Nevada INBRE; Idea Network of Biomedical Research Excellence, \$5,500, 2013.

Samson, D. and **Dufek, J.S.** Development of a Foot Stiffness Measurement Technique. Nevada INBRE; Idea Network of Biomedical Research Excellence, \$4,000, 2014.

Lee, S-P, **Dufek, J.S.** and Mercer, J.A. Influence of Foot Strike Pattern on Lower Back Muscle Activation during Running: Clinical Implications for Preventing Lower Back Pain in Runners. Faculty Opportunity Award, University of Nevada, Las Vegas, \$24,268, 2013-14.

Trabia, M.B. and **Dufek, J.S.** Smart Insoles for Diabetic Patients. Faculty Opportunity Award, University of Nevada, Las Vegas, \$19,767, 2014-15.

Morris, B.T., **Dufek, J.S.** and Hickman, R.A. Serious Games: Development of Physical Therapy and Rehabilitation Game for Children with Cerebral Palsy. Faculty Opportunity Award, University of Nevada, Las Vegas, \$20,000, 2014-15.

Dufek, J.S., Hickman, R.A., Lee, S-P., and Morris, B.T. Large Amplitude Movements (LAMs) for Children with Cerebral Palsy: Dose Response and Clinical Effectiveness. Doctoral Graduate Research Assistant Award, University of Nevada, Las Vegas, \$39,000, 2014-2017.

Dufek, J.S., Guadagnoli, M., Maldonado, C., Murthukumar, V., Shan, S., and Spivak, A. Active Work and Exercise Station Objective Measurement Enterprise (AWESOME) Research Group. Doctoral Graduate Research Assistant Award, University of Nevada, Las Vegas, \$39,000, 2014-2017.

Trabia, M.B.T. and **Dufek, J.S.** Development of a “Smart Orthotic” to Minimize Occurrence of Diabetic Foot Ulceration. Doctoral Graduate Research Assistant Award, University of Nevada, Las Vegas, \$39,000, 2014-2017.

Dufek, J.S., Samson, D., and Trabia, M.B. Development of a Tissue-Deformation Model of the Plantar Surface of the Foot during Walking. Nevada INBRE; Idea Network of Biomedical Research Excellence, \$4,000, 2014.

Dufek, J.S., Eggleston, J.D., Hickman, R.A. and Shan, G. Gait Variability in Children with Autism Spectral Disorder: A Pilot Study. CTR-IN Mini-Grant, \$21,353, 2015.

Trabia, M.B. and **Dufek, J.S.** Development of a Model for Plantar Tissue Stiffness. CTR-IN Mini-Grant, \$18,682, 2015.

Freedman Silvernail, J.A. and **Dufek, J.S.** Obesity and Gait: A Dynamical Systems Perspective of Osteoarthritis Risk in Young Healthy Adults. Faculty Opportunity Award, University of Nevada, Las Vegas, \$19,992, 2015-2016.

Dufek, J.S. The Relationship between Head Acceleration and Heart Rate Variability. University Faculty Travel Committee. University of Nevada, Las Vegas, \$500, 2015.

Dufek, J.S. and Hickman, R.A. Summer Graduate Research Award. School of Allied Health Sciences, University of Nevada, Las Vegas, Las Vegas, NV, \$3,000, 2015.

Hickman, R., Lee, S.P., Morris, B., **Dufek, J.**, Popescu, T. and Manzanares, R. Use of Active Video Gaming in Children with Neurologically-based Movement Dysfunction. UNLV Department of Physical Therapy Student Research Opportunity Grant, \$1,100, 2015-2017.

Dai, B. and **Dufek, J.S.** Land Safely from a High Height: What Can We Learn from Parkour Practitioners? CTR-IN Mini-Grant, \$13,564, 2016.

Lee, S-P, **Dufek, J.S.** and Neumann, E. Prosthetic Assessment of Gait and Mobility in Individuals with Lower Limb Loss. CTR-IN Mini-Grant, \$13,505, 2016.

Dufek, J.S. A Novel Data Analysis Approach for Identification of Performance Differences during Locomotion. University Faculty Travel Committee. University of Nevada, Las Vegas, \$500, 2016.

Radzak, K. and **Dufek, J.S.** Biomechanical Risk Factors for Injuries Commonly Acquired During Military Physical Fitness Training. Faculty Opportunity Award, University of Nevada, Las Vegas, \$19,976, 2016-2017.

Dufek, J.S. Summer Doctoral Student Research Award. School of Allied Health Sciences, University of Nevada, Las Vegas, Las Vegas, NV, \$3,000, 2016.

Trabia, M.B. and **Dufek, J.S.** A Plantar Tissue Stiffness Model to Predict the Onset of Diabetic Ulcers, Nevada IDeA Network of Biomedical Research, \$14,480, 2016-17.

Harry, J.D. and **Dufek, J.S.** Determining the Optimal Weight Vest Dispersion During Externally Loaded Landings. National Strength and Conditioning Association Foundation, \$8,560, 2016-17, 2350-257-929M.

Dufek, J.S., Trabia, M.B.T. and Izuora, K. Determination of Plantar Tissue Compression Area during Walking to Predict Onset of Diabetic Ulceration. Nevada IDeA Network of Biomedical Research, \$14,464, 2017-2018.

Dufek, J.S. Movement Differences between Children with Autism and Children with Typical Development: Evidence for Evaluating the Individual Before the Group. University Faculty Travel Committee. University of Nevada, Las Vegas, \$750, 2017.

Dufek, J.S., Freedman Silvernail J.A, Trabia, M.B. and Hickman, R.A. Movement Variability in Children with Autism: A Window into Detection, Classification and Intervention. Top Tier Doctoral Graduate Research Assistant Award, University of Nevada, Las Vegas, \$60,000 2017-2020.

Yu, P., Lidstone, D.E. and **Dufek, J.S.** Frontal Plane Knee Kinetics and Kinematics in Collegiate Male and Female Soccer Athletes during a Single Leg Landing Task. Nevada IDeA Network Biomedical Research Summer Grant, \$5,500, 2017-2018.

Trabia, M.B., **Dufek, J.S.**, and Izuora, K.A. Quantitative Approach for Detection of Diabetic Plantar Ulceration. Smart and Connected Health (NSF 16-601), \$807,593, (in review).

Thompson, M.V., Dodge-Francis, C., Shegog, M.L., **Dufek, J.S.**, Trabia, M.B.T., Izuora, K. Shan, G., and Haboush-Deloye, A. CHDR – Center of Excellence. NIMHD Specialized Centers of Excellence on Minority Health and Health Disparities (U54), \$7,018,466 (in review).

Frink, L., Dodge-Francis, C., Hanson, A. Hines, R., Schiller, M. **Dufek, J.S.**, et al. *OURMARC*: Preparing High-Achieving Underrepresented UNLV Students for Success in Biomedical Research Fields, National Institutes of Health (T34), \$2,500,000, (in review).

Trabia, M.B. and **Dufek, J.S.** Integrating Engineering, Biomechanics and Medicine for Stimulating the Participation of Underrepresented Groups in Research-Intensive Healthcare Careers. National Science Foundation, \$322,249 (in review).

Shen, Y., Trabia, M.B. and **Dufek, J.S.** Development of a Wearable 3D Insole Force Sensing System for Monitoring the Quality and Safety of Astronauts During Microgravity Exercise. NASA Human Exploration Research Opportunities (HERO), \$300,000 (in review).

Trabia, M.B., **Dufek, J.S.**, and Izuora, K.A. Longitudinal Evaluation of Changes in Plantar Tissue Stiffness in Pre-Diabetic and Diabetic Individuals. Nevada IDeA Network of Biomedical Research, \$10,000 (pre-application submitted).

Ho, K-Y, Lee, S-P., **Dufek, J.S.** and Aguila, E. Knee Pain and Patellar Tendon Degeneration in Trans-Tibial Amputees. Congressionally Directed Medical Research Programs, Department of Defense, \$300,000 (pre-application submitted).

INTELLECTUAL PROPERTY

Provisional Patent Applications

Trabia, M.B.T. and **Dufek, J.S.** Actuated Foot Orthotic with Embedded Sensors. Application Number: 61899960; Filed November 5, 2013.

Lee, S-P., **Dufek, J.S.** and Hickman, R.A. Method and Apparatus for Performing Timed Up-And-Go Test. Application Number: 61904693; Filed November 15, 2013.

International (PCT) Patent Applications

Trabia, M.B. and **Dufek, J.S.** Actuated Foot Orthotic with Embedded Sensors and Systems and Methods for Designing Same. Attorney Docket No. 37474.0018U2; U.S. Serial Number 62/017,544, Filed June 26, 2014.

Trabia, M.B. and **Dufek, J.S.** Actuated Foot Orthotic with Embedded Sensors and Systems and Methods for Designing Same. Attorney Docket No. 37474.0018P1; PCT Application Number PCT/US2014/064148, Filed November 5, 2014.

Lee, S-P., Hickman, R.A. and **Dufek, J.S.** Method and Apparatus for Performing Timed Up-and-Go Test. Attorney Docket No. 37474.0017P1; Filed November 14, 2014.

PUBLICATIONS, Refereed

Dufek, J.S. & Bates, B.T. (1987). Temporal gait characteristics of cross-country skiers. In B. Jonsson (Ed.), *Biomechanics X-B* (pp. 729-732). Champaign, Illinois: Human Kinetics Publishers.

Pierce, J., Pope, M.H., Renstrom, P., Johnson, R., **Dufek, J.** & Dillman, C. Force measurement in cross-country skiing. *International Journal of Sport Biomechanics*. 1987;3(4):383-391.

Bates, B.T., McCaw, S.T., Simpson, K.J. & **Dufek, J.S.** (1988). Intraday variability of two performer-measurement systems. In G. deGroot, A. Hollander, P. Huijing & G. van Ingen Schenau (Eds.), *Biomechanics XI* (pp. 1089-1092). Amsterdam, The Netherlands: Free University Press.

Dufek, J.S. & Bates, B.T. The evaluation and prediction of impact forces during landings. *Medicine and Science in Sports and Exercise*. 1990;22(3):370-377.

Dufek, J.S., Schot, P.K. & Bates, B.T. Dynamic lower extremity evaluation of males and females during walking and running. *Journal of Human Movement Studies*. 1990;18:159-175.

Dufek, J.S. & Bates, B.T. Biomechanical factors associated with injury during landing in jump sports. *Sports Medicine*. 1991;12(5):326-337.

Dufek, J.S., Bates, B.T., Davis, H.P. and Malone, L.A. Dynamic performance assessment of selected sport shoes on impact forces. *Medicine and Science in Sports and Exercise*. 1991;23(9):1062-1067.

Wiese-Bjornstal, D.M. & **Dufek, J.S.** The effect of weightload and footwear on kinetic and temporal factors in level grade backpacking. *Journal of Human Movement Studies*. 1991;21:167-181.

Bates, B.T., **Dufek, J.S.** & Davis, H.P. The effect of trial size on statistical power. *Medicine and Science in Sports and Exercise*. 1992;24(9):1059-1068.

Dufek, J.S. Jump high...then what? Making landings safe. *Strategies*. 1992;5(7):9-12.

Dufek, J.S. & Bates, B.T. Lower extremity performance models for landing. *Human Movement Science*. 1992;11:299-318.

Marcus, R., Drinkwater, B., Dalsky, G., **Dufek, J.**, Raab, D., Slemenda, C. & Snow-Harter, C. Osteoporosis and exercise in women. *Medicine and Science in Sports and Exercise*. 1992;24(6):S301-S307.

Dufek, J.S., Schot, P.K. & Bates, B.T. Landing performance II: Assessment and future directions. *Medicine, Exercise, Nutrition and Health*. 1993;2:135-142.

- James, R. & **Dufek, J.S.** Movement observation: What to watch...and why. *Strategies*. 1993;7(2):17-19.
- Schot, P.K. & **Dufek, J.S.** Landing performance I: Kinematic, kinetic and neuromuscular aspects. *Medicine, Exercise, Nutrition and Health*. 1993;2:69-83.
- Derrick, T.R., Bates, B.T. & **Dufek, J.S.** Evaluation of time-series data sets using the Pearson product-moment correlation coefficient. *Medicine and Science in Sports and Exercise*. 1994;26(7):919-928.
- Schot, P.K., Bates, B.T. & **Dufek, J.S.** Bilateral performance symmetry during drop landing: A kinetic analysis. *Medicine and Science in Sports and Exercise*. 1994;26(9):1153-1159.
- Dufek, J.S.**, Bates, B.T. & Davis, H.P. The effect of trial size and variability on statistical power. *Medicine and Science in Sports and Exercise*. 1995;27(2):288-295.
- Dufek, J.S.**, Bates, B.T., Stergiou, N. & James, C.R. Interactive effects of group and single-subject response patterns. *Human Movement Science*. 1995;14:301-323.
- Bates, B.T., Zhang, S., **Dufek, J.S.** & Chen, F.C. The effects of sample size and variability on the correlation coefficient. *Medicine and Science in Sports and Exercise*. 1996;28(3):386-391.
- Dufek, J.S.** & Zhang, S. Landing models for volleyball players: A longitudinal evaluation. *Journal of Sports Medicine and Physical Fitness*. 1996;36:35-42.
- Krasnow, D.H., Chatfield, S.J., Barr, S., Jensen, J.L. & **Dufek, J.S.** Imagery and conditioning practices for dancers. *Dance Research Journal*. 1997;29(1):43-64.
- Dufek, J.S.**, Mercer, J.A., Kosta, C.S. & Fish, D.J. Metabolic cost of walking with a rigid, rotational control ankle foot orthosis. *Journal of Prosthetics and Orthotics*. 1997;9(4):146-150.
- Dufek, J.S.**, Fish, D.J. & Kosta, C.S. Effects of orthotic intervention on lower extremity muscle activity during walking. *Physical Therapy Case Reports*. 1998;1(5):260-263.
- James, C.R., **Dufek, J.S.**, & Bates, B.T. Effects of injury proneness and task difficulty on joint kinetic variability. *Medicine and Science in Sports and Exercise*. 2000;32(11):1833-1844.
- Zhang, S., Bates, B.T. & **Dufek, J.S.** Contributions of lower extremity joints to energy dissipation during landings from different heights with different stiffnesses. *Medicine and Science in Sports and Exercise*. 2000;32(4):812-819.
- Mercer, J.A., **Dufek, J.S.** & Bates, B.T. Analysis of peak oxygen consumption and heart rate during elliptical and treadmill exercise. *Journal of Sport Rehabilitation*. 2001;10(1):48-56.
- Dufek, J.S.** Exercise variability: A prescription for overuse injury prevention. *Health and Fitness Journal*. 2002;6(4):18-23.

