

Jennifer A. Hess, DC, MPH, PhD
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Education

2004 University of Oregon, Eugene, OR, **Ph.D.**, Exercise and Movement Science
1996 University of Washington, Seattle WA, **Master of Public Health**
1989 Palmer College of Chiropractic-West, Santa Clara CA, **Doctor of Chiropractic**
1983 Western Washington University, Bellingham WA, **BS Biology**, minor chemistry

Employment

Research

Associate Professor of Research, Occupational Injury Prevention, University of Oregon, Labor Education and Research Center, 2015 to present.

- Promotion. Job duties same as below.

Assistant Professor of Research/Research Associate – Occupational Injury Prevention and Outreach, University of Oregon, Labor Education and Research Center, 2002-2015.

- Principal investigator on studies to develop, promote, and evaluate ergonomic solutions to reduce musculoskeletal disorders (MSDs) in high-risk populations such as health care workers, construction workers, and firefighters. For example:
- Co-investigator, Eastern Washington University/Center for Construction Research and Training (CPWR), Safety Voice for Ergonomics (SAVE), 2014-2019, to develop an ergonomics program to be used nationally by the International Masonry Training Institute.
- Co-investigator, NIOSH funded study to develop Health and Safety Communities of Practice (COMPASS) for Home Care Workers, 2011-2016, a peer-led safety and health training program for Oregon home care workers.
- Investigator/Ergonomist: Oregon OSHA funded project to develop a sustainable Safe Resident Handling “Facility of Choice” program at an Oregon Long Term Care Facility.
- Co-developed 8-hour Oregon OSHA ergonomic training curriculum for fire and emergency medical services.
- Speaker on injury prevention, ergonomics, and functional fitness at occupational safety and health conferences in Oregon, nationally, and internationally.
- National Occupational Research Agenda (NORA) NORA Musculoskeletal Health Cross-Sector Council member. Council identifies broad occupational safety and health research objectives for the nation, 2018- present.

Clinical

Chiropractic Physician, Hess Chiropractic, 1989-present, Pullman WA, Oak Harbor WA, Eugene OR

- Multifaceted care incorporating chiropractic manipulation, myofascial release, functional rehabilitative exercise programs, and ergonomic consultation.
- Emphasis on biomechanical principles to restore motor control, muscle tone, and dynamic musculoskeletal function.
- Proficient in Diversified and Thompson Techniques. Certified in Graston Technique and Functional Movement Screening.

Consulting

- Mitchell Medical Consultants Network (MCN), Seattle WA: Perform IMEs
- Insight Service Group, 2019: Perform IMEs
- Exam Works, Eugene, OR, IMEs: Perform 2017 to present
- Royal Caribbean Cruise Lines, Eugene, OR, Ergonomics consulting, 2010 to present
- Green Heron Tools, New Tripoli, PA, Ergonomics consulting, 2010-2012, 2016-2018
- Army Corp of Engineers, Eugene, OR, Ergonomics consulting, 2016-2017
- Parson's Construction, Savannah River, Aiken, South Carolina, Ergonomics consulting, 2009
- Warner Bros, Eugene, OR, Ergonomics consulting, 2007
- Boise Cascade Mills, La Grande Oregon, Ergonomics consulting, 2006
- Hayes and Associates, Corvallis, Oregon, Ergonomics consulting, 2004-2005
- University of Oregon Ergonomic Task Force Focus, Ergonomics consulting, 2002

Courses Taught

Credit

- Occupational Health H445/545, Oregon State University, Spring 2018
- Ethics and Issues, Health 418/518, Oregon State University, autumn 2006
- Exercise and Wellness Across the Lifespan, EMS 102, University of Oregon, 2000
- Exercise and Performance, EMS 103, University of Oregon, 2000, 2002
- Biomechanics lab, EMS 381, University of Oregon, 2000

Non-credit

- Construction Ergonomics, 2000-2019
- Health Care Ergonomics, 2004-2016
- Dental Ergonomics, Seven-part ergonomics program, VA, Portland, OR, 2005
- Ergonomics for Fire and Emergency Medical Service Personnel, 2003-2006

Service

- Oregon Board of Chiropractic Examiners (OBCE) Peer Review Board (PRC), 2010-2012, and PRC Chair 2013-2016. Investigated complaints concerning violations in chiropractic record keeping
- Oregon Coalition for Healthcare Ergonomics (OCHE), volunteer organization promoting workplace injury prevention in Oregon, 2002-2012

Publications

Hess JA, Kincl LD, Weeks DL, Vaughn A, Anton D, Safety Voice for Ergonomics (SAVE):

Evaluation of a Masonry Apprenticeship Training Program, Applied Ergonomics, accepted for publication, February 2020.