James, C.R., Bates, B.T., & **Dufek, J.S.** Classification and comparison of biomechanical response strategies for accommodating landing impact. *Journal of Applied Biomechanics*. 2003;19:106-118.

Mercer, J.A., Bates, B.T., **Dufek, J.S.** & Hreljac, A. Characteristics of shock attenuation during fatigued running. *Journal of Sport Science*. 2003;21:911-919.

James, C.R., **Dufek, J.S.**, & Bates, B.T. Effects of stretch shortening-cycle exercise fatigue on overuse injury risk during landing. *Research Quarterly for Exercise and Sport*. 2006; 77(1):1-13.

Tritsch, A.J., Mangus, B.C., **Dufek, J.S.**, Orzechowski, K.A. & Mercer, J.A. Application of isokinetic strength to dynamic performance for female athletes. *Journal of Athletic Training Supplemental*. 2006;41(2):S100.

James, C.R., Herman, J.H., **Dufek, J.S.** & Bates, B.T. Number of trials necessary to achieve performance stability of selected ground reaction force variables during landing. *Journal of Sports Science and Medicine*. 2007;6:126-134.

Tritsch, A.J., Rubley, M.D., **Dufek, J.S.**, Mercer, J.A., Neumann, E.S. Tibial rotation and valgus movement at the knee during cutting and stopping. *Journal of Athletic Training Supplemental*. 2007;42(2):S81.

Wulf, G., Zachry, T., Granados, C. & **Dufek, J.S.** Increase in jump-and-reach height through an external focus of attention. *International Journal of Sports Science and Coaching*. 2007;2(3):275-284.

Dufek, J.S., Mercer, J.A., Teramoto, K., Mangus, B.C. & Freedman, J.A. Impact attenuation and variability during running in females: A lifespan investigation. *Journal of Sport Rehabilitation*. 2008;17:230-242.

Dufek, J.S., Mercer, J.A. & Griffin, J.R. The effects of speed and surface compliance on shock attenuation characteristics for male and female runners. *Journal of Applied Biomechanics*. 2009;25:219-228.

Wulf, G. & **Dufek, J.S.** Increased jump height with an internal focus is due to enhanced lower extremity joint kinetics. *Journal of Motor Behavior*. 2009;41(5):401-409.

Mercer, J.A., **Dufek, J.S.**, Mangus, B.C., Rubley, M.R., Bhanot, K. & Aldridge, J.A. A description of shock attenuation for children running. *Journal of Athletic Training*. 2010;45(3):259-264.

Wulf, G., **Dufek, J.S.** , Lozano, L. & Pettigrew, C. Increased jump height and reduced EMG activity with an external focus of attention. *Human Movement Science*. 2010;29:440-448.

Dufek, J.S., House, A.J., Mangus, B.C., Melcher, G.G. & Mercer, J.A. Backward walking: A possible active exercise for low back pain reduction and enhanced function in athletes. *Journal of Exercise Physiology Online*. 2011;14(2):17-26.

Liebenberg, J., Scharf, J., Forrest, D., **Dufek, J.S.**, Masumoto, K., & Mercer, J.A. Determination of muscle activity during running at reduced body weight. *Journal of Sports Sciences*. 2011;29:207-214, doi 10.1080/02640414.2010.534806.

Whitley, C.R. & **Dufek, J.S.** The effect of retro-walking on hamstring flexibility and low back range of motion. *International Journal of Exercise Science*. 2011;4(3):192-198.

Candela, L., Gutierrez, A.P. **Dufek, J.S.**, Mercer, J.A., & Putney, L.G. Modifying the Diabetes Prevention Program to adolescents in a school setting: A feasibility study. *International Scholarly Research Network: Nursing*. 2012, Article ID 534085, 9 pages, doi:10/5402/2012/534085.

Dufek, J.S., Currie, R., Gouws, P.L., Candela, L., Guitierrez, A.P., Mercer, J.A., & Putney, L.G. Effects of overweight and obesity on walking characteristics in adolescents. *Human Movement Science*, 2012;31:897-906, doi:10.1016/j.humov.2011.10.003.

Santo, A.S., Roper, J.L., **Dufek, J.S.** & Mercer, J.A. Rocker-bottom, profile-type shoes do not increase lower extremity muscle activity and energy cost of walking. *Journal of Strength and Conditioning Research*. 2012;26(9):2426-2431.

Forrest, D.M., **Dufek, J.S.** & Mercer, J.A. Impact characteristics of children running in adult sized shoes. *Journal of Applied Biomechanics*. 2012;28:593-598.

Delgado, T.L., Kubera-Shelton, E., Robb, R.R., Hickman, R., Wallmann, H.W. & **Dufek, J.S.** Effects of foot strike on low back posture, shock attenuation, and comfort in running. *Medicine and Science in Sports and Exercise*. 2013;45(3):490-496, doi: 10.1249/MSS.0b013e3182781b2c.

Dufek, J.S. and Delgado, T.L. Barefoot running - More than just foot strike? *Sports Medicine Bulletin*. 2013, <http://www.multibriefs.com/briefs/acsm/active3-19.htm>.

Dufek, J.S., Forrest, D. & Mercer, J.A. If the shoe fits: Child and youth footwear considerations. *Lower Extremity Review*. 2013;5:37-41.

Roper, J.M. & **Dufek, J.S.** Exploring the gender disparity in knee valgus: Implications for ACL injuries and prevention strategies. *Wulfenia Journal*. 2013;20(5): 288-304.

Ryan-Wenger, N.A. & **Dufek, J.S.** An interdisciplinary momentary confluence of events model to explain, minimize and prevent pediatric patient falls and fall-related injuries. *Journal for Specialists in Pediatric Nursing*. 2013;18(1):4-12.

Nordin, A.D., Bailey, J.P. and **Dufek, J.S.** Implications of increased lower extremity movement variability on fall susceptibility at increased stride lengths during locomotion. *Proceedings of ASME International Mechanical Engineering Congress and Exposition*, 2013;63804:1-7.

Dufek, J.S., Neumann, E.S., Hawkins, M.C. & O'Toole, B. Functional and dynamic response characteristics of a custom composite ankle foot orthosis for Charcot-Marie-Tooth patients. *Gait & Posture*. 2014;39:308-313. <http://dx.doi.org/10.1016/>

Dufek, J.S., Neumann, E.S., Hawkins, M.C. & O'Toole, B. Management of Charcot-Marie-Tooth disease: A contemporary approach to evaluate brace effectiveness. *Lower Extremity Review*. 2014;6(2):23-30.

James, C.R., Atkins, L.T., **Dufek, J.S** & Bates, B.T. An exploration of load accommodation strategies during walking with extremity-carried weights. *Human Movement Science*, 2014;35:17-29.

Roper, J.M., **Dufek, J.S.** & Mermier, C. Gait retraining with foot strike patterns as management for patellofemoral pain syndrome: A brief review. *International Journal of Sport Science*. 2014;4(5):111300109.

Hickman, R., **Dufek, J.S.** Lee, S-P., Blahovec, A., Kuiken, A., Riggins, H., & McClellan, J.R. Feasibility of using a large amplitude movement therapy to improve ambulatory function in children with cerebral palsy. *Physiotherapy Theory and Practice*. 2015;31(6):382-389: DOI: 10.3109/09593985.2015.1011295.

James, C.R., Atkins, L.T., Yang, H.S., **Dufek, J.S.** & Bates, B.T. Kinematic and ground reaction force accommodation during weighted walking. *Human Movement Science*. 2015;44:327-337.

DeBerardinis, J., Trabia, M.B. & **Dufek, J.S.** Detection of diabetic ulceration through plantar pressure measurement: A review. *Open Access Journal of Science and Technology*. 2016;4, Article ID 101158, 7 pages. Doi:10.11131/2016/101158.

Lee, S-P., **Dufek, J.S.**, Hickman, R. & Schuerman, S. Influence of procedural factors on the performance of the Timed Up and Go test in older adults. *International Journal of Gerontology*. 2016;10(1).

Bailey, J., Mercer, J.A. & **Dufek, J.S.** A comprehensive analysis during a 15K training run. *International Journal of Sports and Exercise Medicine*. 2016;2:039.

Roper, J., Harding, E., Doerfler, D. Dexter, J.G. Kravitz, L., **Dufek, J.S.**, & Mermier, C.M. The effects of gait retaining in runners with patello-femoral pain. *Clinical Biomechanics*. 2016;35:14-22. Doi: 10,1016/j.clinbiomech.2016.03.010.

Dufek, J.S., Harry, J., Soucy, M., Guadagnoli, M. & Lounsbery, M.A.F. Effects of active workstation use on walking mechanics and work efficiency. *Journal of Novel Physiotherapies*. 2016;6:289. Doi:10/4172/2165-7025/1000289.

Nordin, A.D. & **Dufek, J.S.** Neuromechanical synergies in single-leg landing identify changes in movement control. *Human Movement Science*. 2016; 49:66-78.

Bates, B.T., **Dufek, J.S.**, James, C.R., Harry, J.R. & Eggleston, J.D. The influence of experimental design on the detection of performance differences. *Measurement in Physical Education and Exercise Science*. 2016, <http://dx.doi.org/10.1080/1091376X.2016.1198910>.

Nordin, A.D. and **Dufek, J.S.** Single leg landing neuromechanical data following load and land height manipulations. *Data in Brief: Human Movement Science*, 2016.
[Http://dx.doi.org/10.1016/j.dib.2016.07.011](http://dx.doi.org/10.1016/j.dib.2016.07.011).

Nordin, A.D., **Dufek, J.S.**, James, C.R. & Bates, B.T., Classifying performer strategies in drop landing activities. *Journal of Sports Sciences*. doi:10.1080/02640414.2016.1240876.

Nordin, A.D., **Dufek, J.S.** & Mercer, J.A. Three-dimensional impact kinetics with foot-strike manipulations during running. *Journal of Sport and Health Science* (in press doi: 10.1016/j.jshs.2015.11.003).

Dufek, J.S., Eggleston, J.D., Harry, J.R. & Hickman, R. A comparative evaluation of gait between children with autism and typically developing matched controls. *Medical Sciences*. 2017; 5,1;doi:10.3390/medsci5010001.

Prado, A. **Dufek, J.S.**, Navalta, J., Lough, N. & Mercer, J. A first look into the influence of triathlon wetsuit on resting blood pressure and heart rate variability. *Biology of Sport*. 2017; 34:77-82.

Barker, L.A., Harry, J.R., **Dufek, J.S.** & Mercer, J.A. Aerial rotation effects on vertical jump performance among highly skilled collegiate soccer players. *Journal of Strength and Conditioning Research*. 2017; 31(4):932-938, Doi: 10.1519/JSC.0000000000001557.

Nordin, A.D. & **Dufek, J.S.** Lower extremity kinetic variability changes with drop landing height manipulations. *Research in Sports Medicine*. 2017; 25(2):144-155, Doi: 10.1080/15438627.2017.1282353.

Eggleston, J.D. Harry, J.R., Hickman, R.A. & **Dufek, J.S.** Analysis of gait symmetry during over-ground walking in children with Autism Spectrum Disorder. *Gait & Posture*. 2017; 55:162-166.

Hickman, R. Popescu, L., Manzanares, R. Morris, B. Lee, S-P, & **Dufek, J.S.** Use of active video gaming in children with neuromotor dysfunction: A systematic review. *Developmental Medicine & Child Neurology*. May 2017; doi: 10.1111/dmcn.13464.

Ryan-Wenger, N.A. & **Dufek, J.S.** Biomechanics of pediatric patient falls and the potential for concussion. *Journal for Specialists in Pediatric Nursing*. 22:n/a, e12170.doi: 10.1111/jspn.12170.

James, C.R. Atkins, L.T., Yang, H.S., **Dufek, J.S.** & Bates, B.T. Prediction of calcaneal bone competence from biomechanical accommodation variables measured during weighted walking. *Human Movement Science*. 2017; 56:37-45.

Harry, J.R., Barker, L.A., Mercer, J.A. & **Dufek, J.S.** Vertical and horizontal impact force comparison during jump-landings with and without rotation in NCAA Division 1 male soccer players. *Journal of Strength and Conditioning Research*. Doi: 10.1519/JSC.0000000000001650 (in press).

Nordin, A.D., & **Dufek, J.S.** Load accommodation strategies and movement variability in single-leg landing. *Journal of Applied Biomechanics* (in press).

Roper, J., Doerfler, D., Kravitz, L., **Dufek, J.S.**, & Mermier, C.M. Gait retraining from rearfoot strike to forefoot strike does not change running economy. *International Journal of Sports Medicine*. (in press).

Dufek, J.S., Ryan-Wenger, N., Eggleston, J.D. & Mefferd, K. A novel approach to assess head injury severity in pediatric patient falls, *Journal of Pediatric Health Care* (in press).

Harry, J.R., Barker, L.A., James, C.R. & **Dufek, J.S.** Performance differences during vertical jump landings among skilled soccer players of different playing positions. *Journal of Strength and Conditioning Research* (in press).

Harry, J.R., Freedman Silvernail, J.A., Mercer, J.A. & **Dufek, J.S.** Comparison of pre-contact joint kinematics and vertical impulse between vertical jump landings and step-off landings from equal heights. *Human Movement Science* (in press).

PUBLICATIONS, Textbook Chapters

Dufek, J.S. & Bates, B.T. (1990). Foot pressure and temporal patterns during overground and treadmill walking. In C.O. Dotson & J.H. Humphrey, (Eds.), *Exercise Physiology: Current Selected Research* (pp. 179-186). New York: AMS Press.

Crussemeyer, J.A. & **Dufek, J.S.** (2000). Biomechanics. In B.L. Drinkwater (Ed.), *Women in Sport: Olympic Encyclopaedia of Sports Medicine & Science* (pp. 93-107). Oxford, England: Blackwell Science.

Bates, B.T., James, C.R. & **Dufek, J.S.** (2004). Single subject analysis. In N. Stergiou (Ed.), *Innovative Analyses of Human Movement* (pp. 3-28). Champaign, IL: Human Kinetics.

PUBLICATIONS, Extended Abstracts and Non-Refereed

Dillman, C.J. & **Dufek, J.S.** (1983). A comparative analysis between roller and on-snow skiing. Ski Coach, 6(4), 4-8, 17.

Dufek, J.S. & Fenton, R.M. (1984). Electrodynamogram force analysis in cross-country skiing: A preliminary investigation. In J. Terauds, K. Barthels, E. Kreighbaum, R. Mann and J. Crakes (Eds.), Sports Biomechanics (pp. 227-230). Del Mar, California: Academic Publishers.

Dillman, C.J., **Dufek, J.S.** & Cheetham, P.J. (1984). Body stability and performance in archery. U.S. Archer, 3(1), 38-41.

Dufek, J.S., Wiese, D.M. & Bates, B.T. (1987). The effect of velocity on in-boot forces for the cross-country ski diagonal stride. Proceedings of the 11th Annual American Society of Biomechanics, (pp. 165-166). University of California-Davis.

McCaw, S.T., Bates, B.T. & **Dufek, J.S.** (1988). Interday variability of ground reaction force symmetry. Human Locomotion V, Proceedings of the Fifth Biennial Conference of the Canadian Society for Biomechanics (pp. 106-107). London, Ontario: Spodym Publishers.

Bates, B.T., Davis, H.P. & **Dufek, J.S.** (1989). Court shoe evaluation during landings. Proceedings of the 13th Annual American Society of Biomechanics, (pp. 182-183). University of Vermont.

Dufek, J.S. (1989). The effects of landing on lower extremity function (abstract), ISB Newsletter, 35, p. 10.

Dufek, J.S. & Bates, B.T. (1989). Models incorporating height, distance and landing technique to predict impact forces. Proceedings of the 12th International Congress of Biomechanics, abstract #15. University of California-Los Angeles.

Dufek, J.S., Schot, P.K. & Bates, B.T. (1989). Joint mechanical powers of the lower extremity during walking and running. Proceedings of the 13th Annual American Society of Biomechanics, (pp. 114-115). University of Vermont.

Schot, P.K., **Dufek, J.S.** & Bates, B.T. (1989). Lower extremity moments of force during three gait conditions. Proceedings of the 12th International Congress of Biomechanics, abstract #94. University of California-Los Angeles.

Bates, B.T., **Dufek, J.S.** & Davis, H.P. (1990). The effect of sample and trial sizes on statistical power/results. Human Locomotion VI, Proceedings of the Sixth Biennial Conference of the Canadian Society for Biomechanics, (pp. 63-64). Quebec City, Quebec, Canada.

Dufek, J.S. & Bates, B.T. (1990). Regression models for predicting impact forces and knee joint moments and powers during landings. Human Locomotion VI, Proceedings of the Sixth Biennial Conference of the Canadian Society for Biomechanics, (pp. 55-56). Quebec City, Quebec, Canada.

Dufek, J.S. & Bates, B.T. (1990). The relationship between maximum ground reaction forces and lower extremity extensor joint moments during landing. Proceedings of the 14th Annual American Society of Biomechanics, (pp. 205-206). University of Miami.

Dufek, J.S. & Bates, B.T. (1991). Neurons, skills and toys. In E. Zemper, G. Steigelman and S. James (Eds.), Sport Science Symposium: Proceedings from the VIIIth World Veterans' Championships, (pp. 15-18). Eugene, Oregon: University of Oregon Printing Services.

Dufek, J.S., Caster, B.L. & Bates, B.T. (1991). Evaluation of position constraints on landing performance. Proceedings of the 15th Annual American Society of Biomechanics, (pp. 226-227). Arizona State University.

Schot, P.K., **Dufek, J.S.** & Bates, B.T. (1991). Individual joint contributions to shock absorption during vertical drop landings. Proceedings of the 15th Annual American Society of Biomechanics, (pp. 224-225). Arizona State University.

Bates, B.T. & **Dufek, J.S.** (1992). Three-dimensional analysis of barcode scanning. Technical Report, Spectra-Physics, Inc.

Caster, B.L., Bates, B.T. & **Dufek, J.S.** (1992). A multi-dimensional assessment of the functionality of cross training athletic footwear. Proceedings of NACOB II, The Second North American Congress on Biomechanics, (pp. 275-276). Chicago: Organizing Committee.

Dufek, J.S. (1992). Application of the joint moment of force parameter to research in the movement sciences. Research Quarterly for Exercise and Sport, 63, A-17.

Dufek, J.S. & Bates, B.T. (1992). Performance and variable assessment models for landings. Proceedings: 8th Meeting of the European Society of Biomechanics, (p. 328). Coni-Scuola dello Sport, Rome.

Dufek, J.S., Derrick, T.R. & Bates, B.T. (1992). Variability of two types of landings. Proceedings of NACOB II, The Second North American Congress on Biomechanics, (pp. 551-552). Chicago: Organizing Committee.

James, R., **Dufek, J.S.** & Bates, B.T. (1992). Effects of fatigue on mechanical and muscular components of drop landings. Proceedings of NACOB II, The Second North American Congress on Biomechanics, (pp. 553-554). Chicago: Organizing Committee.

Dufek, J.S., Caster, B.L. & James, R. (1993). Relationships among initial body positions and implied joint stiffness on landing impact forces and muscular activity. Proceedings of the 13th International Congress of Biomechanics, (pp. 364-365). Paris: Organizing Committee.

Dufek, J.S. & Schot, P.K. (1993). Identification of variable types for prediction of impact forces. Research Quarterly for Exercise and Sport, 64, A-19.

Bates, B.T., Zhang, S., **Dufek, J.S.** & Chen, F. (1994). The effects of sample size and variability on the correlation coefficient. Proceedings, Eighth Biennial Conference, Canadian Society for Biomechanics, (pp. 292-293). Calgary: Organizing Committee.

Caster, B.L., Chen, F.C., **Dufek, J.S.** & Bates, B.T. (1994). Single subject design in biomechanics research: Justification of statistical assumptions. Proceedings, Eighth Biennial Conference, Canadian Society for Biomechanics, (pp. 294-295). Calgary: Organizing Committee.

Dufek, J.S. & James, C.R. (1994). Modeling landing impacts. Proceedings, Eighth Biennial Conference, Canadian Society for Biomechanics, (pp. 176-177). Calgary: Organizing Committee.

Zhang, S., **Dufek, J.S.** & Bates, B.T. (1994). Viability of bootstrap techniques in biomechanics research. Proceedings, Eighth Biennial Conference, Canadian Society for Biomechanics, (pp. 310-311). Calgary: Organizing Committee.

Zhang, S., Bates, B.T. & **Dufek, J.S.** (1996). Selected knee joint forces during landing activities. Proceedings, American Society of Biomechanics Annual Meeting. Atlanta: Organizing Committee.

Mercer, J.A., Kindling, L.A. Arata, A.W., Hreljac, A., **Dufek, J.S.** & Bates, B.T. (1998). The effect of the quadricep and hamstring fatigue during running. Proceedings of NACOB III, The Third North American Congress on Biomechanics. Waterloo: Organizing Committee.

Teramoto, K., **Dufek, J.S.**, & Mercer, J.A. (2006). The effect of local muscle fatigue on shock attenuation for female runners. Proceedings, American Society of Biomechanics Annual Meeting: abstract #144. Blacksburg, VA.

Aldridge, J.A., Melcher, G.G., Mercer, J.A. & **Dufek, J.S.** (2009). Exploration of a novel task for improvement of balance in older adults. Medicine and Science in Sports and Exercise, 41(5):s219.

Forrest, D.M., **Dufek, J.S.**, Masumoto, K., & Mercer, J.A. (2009). Muscle activity during running at reduced body weight. Medicine and Science in Sports and Exercise, 41(5):s513.

Whitley, C.R. & **Dufek, J.S.** (2009). The effect of retro locomotion on flexibility of the low back and hamstrings. Medicine and Science in Sports and Exercise, 41(5):s358.

Dufek, J.S., Mercer, J.A., Aldridge, J.M., Melcher, G.G. & Gouws, P-L. (2009). Effects of backward walking on balance and lower extremity walking kinematics in healthy young and older adults. Proceedings, American Society of Biomechanics Annual Meeting: abstract #1022. State College, PA.

Dufek, J.S., House, A.J., Mangus, B.C., Mercer, J.A. & Melcher, G.G. (2010). Effects of backward walking as a modality for low back pain reduction in athletes. Proceedings of the

XXVIIIth International Society of Biomechanics in Sports Conference (R. Jensen, Ed.), pp. 289-294. Northern Michigan University, Marquette, MI.

Neumann, E.S., **Dufek, J.S.** & Hawkins, C. (2010). Kinematic and kinetic outcomes of Helios use among eight CMT subjects. Report submitted to the Hereditary Neuropathy Foundation and Ortho Rehab Designs, 75 pages.

Dufek, J.S., Mercer, J.A., Currie, R., Gouws, P-L., Candela, L., Gutierrez, A.P., and Putney, L.G. (2011). Effects of obesity on symmetry and spatio-temporal characteristics of adolescent gait. Proceedings, American Society of Biomechanics Annual Meeting: abstract #113, Long Beach, CA.

Roper, J.L., DeMattei, M., Santo, A.S, **Dufek, J.S.** & Mercer, J.A. (2011). Lower extremity muscle activity while walking in Shape-Up shoes. *Medicine & Science in Sports & Exercise*. 43(5):314, doi: 10.1249/01.MSS.0000400865.16514.8e.

Santo, A.A., DeMattei, M. Roper, J.L., **Dufek, J.S.** & Mercer, J.A. (2011). Skecher Shape-Ups do not increase the metabolic cost of walking. *Medicine & Science in Sports & Exercise*. 43(5):267, doi: 10.1249/01.MSS.0000400732.92269.42.

Dufek, J.S. (2012). Load accommodation strategies during running: Effects of footwear type and foot strike pattern. Proceedings, Noraxon Fall 2012 Research Symposium, abstract #5, Las Vegas, NV.

INVITED PRESENTATIONS

Neurons, skill and toys. World Veteran's Games Sport Science Symposium, Eugene, Oregon, July 1989.

Biomechanics: State of the art/science. Northwest Regional American College of Sports Medicine Annual Meeting, Spokane, Washington, February 1991.

Biomechanical comparison of land and water running. User's Group Meeting, Ariel Life Systems, Inc., La Jolla, California, May 1992.

Dynamic landing activities: Understanding injury and performance mechanisms. Western College Physical Education Society, Reno, Nevada, October 1992.

Biomechanics in the clinic: Needs and applications. Second Annual Symposium on Pathomechanical Conditions of the Human Body, New Orleans, Louisiana, January 1993.

Landing impacts: An invitation for injury? Examination of modeling techniques. Biomechanics Academy; American Alliance for Health, Physical Education, Recreation and Dance Annual Convention, Washington, D.C., March 1993.

Lower extremity function during landing. National Athletic Trainers' Association Annual Convention, Kansas City, Missouri, June 1993.

Biomechanics: What is it??! High School Student Assembly, Ashland Public School System, Ashland, Wisconsin, December 1993.

Clinical quantification: Overview of foot pressure systems and technology. Third Annual Symposium on Pathomechanical Conditions of the Human Body, New Orleans, Louisiana, January 1994.

Human variability: Confusing? Confounding? Constraining? Symposium Presentation at American College of Sports Medicine Annual Meeting, Indianapolis, Indiana, June 1994.

Status of research in biomechanics: Issues of design and methodology. Research Consortium Newsletter (invited manuscript), January 1995.

Triplanar pathomechanics of the lower limb. American Physical Therapy Association Annual Meeting, San Diego, California, June 1997.

The 'Hows' and 'Whys' of Single Subject Analysis (with B.T. Bates, J.A. Mercer & N. Stergiou). American Society of Biomechanics Annual Meeting Tutorial, Chicago, Illinois, July 2000.

Single Subject Analysis Techniques. Biomechanics Invitational Symposium, University of Nevada, Las Vegas, Las Vegas, Nevada, February 2001.

I Run, I Jump, I Hurt: Biomechanical Implications of Impact Activities. Southwest Chapter of the American College of Sports Medicine Annual Meeting, San Diego, California, November 2007.

Too Much Exercise? Biomechanics of Walking the Injury Tight Rope. Southwest Chapter of the American College of Sports Medicine Annual Meeting, San Diego, California, November 2008.

Exergames as Scientific Tools: Applications (and Limitations). Southwest Chapter of the American College of Sports Medicine Annual Meeting, Reno, Nevada, October 2011.

Does “Less Shoe” Reduce Running Injuries? (The Minimalist Debate). Nevada Academy of Family Physicians 23rd Annual Summer Continued Medical Education Meeting, Las Vegas, NV, August 2012.

Load Accommodation Strategies during Running: Effects of Footwear Type and Foot Strike Pattern. Noraxon Research Symposium Fall 2012, Las Vegas, NV, November 2012.

Foot Strike and Forces: The Minimalist Debate. Texas Tech University Health Sciences Center, Lubbock, TX, April 2013.

Foot Strike, Forces and Function: The Minimalist Debate. Brown Bag Lunch Speaker; School of Nursing and School of Allied Health Sciences, University of Nevada, Las Vegas, May 2013.

Find Your Passion – Live Your Dreams. UNLV Creates, 2014, University of Nevada, Las Vegas, August 2014.

Toward the Development of a Smart Orthotic to Address Diabetic Neuropathy: The Scientific Pathway. UNLV’s Third Annual STEM Summit, University of Nevada, Las Vegas, January 2015.

A Technique to Determine Plantar Tissue Stiffness During Locomotion: Implications for Detection of Diabetic Plantar Ulceration, UNLV Gala Celebration, University of Nevada, Las Vegas, April 2015.

Younger and Older: Development and Implementation of Novel Technology for Measuring and Improving Functional Movement Across the Lifespan. UNLV Gala Celebration, University of Nevada, Las Vegas, April 2015.

A Technique to Determine Plantar Tissue Stiffness During Locomotion: Implications for Detection of Diabetic Plantar Ulceration, VA-UNLV Research Day, Veteran’s Administration Hospital, North Las Vegas, NV, May 2015.

The Rebel “STEM” Academy: Bringing Students to the Science. American Society of Biomechanics Annual Meeting, Columbus, OH, August 2015.

Are You Content with Your Content? Rebel Grad Slam Workshop, Graduate College, University of Nevada, Las Vegas, September 2015.

3MT® Content: Three Very Important Slides. Are You Content with Your Content? Rebel Grad Slam Workshop, Graduate College, University of Nevada, Las Vegas, September 2016.