Kincl LD, **Hess JA**, Weeks DL, Vaughan A, Anton D, Efficacy of text messaging apprentices to reinforce ergonomics and safety voice training, Journal of Safety Research, submitted for publication, Nov 19.

Anton D, Bray M, **Hess JA**, Weeks DL, Vaughan A, Kincl L, Prevalence of work-related musculoskeletal pain in masonry apprentices, Ergonomics, submitted for publication, Nov 2019.

Olson R, **Hess JA**, Parker KN, Thompson SV, Rameshbabu A, Rhoten KL, Marino M, From Research-to-Practice: An Adaptation and Dissemination of the COMPASS Program for Home Care Workers. *International Journal of Environmental Research and Public Health*, 2018.

<http://www.mdpi.com/1660-4601/15/12/2777/pdf>

Mabry, L, Parker K, Thompson SV, Bettencourt K, Haque A, Luther K, Wright RR, **Hess JA**, & Olson R 2018. Protecting workers in the home care industry: Workers' experienced job demands, resource gaps, and benefits following a socially supportive intervention. *Home Health Care Services Quarterly*. Advance online publication. doi: [10.1080/01621424.2018.1470590](https://doi.org/10.1080/01621424.2018.1470590)

Olson R, Thompson S, Elliot DL, **Hess JA**, Luther Rhoten, K, Parker KN, Wright RR, Wipfli B, Bettencourt KM, Buckmaster A, & Marino M. Safety and Health Support for Home Care Workers: The COMPASS

- Randomized Controlled Trial, *American Journal of Public Health*, 2016, 106, 1823-1832.
- Kincl LA, Anton D, **Hess JA**, Weeks D. Safety voice for ergonomics (SAVE) project: protocol for a workplace cluster-randomized controlled trial to reduce musculoskeletal disorders in masonry apprentices DOI: 10.1186/s12889-016-2989-x, PUBH-D-16-00625R1, 2016, 16 (362).
<http://www.biomedcentral.com/1471-2458/16/362/>
- Olson R, Wright R, Elliott D, **Hess, JA**, Thompson S, Buckmasater A, Luther K, Wipfli B, The COMPASS Pilot Study: A Total Worker Health™ Intervention for Home Care Workers, 2015, 57 (4):406-416.
- Olson R, Wright, Elliot D, **Hess J**, Thompson S, Luther K, Wipfli B, Wright, R, Buckmaster A. COMMunity of Practice and SAFETY Support (COMPASS) total worker health study among homecare workers: study protocol for a randomized control trial. *Trials*, 2014, 15:411.
- Anton D, Mizner RL, **Hess JA**. The effect of lift teams on kinematics and muscle activity of the upper extremity and trunk in bricklayers, *Journal of Ortho & Sports Physical Ther*, 2013 43(4), 232-241.
- Hess JA**, Mizner RL, Kincl L, Anton D. Alternatives to lifting concrete masonry blocks onto rebar: Biomechanical and perceptual evaluations, *Ergonomics*, July 2012.
- Hess, JA**, Enos L, Safe Patient Handling: Key Elements to Sustainable Programs, *Occupational Health and Safety*, 2010, 79(11):48-51.
- Hess JA**, Weinstein M, Welch L, Ergonomic solutions in masonry: Regional differences, Benefits and barriers, *Journal of Occupational and Environment Hygiene*, 2010, 7(8):446-455.
- Hess JA**, Kincl LD, Davis K, The impact of drywall handling tools on the low back, *Applied Ergonomics*, 2010, 41(2):305-312.
- Hess JA**, Kincl LD, Amasay T, Wolfe P, Ergonomic evaluation of masons laying concrete masonry units and aerated autoclaved concrete, *Applied Ergo*, 2010, 41:477-483.
- Amasay T, Zodrow K, Kincl L, **Hess J**, Karduna A, Validation of tri-axial accelerometer for the calculation of elevation angles, *International Journal of Industrial Ergonomics*, 2009, 39(5) 783-789.
- Hess JA**, Kincl LD, Albers JT, High RR, Ergonomic evaluation of an extension screw gun to improve work postures, *Occupational Ergonomics*, 2008, 8(1):27-40.
- Hess JA**, Kincl LD, Mandeville, DS, Comparison of three single person manual patient transfer techniques for bed to wheelchair transfers, *Home Health Nursing*, 2007, 25(9),572-579.
- Hess J**, Weinstein M, Innovations Reduce Injuries: Equipment, materials, and work practices are available to protect masons. *Masonry Construction*, 2007, 20(8); 22-28.
- Weinstein M, Hecker S, **Hess JA**, Kincl L, A roadmap to diffuse ergonomic innovations in the construction industry: There is nothing so practical as a good theory, *Int J Occup Environ Health*. 2007; 13:46-55.
- Hess JA**, Kincl L, Evaluation of Manual Patient Transfer Techniques by a Single Care Provider to Establish Best Practices. Proceedings from the International Ergonomics Association (IEA) 2006 Congress, Maastricht, Netherlands.
- Hess JA**, Woollacott, MH, Shivitz, N. Ankle force and rate of force production increase following high intensity strength training in frail older adults, *Aging Clin Exp Res*. 2006; 18(2): 107-115.
- Hess JA**, Woollacott, MH. Effect of high intensity strength training on functional measures of balance ability in balance impaired older adults, *J Manipulative Physiol Ther*. 2005; 28(8): 582-590.
- Hecker SF, Schneider S, **Hess JA**, Kincl L. Ergonomics in Construction. In *Occupational Ergonomics Handbook*, 2nd edition, Marras WS, Karwowski W Eds. CRC Press, Boca Raton, FL. 2006.
- Hess JA**, Hecker S, Weinstein, M, Lunger M. A Participatory ergonomics intervention to reduce risk factors for low-back disorders in concrete laborers, *Applied Ergonomics*, 2004; 35(5): 427-441.
- Hess JA**, Hecker S. Danger: Men at Work: How ergonomics can make construction sites safer, *BioMechanics*, 2004; March, XI (3) 22-35.
- Hess JA**, Hecker S. Stretching at Work for Injury Prevention: Issues, Evidence and Recommendations, *App Occup Environ Health*, 2003, 18(5): 331-338.
- Anton D, Shibley LD, Fethke NB, **Hess J**, Cook TM, Rosecrance J. Effect of Overhead Drilling Position on Shoulder Moment and Electromyography, *Ergonomics*, 2001, 44(5): 489-501.