Navigating the Academy: Ambiguity Abounds. Panel Speaker. Gait and Clinical Movement Analysis Society Annual Meeting, Student Symposium. Salt Lake City, UT, May 2017.

PEER REVIEWED PRESENTATIONS

Dufek, J.S. & Fenton, R.M. Electrodynamogram force analysis in cross-country skiing. Second International Symposium on Biomechanics in Sports, Colorado Springs, Colorado, January 1984.

Simpson, K.J., **Dufek, J.S.** & DeVita, P. Computer graphics in biomechanics. Pacific Northwest Computer Graphics Conference, Eugene, Oregon, October 1984.

Dufek, J.S. & Bates, B.T. Temporal gait characteristics of cross-country skiers. Xth International Congress of Biomechanics, Umea, Sweden, June 1985.

Dufek, J.S., Simpson, K.J. & Wiese, D.M. The effect of overground and treadmill walking on selected temporal and kinetic measurements: a pilot study. Northwest Regional American College of Sports Medicine Annual Meeting, Portland, Oregon, April 1987, Student Presentation Award.

Bates, B.T., McCaw, S.T. Simpson, K.J. & **Dufek, J.S.** Intraday variability of two measurement systems. XIth International Congress of Biomechanics, Amsterdam, The Netherlands, June 1987.

Dufek, J.S., Wiese, D.M. & Bates, B.T. The effect of velocity on in-boot forces for the cross-country ski diagonal stride. 11th Annual American Society of Biomechanics Meeting, Davis, California, September 1987.

Bates, B.T., McCaw, S.T., **Dufek, J.S.** & Simpson, K.J. Interday variability of two measurement systems. IEEE Engineering in Medicine and Biology Conference, Boston, Massachusetts, November 1987.

Dufek, J.S. & Wiese, D.M. A practical solution to variable selection in biomechanics. Northwest Regional American College of Sports Medicine Annual Meeting, Coure d'Alene, Idaho, February 1988.

Wiese, D.M., **Dufek, J.S.** & McCaw, S.T. The effect of three backpack weightloads on temporal and kinetic factors during level walking. Northwest Regional American College of Sports Medicine Annual Meeting, Coure d'Alene, Idaho, February 1988.

Dufek, J.S., Bates, B.T. & Geier, P.E. Foot pressure and temporal patterns in overground and treadmill walking. American Alliance for Health, Physical Education, Recreation and Dance National Convention, Kansas City, Missouri, April 1988.

Simpson, K.J., **Dufek, J.S.**, Abendroth-Smith, J. & Bates, B.T. Determination of gait asymmetry using an in-shoe pressure system. American Alliance for Health, Physical Education, Recreation and Dance National Convention, Kansas City, Missouri, April 1988.

Schot, P.K. & **Dufek, J.S.** Lower extremity moments of force during walk, transition and run. Northwest Regional American College of Sports Medicine Annual Meeting, Blaine, Washington, February 1989.

Dufek, J.S. & Bates, B.T. Impact forces during landings. American Alliance for Health, Physical Education, Recreation and Dance National Convention, Boston, Massachusetts, April 1989.

Dufek, J.S. & Bates, B.T. Models incorporating height, distance and landing technique to predict impact forces. XIIth International Congress of Biomechanics, Los Angeles, California, June 1989.

Schot, P.K., **Dufek, J.S.** & Bates, B.T. Lower extremity moments of force during three gait conditions. XIIth International Congress of Biomechanics, Los Angeles, California, June 1989.

Dufek, J.S. & Bates, B.T. Neurons, skills and toys. Sport Science Symposium of the VIII World Veterans' Track and Field Championships, Eugene, Oregon, July 1989.

Bates, B.T., Davis, H.P. & **Dufek, J.S.** Court shoe evaluation during landings. 13th Annual American Society of Biomechanics Meeting, Burlington, Vermont, August 1989.

Dufek, J.S., Schot, P.K. & Bates, B.T. Joint mechanical powers of force during walking and running. 13th Annual American Society of Biomechanics Meeting, Burlington, Vermont, August 1989.

Schot, P.K., **Dufek, J.S.** & Bates, B.T. Comparison of lower extremity joint kinetics during locomotion: Walking versus power walking. Northwest Regional American College of Sports Medicine Annual Meeting, Portland, Oregon, February 1990.

Dufek, J.S., Schot, P.K. & Bates, B.T. Lower extremity moments of force during landings. American College of Sports Medicine Annual Conference, Salt Lake City, Utah, May 1990.

Bates, B.T., **Dufek, J.S.** & Davis, H.P. The effects of sample and trial sizes on statistical power/results. Sixth Biennial Conference of Canadian Society for Biomechanics, Quebec, Canada, August 1990.

Dufek, J.S. & Bates, B.T. Regression models for predicting impact forces and knee joint moments and powers during landings. Sixth Biennial Conference of Canadian Society for Biomechanics, Quebec, Canada, August 1990.

Schot, P.K., **Dufek, J.S.** & Caster, B.L. Evaluation of bilateral symmetry of vertical ground reaction forces during drop landings. First World Congress of Biomechanics, La Jolla, California, August 1990.

Dufek, J.S., Caster, B.L. & Bates, B.T. The relationship between maximum ground reaction forces and lower extremity extensor joint moments during landing. 14th Annual American Society of Biomechanics Meeting, Miami, Florida, November 1990.

Caster, B.L., Bates, B.T. & **Dufek, J.S.** Mechanical and neuromuscular control components of impact activities. Northwest Regional American College of Sports Medicine Annual Meeting, Spokane, Washington, February 1991.

Chen, F.C., **Dufek, J.S.** & Bates, B.T. A comparison of massage and accupressure treatments on muscle relaxation and recovery rate. Northwest Regional American College of Sports Medicine Annual Meeting, Spokane, Washington, February 1991.

Dufek, J.S. Integrating biomechanics and motor control/learning. Kinesiology Academy Symposium, American Alliance for Health, Physical Education, Recreation and Dance National Convention, San Francisco, California, April 1991.

Dufek, J.S., Caster, B.L. & Bates, B.T. Evaluation of position constraints on landing performance. 15th Annual American Society of Biomechanics Meeting, Tempe, Arizona, October 1991.

Schot, P.K., **Dufek, J.S.** & Bates, B.T. Individual joint contributions to shock absorption during vertical drop landings. 15th Annual American Society of Biomechanics Meeting, Tempe, Arizona, October 1991.

Griffin, L.A., **Dufek, J.S.** & Bates, B.T. Methods and instrumentation in water research. XIIIth International Congress on Biomechanics, Perth, Australia, December 1991.

Chen, F.C. & **Dufek, J.S.** The effects of two different stepper machines on selected kinematic variables. Northwest Regional American College of Sports Medicine Annual Meeting, Seattle, Washington, February 1992.

Zhang, S. & **Dufek, J.S.** Characteristics of selected kinematic and kinetic variables during jumping. Northwest Regional American College of Sports Medicine Annual Meeting, Seattle, Washington, February 1992.

Dufek, J.S. Application of the joint moment of force parameter to research in the movement sciences. Research Consortium Symposium, American Alliance for Health, Physical Education, Recreation and Dance National Convention, Indianapolis, Indiana, April 1992.

Dufek, J.S. & Bates, B.T. Performance and variable assessment models for landing. European Society of Biomechanics, Rome, Italy, June 1992.

Griffin, L.A., **Dufek, J.S.** & Bates, B.T. A biomechanical comparison of running between media. Xth International Symposium of Biomechanics in Sports, Milan, Italy, June 1992.

Caster, B.L., Bates, B.T. & **Dufek, J.S.** A multi-dimensional assessment of the functionality of cross training athletic footwear. NACOB II: Second North American Congress on Biomechanics, Chicago, Illinois, August 1992.

Dufek, J.S., Derrick, T.R. & Bates, B.T. Variability of two types of landings. NACOB II: Second North American Congress on Biomechanics, Chicago, Illinois, August 1992.

James, R., **Dufek, J.S.** & Bates, B.T. Effects of fatigue on mechanical and muscular components of performance during drop landings. NACOB II: Second North American Congress on Biomechanics, Chicago, Illinois, August 1992.

Chen, F.C. & **Dufek, J.S.** Comparison of normal and pathological walking using center of pressure and strike indexes. Northwest Regional American College of Sports Medicine Annual Meeting, Eugene, Oregon, February 1993.

James, R., **Dufek, J.S.** & Bates, B.T. Effects of fatigue on lower extremity performance models during drop landings. Northwest Regional American College of Sports Medicine Annual Meeting, Eugene, Oregon, February 1993.

Ober, K.M., Combs, C.M. & **Dufek, J.S.** Biomechanical analysis of joint flexibility in arthritic subjects participating in an exercise program. Northwest Regional American College of Sports Medicine Annual Meeting, Eugene, Oregon, February 1993.

Ouellette, M.J., Chen, F.C. & **Dufek, J.S.** Stair height and its effect on center of pressure. Northwest Regional American College of Sports Medicine Annual Meeting, Eugene, Oregon, February 1993.

Zhang, S., **Dufek, J.S.** & Bates, B.T. Jump height prediction using biomechanical performance characteristics. Northwest Regional American College of Sports Medicine Annual Meeting, Eugene, Oregon, February 1993.

Dufek, J.S. & Schot, P.K. Identification of variable types for prediction of impact forces. American Alliance of Health, Physical Education, Recreation and Dance Annual Convention, Washington, D.C., March 1993.

Chen, F.C., Bates, B.T. & **Dufek, J.S.** Using the strike index in gait analysis. East Coast Gait Conference, Rochester, Minnesota, May 1993.

Bates, B.T., **Dufek, J.S.** & Davis, H.P. Relationship between sample size, data reliability, effect size and subject variability. American College of Sports Medicine Annual Meeting, Seattle, Washington, June 1993.

Dufek, J.S. Landing models for elite athlete performances across a competitive season. American College of Sports Medicine Annual Meeting, Seattle, Washington, June 1993.

James, R., **Dufek, J.S.** & Bates, B.T. Effects of fatigue on lower extremity performance models during drop landings. American College of Sports Medicine Annual Meeting, Seattle, Washington, June 1993.

Zhang, S., **Dufek, J.S.** & Bates, B.T. Jump height prediction using biomechanical performance characteristics. American College of Sports Medicine Annual Meeting, Seattle, Washington, June 1993.

Dufek, J.S., Caster, B.L. & James, R. Relationships among initial body positions and implied joint stiffness on landing impact forces and muscular activity. XIVth International Society of Biomechanics Congress, Paris, France, July 1993.

James, C.R., **Dufek, J.S.** & Bates, B.T. Fatigue accommodation during landing. Northwest Regional American College of Sports Medicine Annual Meeting, Boise, Idaho, February 1994.

Zhang, S., **Dufek, J.S.**, Albert, S. & Chen, F.C. Longitudinal study of a diabetes mellitus patient using an insole pressure system. Northwest Regional American College of Sports Medicine Annual Meeting, Boise, Idaho, February 1994.

Combs, C.M., **Dufek, J.S.**, Bates, B.T. & Davis, H.P. Object manipulations in an occupational setting. American College of Sports Medicine Annual Meeting, Indianapolis, Indiana, June 1994.

Dufek, J.S., Bates, B.T., Caster, B.L., McCaw, S.T. & Schot, P.K. Human performance repeatability: A random model? American College of Sports Medicine Annual Meeting, Indianapolis, Indiana, June 1994.

James, C. R., **Dufek, J.S.** & Bates, B.T. Muscular and mechanical accommodation to fatigue. American College of Sports Medicine Annual Meeting, Indianapolis, Indiana, June 1994.

Zhang, S., **Dufek, J.S.**, Albert, S. & Chen, F.C. Longitudinal study of a diabetes mellitus patient using an insole pressure system. American College of Sports Medicine Annual Meeting, Indianapolis, Indiana, June 1994.

Bates, B.T., Zhang, S., **Dufek, J.S.** & Chen, F.C. The effects of sample size and variability on the correlation coefficient. Canadian Society for Biomechanics VIIIth Biennial Conference, Calgary, Alberta, August 1994.

Caster, B.L., Chen, F.C., **Dufek, J.S.** & Bates, B.T. Single subject design in biomechanics research: Justification of statistical assumptions. Canadian Society for Biomechanics VIIIth Biennial Conference, Calgary, Alberta, August 1994.

Dufek, J.S. & James, R. Landing impact models. Canadian Society for Biomechanics VIIIth Biennial Conference, Calgary, Alberta, August 1994.

Zhang, S., **Dufek, J.S.** & Bates, B.T. Viability of bootstrap techniques in biomechanics research. Canadian Society for Biomechanics VIIIth Biennial Conference, Calgary, Alberta, August 1994.

James, C.R. & **Dufek, J.S.** Comparison of muscular activity and mechanical constraints for prediction of landing impact forces. American College of Sports Medicine Annual Meeting, Minneapolis, Minnesota, June 1995.

Zhang, S. & **Dufek, J.S.** Evaluation of playing experience on volleyball block-jump performance. American College of Sports Medicine Annual Meeting, Minneapolis, Minnesota, June 1995.

Krasnow, D.H., Chatfield, S.J., Barr, S., Jensen, J.L. & **Dufek, J.S.** Imagery and conditioning practices for dancers. International Association for Dance Medicine and Science, Tel-Aviv, Israel, June 1995.

Bates, B.T. & **Dufek, J.S.** Lower extremity function during running and landing. International Conference for Women, Alexandria, Egypt, October, 1995.

Bates, B.T., **Dufek, J.S.** & Zhang, S. Landing models: Evaluation of elite volleyball players. International Conference for Women, Alexandria, Egypt, October, 1995.

Crussemeyer, J., Ludwick, G., Dasho, J. & **Dufek, J.** Step aerobics: Power or not? Northwest Regional American College of Sports Medicine Annual Meeting, Corvallis, Oregon, February, 1996.

Kean, J., Crussemeyer, J., & **Dufek, J.** Do people understand lifting? Northwest Regional American College of Sports Medicine Annual Meeting, Corvallis, Oregon, February, 1996.

Mercer, J., Adams, T., & **Dufek, J.** Effectiveness of a triplanar rigid ankle orthosis: A case study. Northwest Regional American College of Sports Medicine Annual Meeting, Corvallis, Oregon, February, 1996.

James, C.R., **Dufek, J.S.** & Bates, B.T. Effects of overuse injury proneness on joint kinetic variability during landing. American College of Sports Medicine Annual Meeting, Cincinnati, Ohio, May 1996.

Zhang, S., **Dufek, J.S.** & Bates, B.T. Mechanical demands on the knee joint during landing activity. American College of Sports Medicine Annual Meeting, Cincinnati, Ohio, May 1996.

Dufek, J.S., Mercer, J.A., Fish, D., Kosta, C.S. & Fish, D. Efficacy of a tri-planar rigid AFO for walking: A case study. Canadian Society for Biomechanics Biennial Meeting, Vancouver, British Columbia, August 1996.

Zhang, S., Bates, B.T., & **Dufek, J.S.** Selected knee joint forces during landing activities. American Society of Biomechanics Annual Meeting, Atlanta, Georgia, October 1996.

Zhang, S, Bates, B.T. & **Dufek, J.S.** Regulation of lower extremity stiffness during landings. American College of Sports Medicine Annual Meeting, Denver, Colorado, May 1997.

Crussemeyer, J.A., Fish, D.J. & **Dufek, J.S.** Load bearing relief and PTBO Applications. American Physical Therapy Association Scientific Meeting and Exposition, San Diego, California, June 1997.

Dufek, J.S., Fish, D.J. & Kosta, C.S. Effects of orthotic intervention and gait training on muscle activity: A follow-up case study. American Physical Therapy Association Scientific Meeting and Exposition, San Diego, CA, June 1997.

Mercer, J.A., **Dufek, J.S.**, Kosta, C.S. & Fish, D.J. Metabolic cost of walking with a rigid, rotational control AFO. American Physical Therapy Association Scientific Meeting and Exposition, San Diego, California, June 1997.

James, C.R., Bates, B.T. & **Dufek, J.S.** Comparison of right vs. left leg GRF landing symmetry for healthy and overuse injury-prone recreational athletes. International Society of Biomechanics in Sports Annual Meeting, Denton, Texas, July 1997.

Mercer, J.A., James, C.R., Zhang, S., **Dufek, J.S.** & Bates, B.T. Single subject analysis of landing strategies. American College of Sports Medicine Annual Meeting, Orlando, Florida, June 1998.

Mercer, J.A., Kindling, L.A. Arata, A.W., Hreljac, A., **Dufek, J.S.** & Bates, B.T. The effect of the quadriceps and hamstring fatigue during running. Third North American Congress on Biomechanics, Waterloo, Canada, August 1998.

Clark-Donovan, S.M., Crussemeyer, J.A., **Dufek, J.S.** & Bates, B.T. Kinetic effects of a locked ankle joint via an ankle-foot orthosis during walking. American College of Sports Medicine Annual Meeting, Seattle, Washington, June 1999.

Crussemeyer, J.A., **Dufek, J.S.** & Bates, B.T. Determination of variability in pronation curve behavior during running. American College of Sports Medicine Annual Meeting, Seattle, Washington, June 1999.

Mercer, J.A., Hreljac, A., **Dufek, J.S.** & Bates, B.T. Peak leg and head accelerations during running following isolated quadriceps fatigue. American College of Sports Medicine Annual Meeting, Seattle, Washington, June 1999.

Mercer, J.A., **Dufek, J.S.** & Bates, B.T. Shock attenuation during running before and after a graded exercise test. XVIIIth International Congress of Biomechanics, Calgary, Canada, August 1999.

James, C.R., Bates, B.T. & **Dufek, J.S.** Evaluation of biomechanical response strategies for absorbing landing impacts. American College of Sports Medicine Annual Meeting, Indianapolis, Indiana, June 2000.

Mercer, J.A., Hreljac, A., **Dufek, J.S.**, & Bates, B.T. Peak leg and head accelerations during running following isolated quadriceps fatigue. American College of Sports Medicine Annual Meeting, Indianapolis, Indiana, June 2000.

Reid, M.N., Mercer, J.A., Mangus, B. & **Dufek, J.S.** Ground reaction force characteristics of a plyometric activity completed on different surfaces. Southwest Region of the American College of Sports Medicine Annual Meeting, San Diego, California, November 2000.

Reid, M.N., Mercer, J.A., **Dufek, J.S.**, & Mangus, B.C. Ground reaction force characteristics of a drop-jump performed barefoot and with shoes. American College of Sports Medicine Annual Meeting, Baltimore, Maryland, May 2001.

Gruenenfelder, A.R., Black, D., Mercer, J.A., & **Dufek, J.S.** Kinetic consequences to increased trunk mass during landing. American College of Sports Medicine Annual Meeting, San Francisco, California, May 2003.

Neumann, E., Mercer, J.A., DeLion, D., **Dufek, J.S.** & Griffin, J. Examination of prosthesis mal-alignment using motion capture. (Howard A. Thranhardt Lecture Honorarium Award Recipient). American Orthopedic and Prosthetic Association National Assembly, Las Vegas, NV, September 2005.

Griffin, J.R., **Dufek, J.S.**, Mercer, J.A., Teramoto, K., DeLion, D., & Bestwick, A. Lower extremity geometry as a predictor of shock attenuation during running. Southwest Regional American College of Sports Medicine Annual Meeting, Las Vegas, NV, November 2005.

Melcher, G., Griffin, J.R., Teramoto, K., **Dufek, J.S.** & Mercer, J.A. The effects of speed and surface on shock attenuation characteristics for male runners. Southwest Regional American College of Sports Medicine Annual Meeting, Las Vegas, NV, November 2005.

Teramoto, K., Griffin, J.R., **Dufek, J.S.** & Mercer, J.A. The effects of speed and surface stiffness on shock attenuation characteristics for female runners. Southwest Regional American College of Sports Medicine Annual Meeting, Las Vegas, NV, November 2005.

Griffin, J.R. **Dufek, J.S.**, Mercer, J.A., Teramoto, K. & DeLion, D. Surface variations alter the prediction of shock attenuation for female runners. American College of Sports Medicine Annual Meeting, Denver, CO, May 2006.

Teramoto, K., **Dufek, J.S.**, Mercer, J.A. & Mangus, B.C. Impact variability among skilled volleyball players. American College of Sports Medicine Annual Meeting, Denver, CO, May 2006.

Tritsch, A.T., Mangus, B.C., **Dufek, J.S.**, Orzechowski, K.A. & Mercer, J.A. Application of isokinetic strength assessment to dynamic performance for female athletes. National Athletic Trainers Association Annual Meeting, Atlanta, GA, June 2006.

Teramoto, K., **Dufek, J.S.** & Mercer, J.A. The effects of local muscle fatigue on shock attenuation for female runners. American Society of Biomechanics Annual Meeting, Blacksburg, VA, September 2006.

Bhanot, K., Mercer, J.A. **Dufek, J.S.**, Freedman, J.A., House, A.J. & Griffin, J.R. Effect of change in running speeds on shock attenuation among children. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, November 2006.

Freedman, J.A., **Dufek, J.S.** & Mercer, J.A. Shock attenuation characteristics in females across the lifespan. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, November 2006.

Griffin, J.R., Mercer, J.A. & **Dufek, J.S.** Preliminary analysis of a kinematic comparison of running barefoot and in the Nike Free 5.0. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, November 2006.

Freedman, J.A., **Dufek, J.S.** & Mercer, J.A. Footstrike patterns during barefoot running. American College of Sports Medicine Annual Meeting, New Orleans, LA, May 2007.

Griffin, J.R., Mercer, J.A. & **Dufek, J.S.** Kinematic comparison of running barefoot and in the Nike Free 5.0. American College of Sports Medicine Annual Meeting, New Orleans, LA, May 2007.

Bhanot, K., Mercer, J.A., **Dufek, J.S.**, Freedman, J.A., House, A.J. and Griffin, J.R. Effect of change in running speeds on shock attenuation among children. American College of Sports Medicine Annual Meeting, New Orleans, LA, May 2007.

Wulf, G., Granados, C. & **Dufek, J.S.** Increases in jump-and-reach height through an external focus of attention. North American Society for Psychology of Sport and Physical Activity Annual Meeting, San Diego, CA, June 2007.

Mercer, J.A., **Dufek, J.S.**, Bhanot, K., Freedman, J.A., House, A.J., Griffin, J.R., Rubley, M.D. & Mangus, B.C. Shock attenuation characteristics for children running on a treadmill and overground. National Athletic Trainers Association Meeting, Anaheim, CA, June 2007.

Tritsch, A.J., Rubley, M.D., **Dufek, J.S.**, & Mercer, J.A. Tibial rotation and valgus movement at the knee during cutting and stopping. National Athletic Trainers Association Meeting, Anaheim, CA, June 2007.

Melcher, G.G., House, A.J., Mangus, B.C. and **Dufek, J.S.** A novel exercise intervention to alleviate low back pain. Southwest Chapter of the American College of Sports Medicine, November 2007.

Tritsch, A.J. & **Dufek, J.S.** Functional change in jump height, knee laxity, and leg strength over a single season of play and training for female athletes. Far West Athletic Trainers Association Annual Meeting, San Francisco, CA, April 2008.

Bhanot, K., Mercer, J.A., Masumoto, K. & **Dufek, J.S.** Shock attenuation and impact characteristics for children running at different stride lengths. American College of Sports Medicine Annual Meeting, Indianapolis, IN, May 2008.

Mercer, J.A., **Dufek, J.S.**, Bhanot, K., Freedman, J.A., House, A.J., Aldridge, J., Rubley, M.D., & Mangus, B.C. Shock attenuation characteristics for children running. National Athletic Trainers Association Meeting, St. Louis, MO, June 2008.

Tritsch, A.J. & **Dufek, J.S.** Functional change in jump height, knee laxity, and leg strength over a single season of play and training for female athletes. National Athletic Trainers Association Meeting, St. Louis, MO, June 2008.

Wulf, G., **Dufek, J.S.**, Granados, C. & Pettigrew, C. An external focus of attention increases jump height. North American Society for the Psychology of Sport and Physical Education, Niagara Falls, Ontario, June 2008.

Freedman, J.S., **Dufek, J.S.** & Mercer, J.A. Kinetic characteristics of barefoot running. North American Congress of Biomechanics, Ann Arbor, MI, August 2008.

Aldridge, J.M., Melcher, G.G., Mercer, J.A. & **Dufek, J.S.** The effects of retro locomotion on balance in young and older adults: A pilot study. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, November 2008.

Forrest, D., **Dufek, J.S.**, Masumoto, K. & Mercer, J.A. Knee flexion and extension muscle activity during running at simulated microgravity: A pilot study. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, November 2008.

Gouws, P-L., Melcher, G.G., Aldridge, J.M. & **Dufek, J.S.** Efficacy of retro locomotion as a modality for the reduction of low back pain in athletes. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, November 2008.

Liebenberg, J.N., Melcher, G.G., Aldridge, J.M. & **Dufek, J.S.** Does a retro walking training program influence kinetic and kinematic gait parameters for healthy individuals? Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, November 2008.

Melcher, G.G., **Dufek, J.S.** & Mercer, J.A. Is there short term adaptation to a novel locomotor task? Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, November 2008.

Whitley, C.R. & **Dufek, J.S.** The effect of retro locomotion on flexibility of the low back and hamstrings: A pilot study. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, November 2008.

Aldridge, J.M., Melcher, G.G., Mercer, J.A. & **Dufek, J.S.** The effects of retro locomotion on balance in young and older adults. American College of Sports Medicine Annual Meeting, Seattle, WA, May 2009.

Forrest, D., **Dufek, J.S.**, Masumoto, K. & Mercer, J.A. Knee flexion and extension muscle activity during running at simulated microgravity. American College of Sports Medicine Annual Meeting, Seattle, WA, May 2009.

Whitley, C.R. & **Dufek, J.S.** The effect of retro locomotion on flexibility of the low back and hamstrings. American College of Sports Medicine Annual Meeting, Seattle, WA, May 2009.

Dufek, J.S., Mercer, J.A., Aldridge, J.M., Melcher, G.G. & Gouws, P-L. Effects of backward walking on balance and lower extremity walking kinematics in healthy young and older adults. American Society of Biomechanics Annual Meeting, College Park, PA, August 2009.

Aldridge, J.M., **Dufek, J.S.** Mercer, J.A. & Tandy, R.D. The effect of concurrent cell phone use and walking on gait characteristics. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, October 2009 (Student Presentation Award).

Gouws, P-L., Applequist, B.J. Liebenberg, J. & **Dufek, J.S.** Variability of lower extremity function in a runner presenting with knee joint pain: A case study. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, October 2009.

Liebenberg, J., Scharf, J., Forest, D., **Dufek, J.S.**, & Mercer, J.A. Muscle activity during running at reduced body weight. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, October 2009.

Dufek, J.S., House, A.J., Mangus, B.C., Mercer, J.A. and Melcher, G.G. Effects of backward walking as a modality for low back pain reduction in athletes. XXVIII International Symposium on Biomechanics in Sports, Marquette, MI, July 2010.

Applequist, B., Mercer, J.A. and **Dufek, J.S.** A pilot study of shock attenuation and body locale. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, October 2010.

Currie, R. Gouws, P-L., Gutierrez, A., Candela, L. and **Dufek, J.S.** Effects of speed and gender on spatio-temporal characteristics of walking in overweight/obese vs normal weight middle- and high school aged children. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, October 2010.

McClellan, J.R., Forrest, D.M., Neumann, E.S. and **Dufek, J.S.** Effects of a custom orthopedic brace on balance characteristics for Charcot-Marie-Tooth patients. Southwest Regional American College of Sports Medicine Annual Meeting, San Diego, CA, October 2010.

Liebenberg, J.N., **Dufek, J.S.** and Gouws, P-L. Kinetics at front foot contact of cricket bowling during a 10-over spell. 4th World Congress of Science and Medicine in Cricket, Chandigarh, India, March 2011.

McClellan, J.R. and **Dufek, J.S.** The effect of shoe choice on variability in walking. 2011 Intermountain Graduate Research Symposium, Logan, UT, March 2011.

Candela, L.C., Gutierrez, A., **Dufek, J.S.**, Mercer, J.A. and Putney, L. Modifying the Diabetes Prevention Program to a school setting. Western Institute for Nursing Communicating Nursing Research Annual Conference, Las Vegas, NV, April 2011.

Roper, J.L., DeMattei, M., Santo, A., **Dufek, J.S.** and Mercer, J.A. Lower extremity muscle activity while walking in shape-up shoes. American College of Sports Medicine Annual Meeting, Denver, CO, May 2011.

Santo, A., DeMattei, M. Roper, J., **Dufek, J.S.** and Mercer, J.A. Skecher Shape-Ups do not increase the metabolic cost of walking. American College of Sports Medicine Annual Meeting, Denver, CO, May 2011.

Dufek, J.S., Mercer, J.A., Currie, R., Gouws, P-L., Candela, L., Gutierrez, A.P., and Putney, L.G. Effects of obesity on symmetry and spatio-temporal characteristics of adolescent gait. American Society of Biomechanics Annual Meeting, Long Beach, CA, August, 2011.

Dufek, J.S., Santo, A. and Klug, N. Interactive gaming and ACSM Exercise Guidelines (invited; session organizer). Southwest Regional American College of Sports Medicine Annual Meeting, Reno, NV, October 2011.

Horsch, S.E., Dixon, L.M., Hanson, B.D., Hamilton, K.S., Reikowsky, L.K., Williams, A., Cook, M. and **Dufek, J.S.** The influence of static, dynamic, and active-isolated stretching on vertical jump performance. Southwest Regional American College of Sports Medicine Annual Meeting, Reno, NV, October 2011.

McClellan, J.R., **Dufek, J.S.**, Hickman, R., Blahovec, A., Kuiken, A., Mears, J. and Riggins, H. Dual-task performance among children with cerebral palsy following a novel physical therapy intervention. Southwest Regional American College of Sports Medicine Annual Meeting, Reno, NV, October 2011.

McClellan, J.R. and **Dufek, J.S.** Are shock characteristics at impact influenced by midsole hardness during running? Rocky Mountain Regional American Society of Biomechanics Meeting, Boise, ID, April 2012.

Dufek, J.S., Aldridge, J.M., Mercer, J.A., and Gouws, P-L. Does backward walking enhance gait or balance performance in older adults? American College of Sports Medicine Annual Meeting, San Francisco, CA, May 2012.

McClellan, J.R., **Dufek, J.S.**, and Hickman, R. Effectiveness of a novel physical therapy technique on improving gait characteristics among children with cerebral palsy. American College of Sports Medicine Annual Meeting, San Francisco, CA, May 2012.

Hickman, R., **Dufek, J.S.**, Kuiken, A., Blahovec, A., McClellan, R., Mears, J. and Riggins, H. Feasibility and effects on gait of large amplitude movement training in children with CP. American Physical Therapy Association Annual Meeting, Tampa, FL, June 2012.

Nordin, A.D. and **Dufek, J.S.** Kinetic variability during walking in casual footwear as a function of speed. Canadian Society for Biomechanics Biannual Meeting, Burnaby, British Columbia, Canada, June 2012.

Atkins, L.T., **Dufek, J.S.** and James, C.R. Evaluation and classification of load accommodation strategies during walking with extremity-carried weights: A pilot study. American Society of Biomechanics Annual Meeting, Gainesville, FL, August 2012.

Bailey, J., Nordin, A., Lee, D. and **Dufek, J.S.** The effects of altering stride length on center of mass vertical and horizontal position during walking. Undergraduate Research Opportunities Program, Las Vegas, NV, August 2012.

Comanescu, T., Nordin, A.D., Bailey, J., **Dufek, J.S.**, and Lee, D. Influence of step length manipulations on the frequency components of ground reaction force- Do dynamic oscillations change with step length? Undergraduate Research Opportunities Program, Las Vegas, NV, August 2012.

Mefferd, K., Ryan-Wenger, N.A. and **Dufek, J.S.** Biomechanical analysis of infant fall impacts and modern approaches to assess future injury potential. Undergraduate Research Opportunities Program, Las Vegas, NV, August 2012.

Ryan-Wenger, N.A. and **Dufek, J.S.** An interdisciplinary momentary confluence of events model to explain, minimize, and prevent hospital patient falls and fall-related injuries. State of the Science Congress on Nursing Research, Washington, DC, September 2012.

Bailey, J.P., Nordin, A.D, Lee, D. and **Dufek, J.S.** Kinematic effects of stride length perturbations on system COM horizontal velocity during locomotion. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Newport Beach, CA, October 2012.

Horsch, S.E. and **Dufek, J.S.** Does footwear matter when walking on an incline? Southwest Chapter of the American College of Sports Medicine Annual Meeting, Newport Beach, CA, October 2012.

Jarrett, M., Hafen, P., Moschella, K., Barkley, J., **Dufek, J.S.**, Navalta, J., Tandy, R., and Santo, A.S. Interactive video gaming: Beneficial to health or just fun? Southwest Chapter of the American College of Sports Medicine Annual Meeting, Newport Beach, CA, October 2012.

Nordin, A.D. and **Dufek, J.S.** Examining lower extremity joint range of motion variability during landing. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Newport Beach, CA, October 2012.

Ryan-Wenger, N.A. and **Dufek, J.S.** Interdisciplinary momentary confluence of events model for the study of pediatric patient falls and fall-related injuries. 19th Annual Pediatric Nursing Conference, Akron, OH, October 2012.

Mefferd, K.C., Ryan-Wenger, N.A. and **Dufek, J.S.** Biomechanical analysis of infant fall impacts using HIC to predict injury severity. Noraxon Research Symposium Fall 2012, Las Vegas, NV, November 2012.

Nordin, A.D. and **Dufek, J.S.** Knee joint moment variability during landing for females. Noraxon Research Symposium Fall 2012, Las Vegas, NV, November 2012.

Delgado, T.A., Kubera-Shelton, E., Robb, R.R., Hickman, R., **Dufek, J.S.** and Wallmann, H.W. Effects of footstrike on low back posture, shock attenuation, and comfort. Combined Sections Meeting of the American Physical Therapy Association, San Diego, CA, January 2013.

Mefferd, K.C., Ryan-Wenger-N.A. and **Dufek, J.S.** Biomechanical analysis of infant fall impacts using HIC to predict injury severity. International Symposium, Computer Methods in Biomechanics and Biomedical Engineering, Salt Lake City, UT, April 2013.

Nordin, A.D. and **Dufek, J.S.** Continuous variability assessment of vertical ground reaction forces during landing. International Symposium, Computer Methods in Biomechanics and Biomedical Engineering, Salt Lake City, UT, April 2013.

Allen, S.K., Barkley, J.E., **Dufek, J.S.**, Hafen, P.S., Jarrett, M.S., Moschella, K., Navalta, J.W., Rietjens, R., Tandy, R. and Santo, A.S. Physically interactive video games increase VO₂ above resting metabolic rate. American College of Sports Medicine Annual Meeting, Indianapolis, IN, May 2013.

Horsch, S.E. and **Dufek, J.S.** Effects of shoe outsole design and incline on walking biomechanics. American College of Sports Medicine Annual Meeting, Indianapolis, IN, May 2013.

Jarrett, M.S., Allen, S.K., Barkley, J.E., **Dufek, J.S.**, Hafen, P.S., Moschella, K., Navalta, J.W.,

Rietjens, R., Tandy, R. and Santo, A.S. Interactive video gaming maintains VO₂ and HR at current recommended exercise intensities for cardiovascular fitness. American College of Sports Medicine Annual Meeting, Indianapolis, IN, May 2013.

Santo, A.S., Allen, S.K., **Dufek, J.S.**, Hafen, P.S., Jarrett, M.S., Moschella, K., Rietjens, R., Navalta, J.W. Tandy, R. and Barkley, J.E. Interactive video gaming: Do we feel like we are exercising? American College of Sports Medicine Annual Meeting, Indianapolis, IN, May 2013.

Nordin, A.D. and **Dufek, J.S.** Examining lower extremity range of motion and movement variability changes due to focus of attention during landing. Progress in Motor Control, Montreal, Quebec, Canada, July 2013.

Holt, J.L., Nordin, A.D. and **Dufek, J.S.** Effects of added mass and horizontal displacement on landing strategies. Undergraduate Research Opportunities Program, Las Vegas, NV, August 2013.

Wilson, J.N., Nordin, A.D. and **Dufek, J.S.** Landing strategy patterns at selected bodyweight percentages. Undergraduate Research Opportunities Program, Las Vegas, NV, August 2013.

Atkins, L.T., **Dufek, J.S.**, Bates, B.T. and James, C.R. Prediction of load accommodation strategies during walking from lower extremity kinematic variables. American Society of Biomechanics Annual Meeting, Omaha, NE, September 2013.

Bailey, J.P., Nordin, A.D. and **Dufek, J.S.** Step length perturbations alter variations in center of mass horizontal velocity. American Society of Biomechanics Annual Meeting, Omaha, NE, September 2013.

Bates, B.T., James, C.R. and **Dufek, J.S.** Experimental design influence on detection of performance differences. American Society of Biomechanics Annual Meeting, Omaha, NE, September 2013.

Dufek, J.S., Ryan-Wenger, N.A. and Mefferd, K.C. Quantifying head injury severity following pediatric patient falls. American Society of Biomechanics Annual Meeting, Omaha, NE, September 2013.

Nordin, A.D., Bailey, J.P. and **Dufek, J.S.** Variations in leg stiffness and lower extremity range of motion variability from stride length perturbations during gait. American Society of Biomechanics Annual Meeting, Omaha, NE, September 2013.

Nordin, A.D. and **Dufek, J.S.** Gender differences in frontal plane lower extremity kinetic variability during landing. American Society of Biomechanics Annual Meeting, Omaha, NE, September 2013.

Bailey, J.P., Nordin, A.D. and **Dufek, J.S.** Effects of stride length perturbations on anterior-posterior force components during the stance phase of walking. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Newport Beach, CA, October 2013.

Coupe, A. Montes, A. and **Dufek, J.S.** Effect of simulated obesity on the double support phase of gait. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Newport Beach, CA, October 2013.

Holt, J.L., Nordin, A.D. and **Dufek, J.S.** Effects of added mass and horizontal displacement on landing strategies. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Newport Beach, CA, October 2013.

Jensen, D.B., Mefferd, K., Rietjens, R., Santo, A. and **Dufek, J.S.** Mechanical efficiency of the standard versus a modified YMCA 3 minute step test. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Newport Beach, CA, October 2013.

Nordin, A.D., Castro, S.B., **Dufek, J.S.** and Mercer, J.A. Changes in impact kinetics with altered foot strike patterns in running. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Newport Beach, CA, October 2013.

Wilson, J.N., Nordin, A.D. and **Dufek, J.S.** Do landing strategies vary with increased system energy? Southwest Chapter of the American College of Sports Medicine Annual Meeting, Newport Beach, CA, October 2013.

Nordin, A.D. and **Dufek, J.S.** Investigating lower extremity functioning via frontal plane movement variability asymmetries during landing. Society for Neuroscience Annual Meeting, San Diego, CA, November 2013.

Nordin, A.D., Bailey, J.P. and **Dufek, J.S.** Implications of increased lower extremity movement variability on fall susceptibility at increased stride lengths during locomotion. 2013 ASME International Mechanical Engineering Congress and Exposition, San Diego, CA, November 2013.

Bailey, J.P., Nordin, A.D. and **Dufek, J.S.** Effects of stride length perturbations on anterior-posterior force components during the stance phase of walking. American College of Sports Medicine Annual Meeting, Orlando, FL, May 2014.

Hickman, R., **Dufek, J.S.**, Morris, B. and Lee, S-P. Serious games: Novel, large amplitude movement physical therapy intervention and rehabilitation game for children with cerebral palsy. Clinical Translational Research - Infrastructure Network Annual Meeting, Las Vegas, NV, June 2014.

James, C.R., Atkins, L.T., **Dufek, J.S.**, Bates, B.T. and Yang, H.S. Prediction of calcaneal bone stiffness index from biomechanical function and accommodation variables obtained during weighted walking. World Congress of Biomechanics, Boston, MA, July 2014.

Nordin, A.D. and **Dufek, J.S.** Associating kinematic and kinetic synergies with movement control strategies in drop landing. World Congress of Biomechanics, Boston, MA, July 2014.

Nordin, A.D., Bailey, J.P., **Dufek, J.S.** and Mercer, J.A. A novel approach to characterizing 3D impact kinetics during foot-strike manipulations in running. International Calgary Running Symposium, Calgary, Canada, August 2014.

Bailey, J.P., Mercer, J.A. and **Dufek, J.S.** A comprehensive kinematic analysis of a 15km training run. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Costa Mesa, CA, October 2014.

Bartel, K., Coupé, A. and **Dufek, J.S.** Relationship between resistance band tension and muscle activity during use of a hip exercise device. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Costa Mesa, CA, October 2014.

DeBerardinis, J., Samson, D. Trabia, M.B. and **Dufek, J.S.** Determination of heel deformation using a two-camera system. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Costa Mesa, CA, October 2014.

Harry, R., Hickman, R., Lee, S-P., Morris, B. and **Dufek, J.S.** Effects of dual-tasking on spatio-temporal gait parameters in children with cerebral palsy. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Costa Mesa, CA, October 2014.

Samson, D., DeBerardinis, J., Trabia, M.B. and **Dufek, J.S.** Methodology for evaluating heel deformation utilizing a variable sized cursor scan. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Costa Mesa, CA, October 2014.

Lee, S-P., Hickman, R., **Dufek, J.S.** and Schuerman, S. Influence of procedural factors on the performance of Timed Up and Go test in community-dwelling older adults. American Physical Therapy Association Combined Sections Meeting, Indianapolis, IN, February 2015.

Jensen, D., Hickman, R., Navalta, J., Mercer, J.A. and **Dufek, J.S.** A comparative evaluation of the effects of incline on kinematics and muscle function during backward walking. Annual Meeting of the South Central American Society of Biomechanics, Fort Worth, TX, March 2015.

Bailey, J.P., Mercer, J.A. and **Dufek, J.S.** A comprehensive kinematic analysis of a 15km training run. American College of Sports Medicine Annual Meeting, San Diego, CA, May 2015.

Bartel, K., Coupé, A. and **Dufek, J.S.** Proportionality of resistance band tension and corresponding muscle activity while using a novel exercise device. American College of Sports Medicine Annual Meeting, San Diego, CA, May 2015.

Dufek, J.S., Nordin, A.D., James, C.R. and Bates, B.T. Does landing strategy change with increased mechanical task demands? American College of Sports Medicine Annual Meeting, San Diego, CA, May 2015.

Freedman Silvernail, J., Nordin, A.D. and **Dufek, J.S.** Alterations in movement coordination due to increasing landing height. American College of Sports Medicine Annual Meeting, San Diego, CA, May 2015.

Harry, J., Hickman, R., Lee, S-P., Morris, B. and **Dufek, J.S.** Effects of dual-tasking on stability during walking in children with cerebral palsy. American College of Sports Medicine Annual Meeting, San Diego, CA, May 2015.

Kumanchik, J.E., McNeal, J.R. and **Dufek, J.S.** Recovery from spinal shrinkage: A comparison of four supine unloading positions. American College of Sports Medicine Annual Meeting, San Diego, CA, May 2015.

Nordin, A.D. and **Dufek, J.S.** Joint-specific kinetic adjustments following landing height manipulations. American College of Sports Medicine Annual Meeting, San Diego, CA, May 2015.

DeBerardinis, J., Trabia, M.B., Samson, D. and **Dufek, J.S.** Effect of walking speed on the validity of pressure-measuring insoles. Clinical Translational Research – Infrastructure Network Annual Meeting, Las Vegas, NV, June 2015.

DeVita, P., Davis, B., **Dufek, J.S.**, McNitt-Gray, J. and Tracy, B. Let's get younger: Educational outreach in biomechanics for 6th to 12th grade students. Symposium Proposal. American Society of Biomechanics Annual Meeting, Columbus, OH, August 2015.

DeBarardinis, J., Trabia, M.B., Samson, D. and **Dufek, J.S.** Dynamic reliability and validity of pressure-measuring insoles. American Society of Biomechanics Annual Meeting, Columbus, OH, August 2015.

Dufek, J.S. Ryan-Wenger, N.A., Prado, A. and Coupé, A. The relationship between head acceleration and heart rate variability: A possible diagnostic tool for head injury severity. American Society of Biomechanics Annual Meeting, Columbus, OH, August 2015.

Nordin, Andrew D. and **Dufek, J.S.** Subject-specific landing strategies identify changes in movement control. American Society of Biomechanics Annual Meeting, Columbus, OH, August 2015.

Nordin, Andrew D. and **Dufek, J.S.** Loading patterns vary by direction, footwear, and foot strike in running. American Society of Biomechanics Annual Meeting, Columbus, OH, August 2015.

Bradley, S., Wiegand, K., Miller, K., **Dufek, J.S.** and Freedman Silvernail, J. Quadriceps and hamstring strength: A relationship to number of competitive years on the cross-country team. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Costa Mesa, CA, October 2015.

Eggleston, J. D., Harry, J. R., Hickman, R.A. and **Dufek, J. S.** A comparative evaluation of gait between children with autism and typically developing matched controls: Insight gained via single subject design. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Costa Mesa, CA, October 2015.

Roper, J.L., Harding, E., Doerfler, D., Dexter, J.G., Kravitz, L., **Dufek, J.S.** and Mermier, C.M. The effects of changing footstrike pattern on running economy. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Costa Mesa, CA, October 2015.

Wiegand, K., Freedman Silvernail, J. and **Dufek, J.S.** Changes in spring kinetics and kinematics following static or dynamic stretching. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Costa Mesa, CA, October 2015.

Ryan-Wenger, N.A. and **Dufek, J.S.** Biomechanical analysis of head impact in pediatric patient falls. Sigma Theta Tau International Biennial Convention, Las Vegas, NV, November 2015.

Dufek, J.S., Harry, J.R., Eggleston, J.D. and Bates, B.T. A novel data analysis approach for identification of performance differences during locomotion. Gait and Clinical Movement Analysis Society Annual Conference, Memphis, TN, May 2016.

James, C.R., Atkins, L.T., Yang, H.S., **Dufek, J.S.** and Bates, B.T. Prediction of calcaneal bone competence from biomechanical accommodation variables measured during weighted walking. Gait and Clinical Movement Analysis Society Annual Conference, Memphis, TN, May 2016.

Roper, J.L, Harding, E., Doerfler, D., Dexter, J.G., Kravitz, L, **Dufek, J.S.** and Mermier, C.M. The effects of gait retraining on oxygen consumption and carbohydrate metabolism. American College of Sports Medicine Annual Meeting, Boston, MA, May 2016.

Weigand, K., Freedman Silvernail, J.A. and **Dufek, J.S.** Changes in sprint kinetics and kinematics following static or dynamic stretching. American College of Sports Medicine Annual Meeting, Boston, MA, May 2016.

Hickman, R., McConnell, J., Silverman, B., Harry, J.R., Lee, S-P., Morris, B. and **Dufek, J.S.** Evaluating usability and agreement among selected low- and high technology approaches to clinical gait analysis. American Physical Therapy NEXT Conference, Nashville, TN, June 2016.

Barker, L.A. Harry, J.R., **Dufek, J.S.** and Mercer, J.A. Performance of aerial rotation during vertical jumping among highly skilled collegiate soccer players. American Society of Biomechanics Annual Meeting, Raleigh, N.C., August 2016.

Harry, J.R., Barker, L.A., Mercer, J.A. and **Dufek, J.S.** Differences in vertical impact forces during jump-landings among soccer players of different playing positions. American Society of Biomechanics Annual Meeting, Raleigh, N.C., August 2016.

Eggleston, J.D., Harry, J.R., Hickman, R.A. and **Dufek, J.S.** Evaluation of gait symmetry in children with Autism Spectrum Disorder. American Society of Biomechanics Annual Meeting, Raleigh, N.C., August 2016.

Harry, J.R., Eggleston, J.D., Hickman, R.A. and **Dufek, J.S.** Walking mechanics and within-subject variability in monozygotic twins with Autism Spectrum Disorder. American Society of Biomechanics Annual Meeting, Raleigh, N.C., August 2016.

Nordin, A.D. and **Dufek, J.S.** Mechanical task demands alter neuromechanical synergies in single-leg landing. American Society of Biomechanics Annual Meeting, Raleigh, N.C., August 2016.

Hickman, R., Goodrich, P.R., Hulse, K.F., Johnson, D.T., Harry, J.R., Morris, B., Lee, S-P., and **Dufek, J.S.** Therapist-led versus active video game-based large amplitude movement exercise for children with cerebral palsy: Comparison of dosing variables. American Physical Therapy Association Combined Sections Meeting. San Antonio, TX, February 2017.

Eggleston, J.D., Flores, L., Mamauag, M., Lidstone, D.E., Harry, J.R., Dufek, J.S.. Influence of a weighted backpack and weighted vest on gait kinematics in children with autism spectrum disorder. Northwest Biomechanics Symposium, Eugene, OR, May 2017.

Flores, L.A., Eggleston, J.D., Mamauag, M., Lidstone, D.E., **Dufek, J.S.** Effects of load carriage on lower extremity joint patterns in children with autism spectrum disorder. Northwest Biomechanics Symposium, Eugene, OR, May 2017.

Mamauag, M., Eggleston, J.D., Flores, L.A., **Dufek, J.S.** Examining the influence of backpack weight on stride kinematics among children with autism spectrum disorder. Northwest Biomechanics Symposium, Eugene, OR, May 2017.

DeBerardinis, J. Lidstone, D., **Dufek, J.S.**, and Trabia, M.B. Determining gait symmetry using pressure-measuring insoles. Gait and Clinical Movement Analysis Society Annual Conference, Salt Lake City, UT, May 2017.

Dufek, J.S., Eggleston, J.D. and Harry, J.R. Movement differences between children with autism and children with typical development: Evidence for evaluating the individual before the group. Gait and Clinical Movement Analysis Society Annual Conference, Salt Lake City, UT, May 2017.

Lidstone, D., DeBarardinis, J. Porther, L.M., Trabia, M.B. and **Dufek, J.S.** Calculating the area of compressed plantar tissue during gait. Gait and Clinical Movement Analysis Society Annual Conference, Salt Lake City, UT, May 2017.

Ghanem, A., DeBerardinis, J., Trabia, M.B., **Dufek, J.S.** and Lidstone, D. Determining a calibration curve for pressure-measuring insoles. Summer Biomechanics, Bioengineering and Biotransport Conference, Tucson, AZ, June 2017.

Lidstone, D., Porcher, L.M., DeBerardinis, J., Trabia, M.B. and **Dufek, J.S.** Concurrent validity of an automatic technique to calculate plantar contact area at mid-stance during gait. American Society of Biomechanics Annual Meeting, Boulder, CO., August 2017.

Dai, B., Layer, J.S., Hinshaw, T.J. Cook, R.F. and **Dufek, J.S.** Kinematic analysis of Parkour landings from a drop height of 2.7 meters. American Society of Biomechanics Annual Meeting, Boulder, CO., August 2017.

Eggleston, J., Flores, L., Mamaug, M., Lidstone, D., Harry, J. and **Dufek, J.S.** Influence of a weighted backpack and weighted vest on gait kinematics in children with autism spectrum disorder (Invited). University of Nevada, Las Vegas Research Week, Las Vegas, NV., October 2017.

Trotter, A., DeBerardinis, J., Trabia, M.B., and **Dufek, J.S.** Reliability and validity of center of pressure measurements for Medilogic insoles during walking (Invited). University of Nevada, Las Vegas Research Week, Las Vegas, NV., October 2017.

Lidstone., D.E., DeBerardinis, J., Ghanem, A., Trotter, A., Varre, M.S., Trabia, M.B. and **Dufek, J.S.** Characterization of plantar contact area error from pressure-measuring insoles is reduced using an adaptive threshold method. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Long Beach, CA, October 2017.

Varre, M.S., Lidstone, D.E., DeBerardinis, J., Trotter, A., Trabia, M.B. and **Dufek, J.S.** Evaluation of plantar pressure distribution in prediabetic and diabetic. Southwest Chapter of the American College of Sports Medicine Annual Meeting, Long Beach, CA, October 2017.

Harry, J.R., Barker, L.A., Dufek, J.S. and James, C.R. Force- and velocity-profile differences between good and poor countermovement vertical jumpers. American College of Sports Medicine Annual Meeting, Minneapolis, MN, May 2018 (submitted).

UNIVERSITY TEACHING EXPERIENCE

PEP 371	Kinesiology (undergraduate)
PEP 468	Track & Field Coaching (undergraduate)
PEP 481	Sport Biomechanics (undergraduate/graduate)
SPE 100-200	Activity Physical Education Courses (undergraduate): jogging, 10K training, marathon training, aerobics, beginning weight training, fit-for-life, intermediate/advanced basketball, intermediate/advanced softball
EMS 103	Exercise and Performance (undergraduate)
EMS 381	Introductory Biomechanics (undergraduate)
EMS 405	Readings in Biomechanics (undergraduate)
EMS 407/507	Orthopedic Biomechanics (undergraduate/graduate)
EMS 407/507	Lower Extremity Biomechanics (undergraduate/graduate)
EMS 407/507	Impact Biomechanics (undergraduate/graduate)
EMS 407/507	Human Factors Biomechanics (undergraduate/graduate)
EMS 407/507	QuickBasic Computer Programming (undergraduate/graduate)
ESS 546	Biomechanics (graduate; Oregon State University)
EMS 607	Biomechanics Seminar (graduate)
EMS 607	Biomechanics Instrumentation Seminar (graduate)
EMS 682	Biomechanics II: Mechanics (graduate)
EMS 610	Statistical Methods Laboratory (graduate)
EMS 691	Statistical Methods (graduate)
KIN 346	Biomechanics (undergraduate)
KIN 411x	Advanced Biomechanics Seminar (undergraduate)
KIN 415/615	Forensic Kinesiology (undergraduate/graduate)
KIN 446	Sport and Exercise Biomechanics
KIN 499/791	Introduction to Forensic Science: Human Performance (undergraduate/graduate)
KIN 736	Biomechanical Applications in Kinesiology (graduate)
KIN 743	Research Techniques in Biomechanics (graduate)
KIN 747	Biomechanics Seminar (graduate)
*PEP:	Professional Physical Education, College of Human Development & Performance, University of Oregon
*SPE:	Service Physical Education, College of Human Development & Performance, University of Oregon
*EMS:	Exercise & Movement Science, College of Arts & Science, University of Oregon
*ESS:	Exercise & Sport Science, College of Health & Human Performance, Oregon State University
*KIN:	Department of Kinesiology and Nutrition Sciences, School of Allied Health Sciences, University of Nevada, Las Vegas

PROFESSIONAL ORGANIZATIONS

American College of Sports Medicine; 1987-present
American Society of Biomechanics; 1987-present
International Society of Biomechanics; 1989-1996
International Society of Biomechanics; 2011-present
International Society of Sport Biomechanics; 2010-present
Northwest Regional American College of Sports Medicine; 1987-2001
Southwest Regional American College of Sports Medicine; 2002-present
National Strength and Conditioning Association; 2014-present
Gait & Clinical Movement Analysis Society; 2016-present

PROFESSIONAL SERVICE

Department, College/School, University:

Department (PEHMS): Undergraduate Physical Education Council; 1989-92.
Department (PEHMS): Affirmative Action Officer; 1990-91.
Department (PEHMS): Undergraduate Scholarship Committee; 1991-92.
Department (EMS): Computer Services Representative; 1991-95.
Department (EMS): Graduate Student Admissions Committee; 1991-95.
Department (EMS): Library Acquisitions Representative; 1991-95.
Department (EMS): Search Committee Member, Exercise Physiology; 1992, 1993.
Department (EMS): Acting Undergraduate Coordinator; Summer 1993.
Department (EMS): Undergraduate Coordinator; 1994-95.
Department (KIN): Faculty Sponsor for McNair Award Application (C. Whitley); 2008.
Department (KIN): Search Committee Member, Exercise Physiology; 2010.
Department (KNS): Doctoral Program Ad Hoc Committee Member; 2011.
Department (KNS): Departmental Brainstorming Activity Ad Hoc Committee Facilitator; 2011.
Department (KNS): Search Committee Member, Applied Exercise Physiology; 2012.
Department (KNS): Faculty Sponsor for McNair Award Application (A. Montes); 2013.
Department (KNS): Search Committee Member, Exercise Science, (3 positions); 2013-2014.
Department (KNS): Ph.D. Graduate Coordinator; 2013-present.
Department (KNS): Ph.D. Admissions Committee; 2013-present.
Department (KNS): Academic Standards Committee; 2014-2016.
Department (KNS): Search Committee Member, Lecturer position; 2014.
Department (KNS): Search Committee Member, Athletic Training position; 2014-2015.
Department (KNS): Search Committee Member, Nutrition position; 2014-2015.
Department (KNS): Student Travel Award Committee; 2016-present.
College (HDP): Library Committee; 1989-91.
School (AHS): Chair, Ad Hoc School Award Application Review Committee, 2013.
School (AHS): Faculty Review Committee; 2014-2015.
School (AHS): Faculty Review Committee (Chair): 2015-2016.
School (AHS): Search Committee Member; Dean position: 2015-2016.
School (AHS): Ph.D. Graduate Coordinator; Interdisciplinary Health Sciences: 2015-present.
School (AHS): Search Committee Member, Development Officer: 2016.

School (AHS): Grant Reviewer, Center for Biobehavioral Interdisciplinary Science, 2017.
University: Faculty Senator, College of Arts and Sciences; 1993-95.
University: Intercollegiate Athletic Committee; 1994-95.
University: General Science Advisory Committee; 1995.
University: (Health Sciences): Priority and New Program Committee Member; 2010-2013.
University: Mock Accreditation Team Member, Office of the Executive Vice-President and Provost, 2013.
University: Graduate Assessment Sub-Committee, Office of Academic Assessment, 2013.
University: Faculty Opportunity Award Review Panel Member; STEM Health, Office of the President, 2013.
University: Chair, UNLV Faculty Gala Committee, 2013-2014.
University: Senior Mentor, Junior-Senior Faculty Mentoring Program, University of Nevada, Las Vegas, 2013-2014.
University: Ad Hoc Graduate School Thesis and Dissertation Committee, University of Nevada, Las Vegas, 2013-2014.
University: (Health Sciences Representative); Priority and New Program Review Committee, 2013-2016.
University: CoRE (Collaborative Research and Education) Fellow, Health; Co-Chair, 2014-1015.
University: Faculty Opportunity Award Review Panel Member; STEM Health, Office of the President, 2014.
University (Health Sciences Representative): Doctoral Graduate Research Award Review Panel Member; Graduate College, University of Nevada, Las Vegas, 2014.
University: Ad Hoc Faculty Gala Abstract Reviewer, 2014.
University: Grad Slam Judge, Graduate College, University of Nevada, Las Vegas, 2014.
University: R2PC (Recruitment, Retention, Progression, Completion) Committee, Graduate College, University of Nevada, Las Vegas, 2014-2015.
University: STEM Summit Panel Member, *How does Biomedical Research Shape the Future of the Nevada Health Care System?*, University of Nevada, Las Vegas, 2015.
University: Faculty Mentoring Program Invited Speaker, *Creating Interdisciplinary Research*, University of Nevada, Las Vegas, 2015.
University: Advisory Board Member, UNLV Health Law Program, University of Nevada, Las Vegas, 2015-2016.
University: CoRE (Collaborative Research and Education) Fellow, Special Appointment by the Provost, 2015.
University: Research, Scholarship, and Creative Activity Committee; Appointed by the President, 2015-16.
University: College of Engineering Top Tier Strategic Planning Committee, Appointed by Dean of College of Engineering, University of Nevada, Las Vegas 2015-16.
University: Executive Committee, Graduate College, University of Nevada, Las Vegas 2015-16.
University: Ad Hoc Top Tier Committee (Chair), Graduate College, University of Nevada, Las Vegas 2015-16.
University: Grad Slam Judge, Graduate College, University of Nevada, Las Vegas, 2015.
University: Executive Committee, Graduate College, University of Nevada, Las Vegas 2016-17.
University: Grad Slam Judge, Graduate College, University of Nevada, Las Vegas, 2016.
University: Ad Hoc Top Tier Committee (Chair), Graduate College, University of Nevada, Las Vegas 2016-17.

University: Reviewer; Nevada Regents' Scholar Award – Graduate Students, University of Nevada, Las Vegas 2016-17.

University: Invited Panel Speaker; Strategies on Handling the Publication Revise and Resubmit Process, Graduate College, University of Nevada, Las Vegas 2017.

University: Biomechanics Organizer; Dawson-UNLV Honors College Bound Program, Office of the Vice Provost for Undergraduate Education, University of Nevada, Las Vegas, 2017.

University: Graduate College Faculty Fellow, University of Nevada, Las Vegas 2017-18.

University: Executive Committee, Graduate College, University of Nevada, Las Vegas 2017-18.

University: Faculty Research Mentor Program (mentee: Dr. Dieu-My Tran, School of Nursing), 2017-18.

University: Ad Hoc Top Tier Committee (Chair), Graduate College, University of Nevada, Las Vegas 2017-18.

University: Ad Hoc Top Tier Recruitment, Retention, Progression, Completion Committee (Chair), Graduate College, University of Nevada, Las Vegas 2017-18.

University: Ad Hoc Top Tier Interdisciplinary Programs Committee (member), Graduate College, University of Nevada, Las Vegas 2017-18.

Non-University:

Student Affairs Committee Regional Representative, American College of Sports Medicine; 1987-88.

Member-at-Large (Executive Board Member), Northwest Regional Chapter of the American College of Sports Medicine; 1989-1992.

Nominating Committee, Kinesiology Academy, American Alliance for Health, Physical Education, Recreation and Dance; 1991.

Working Group Member (Prospective Research Committee), Osteoporosis and Exercise. National Institutes of Health: Heart, Lung and Blood Institute; 1991.

Biomechanics Academy; American Alliance for Health, Physical Education, Recreation and Dance Annual Convention Abstract Reviewer; 1992.

Program Evaluation Committee Member, Research Consortium, American Alliance for Health, Physical Education, Recreation and Dance; 1992.

Invited Reviewer: Idaho State Board of Education Grant Program; 1992.

Section Editor, "Performance Excellence", *Strategies*; 1992-1995.

Program Co-Chair, Northwest Regional Chapter of the American College of Sports Medicine Annual Meeting; 1993.

President, Northwest Regional Chapter of the American College of Sports Medicine; 1993-94.

Western College Physical Education Young Scholar Award Committee; 1993.

Chair-Elect, Biomechanics Academy, American Alliance for Health, Physical Education, Recreation and Dance; 1994.

Minority Assistance Sub-Committee Member, American College of Sports Medicine, 1994.

Defense Women's Health Research Program Review Panel Member (via BioReview and American Institute of Biological Science), 1994.

National Aeronautics Space Administration Review Panel Member (via BioReview and American Institute of Biological Science), 1995.

American College of Sports Medicine Annual Meeting Abstract Reviewer; 1995, 1996.

Project Review Committee Member, American College of Sports Medicine; 1994-1997.
Regional Chapters' Representative (Northwest Region), American College of Sports Medicine;
1995-1997.
American Heart Association Volunteer; 1997-1999.
American College of Sports Medicine Certification Program Instructor, 1998, 1999.
Regional Chapters Representative (Northwest Region), American College of Sports Medicine;
1998-2001.
Executive Board Member, International Institute for Sport and Human Performance, 2000-2004.
Student Grant Committee Chair, Northwest Region of the American College of Sports Medicine;
2000.
Editorial Board Member, *Health and Fitness Journal*, 2001-2005.
Strategic Health Initiative: Women, Sport & Physical Activity Committee, American College of
Sports Medicine, 2001-2004.
State of Oregon Chair, SHARES Membership Initiative, American College of Sports Medicine,
2001-2002.
Abstract Reviewer, Southwest Chapter of the American College of Sports Medicine, 2003.
Invited Reviewer: Idaho State Board of Education Grant Program; 2006.
Faculty-Student Mentor (G. Casebolt, Texas Women's University), American Society of
Biomechanics Annual Meeting, 2006.
Educational DVD Participant, "Biomechanics", Castilia Media, 2006.
Abstract Reviewer: American Society of Biomechanics Annual Meeting, 2007.
Invited Reviewer: Nebraska Research Initiative, Biotechnology Section, 2006.
Invited Reviewer: Idaho State Board of Education: Research Center Grant FY 2008 Proposal,
2007.
Invited Reviewer: Nebraska Research Initiative, Biotechnology Section, 2008.
External Program Reviewer, Department of Physical Education and Exercise Science, Brooklyn
College, Brooklyn, New York, 2009.
Invited Scholar-Facilitator: Women in Science Luncheon, American Society of Biomechanics
Annual Meeting, 2009.
Faculty-Student Mentor (A. Sumner, Auburn University), American Society of Biomechanics
Annual Meeting, 2009.
Expert Judge, *Recommendations for Biomechanics in Physical Education Teacher Education*,
West Virginia University, 2010.
Review Editorial Board Member, *Frontiers in Movement Science and Sport Psychology*,
2010-2013.
Abstract Reviewer: American Society of Biomechanics Annual Meeting, 2011.
MentorNET Faculty Mentor, (K. Tomko, Marywood College), Women in Science via American
College of Sports Medicine, 2011.
Faculty-Student Mentor (R. Fremenko, University of Virginia), American Society of
Biomechanics Annual Meeting, 2011.
Board of Trustees Member, Rocky Mountain University of the Health Professions, 2011-2013.
Academic Assessment Committee, Rocky Mountain University of the Health Professions,
2011-2013.
Invited External Grant Reviewer, Nebraska Research Initiative, University of Nebraska State
System, 2011-2012.
Abstract Reviewer: American Society of Biomechanics Annual Meeting, 2012.

Northwest Commission on Colleges and Universities Evaluator Training Workshop, 2012.
Invited External Grant Reviewer, Nebraska Research Initiative, University of Nebraska State System, 2012-2013.
Abstract Reviewer: American Society of Biomechanics Annual Meeting, 2013.
American Society of Biomechanics Post-Doctoral Scholar Review Committee, 2013.
Chair, Academic Affairs Committee, Rocky Mountain University of the Health Professions, 2013-2015.
Faculty-Student Mentor (N. Lippa, University of Southern Mississippi), American Society of Biomechanics Annual Meeting, 2013.
Invited External Grant Reviewer, Nebraska Research Initiative, University of Nebraska State System, 2013-14.
Board of Trustees Member, Rocky Mountain University of the Health Professions, 2014-2016.
Academic Assessment Committee (Chair), Rocky Mountain University of the Health Professions, 2014-2016.
Ad Hoc Reviewer, University of Tennessee-Knoxville, Biomechanics Examination Quality, 2014.
Mountain West CTR-IN Reviewer Workshop, Invited Participant, University of Nevada, Las Vegas, Las Vegas, NV, 2015.
Medical School Exploration Committee, Rocky Mountain University of the Health Professions, 2015-2016.
Grant Reviewer, COBRE Pilot Grant Applications, Center for Research in Human Movement Variability, University of Nebraska at Omaha, 2015.
Organizing Committee Member, National Biomechanics Day, American Society of Biomechanics, 2015-16.
Invited Participant, Research Vision Conference, Rocky Mountain University of the Health Professions, 2015.
Grant Reviewer, COBRE Pilot Grant Applications, Center for Research in Human Movement Variability, University of Nebraska at Omaha, 2016.
Organizing Committee Member, National Biomechanics Day, American Society of Biomechanics, 2016-17.
Scientific Review Committee Member, Orthotics Outcomes Research, Congressionally Directed Medical Research Program, 2016-17.
Abstract Reviewer: American Society of Biomechanics Annual Meeting, 2017.
Faculty-Student Mentor (E. Dooley, University of Virginia), Gait and Clinical Movement Analysis Society Annual Meeting, 2017.
Board of Trustees Member, Rocky Mountain University of the Health Professions, 2017-2019.

Manuscript / Textbook Reviewer for:

Medicine and Science in Sports and Exercise; 1989- present
Prentice-Hall, Inc.; 1990, 1992, 1993
Dance Research Journal, (guest reviewer); 1992
Benjamin-Cummings Publishing Company; 1992
Lea & Febiger, Inc.; 1993
Williams & Wilkens; 1993, 1994

Journal of Applied Biomechanics; 1994-present
Research Quarterly for Exercise and Sport; 1994-1996, 2000-present
Brown and Benchmark Publishers, 1996
Health and Fitness Journal; 2001- present
Journal of Physical Medicine and Rehabilitation; 2006-present
Journal of NeuroEngineering and Medicine; 2006-present
Sports Medicine; 2006-present
Wadsworth Publishing Company, 2006
Clinical Biomechanics; 2009-present
International Journal of Women's Health; 2009-present
Military Medicine; 2009-present
Journal of Sport Rehabilitation; 2010-present
Motor Control: 2010-present
Gait & Posture: 2011-present
Journal of Biomechanics: 2011-present
Footwear Science: 2012-present
Osteoarthritis and Cartilage: 2012-present
Journal of Athletic Training: 2013-present
Journal of Electromyography and Kinesiology: 2014-present
Research in Sports Medicine: 2014-present
Journal of Sports Science and Medicine: 2014-present
Sensors, IEEE: 2017-present
PLOS-ONE: 2017-present

HONORS and PROFESSIONAL RECOGNITION

Northwest Regional American College of Sports Medicine Student Presentation Award; 1987
Northwest Regional American College of Sports Medicine Student Presentation Award; 1988
Who's Who Among Rising Young Americans; 1990 (Selective listing of individuals across disciplines who show potential in their field)
Fellow, Research Consortium, American Alliance for Health, Physical Education, Recreation and Dance; 1991
Fellow, American College of Sports Medicine; 1991
Young Scholar Award, Western College Physical Education Society; 1992
Outstanding Service Award, Northwest Region, American College of Sports Medicine, 1999
Lydia T. Thering Meritorious Service Award: Hall of Fame, University of Wisconsin-Superior, 2007
Marquis Who's Who in America; 2010 (Comprehensive listing of contemporary leaders and achievers from the U.S. worldwide)
Early Career Reviewer Program Nominee (Nominated by Provost's Office, representing the University of Nevada, Las Vegas). Center for Scientific Review, the National Institutes of Health, 2011
School of Allied Health Sciences, University of Nevada, Las Vegas, Distinguished Scholar Award, 2012

Proposal Writing Institute, Invited Participant, Office of Sponsored Programs, University of Nevada, Las Vegas, Las Vegas, NV, 2015
Leadership Development Academy, Selected Participant, Office of the Provost, University of Nevada, Las Vegas, Las Vegas, NV, 2015-2016
Recognized Reviewer, *Gait & Posture*, Elsevier Publications, 2015
Interdisciplinary Research and Scholarship Day, Third Place Research Presentation: A Novel Data Analysis Approach for Identification of Performance Differences During Locomotion (Dufek, Harry, Eggleston, & Bates), 2016.
Interdisciplinary Research and Scholarship Day, Second Place Research Presentation: Evaluation of Gait Symmetry in Children with Autism Spectrum Disorder (Eggleston, Harry, Hickman & Dufek), 2016.
Outstanding Graduate Faculty Leadership Award, University of Nevada, Las Vegas Graduate College, 2017.

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