- Hess JA, Mootz RD.** Comparison of Work and Time Estimates by Chiropractic Physicians with Those of Medical and Osteopathic Providers, *J Manipulative Physiol Ther.* 1999; 22(5): 280-91.
- Hess JA, Mootz RD, Madden CW, Perrin EB.** Measurement of Work Values for Evaluation/Management and Manipulation Services by Chiropractic Physicians, *J Manipul Physiol Ther.* 1997, 20(1):13-23.
- Mootz RD, Hess JA, McMillin AD.** Valuation of Chiropractic Services: The Challenge of Standardization, *Top Clin Chiro.* 1996; 3(2): 20-31.
- Mootz RD, Hess JA, McMillin AD.** Resource-Based Relative Value Scales: Impacts and Recommendations Relative to Chiropractic Practice, *J Manipulative Physiol Ther.* 1995, 18(5): 271-84.
- Mootz RD, McMillin AD, Hess JA.** Reimbursement for Chiropractic Services: Recommendations for a Standardized Approach, *ACA J Chiro.* 1994, 31(11): 30-38.
- Mootz RD, Dhamsi MSI, Hess JA, Cook RD, Schorr DB.** Chiropractic Treatment of Chronic Episodic Tension Type Headache in Male Subjects: A Case Series Analysis, *J Canadian Chiro Assoc.* 1994; 38(30): 152-59.

Selected Presentations

- “Safety Voice for Ergonomics” Center for Construction Research and Training webinar, 2019. <https://www.cpwr.com/news-events/cpwr-informational-webinar-series/>
- “Functional Fitness: Does it fit in the workplace?” Governors Occupational Safety and Health Conference, Portland, OR 2017.
- “SAVE: Ergonomics and Communication Skills to Enhance Injury Prevention in Bricklayers” Governors Occupational Safety and Health Conference, Portland, OR 2017.
- “Corporate Stretching Programs: Is There Something More?” Human Factors, Seattle, WA, 2014.
- “Stretching: a 21st Century Approach” Cascade Occupational Safety & Health Conference, Eugene OR, 2014.
- “Stretching the Truth: Is Stretching Substituting for Ergonomics?” Association for Industrial Hygiene Conference and Exposition, Montreal Canada, 2013.
- “Researching and Disseminating Innovations in Masonry Construction: Understanding Barriers and Benefits,” Canadian Association for Research on Work and Health 2012, Vancouver, BC, 2012.
- “Implementing a Sustainable Safe Resident Handling Program: The Oregon Facility of Choice Program,” Governor’s Occupational Safety and Health Conference, Portland OR, 2011.
- “Reducing Jobsite Injuries: New Research Findings to Reduce MSDs in Masonry.” International Union of Bricklayers and Allied Crafts, Notre Dame, South Bend, IL, 2009.
- “Oregon’s Safe Patient Handling Facility of Choice Program,” Governors Occupational Safety and Health Conference, Portland, OR, 2009.
- “Ergonomic Innovations in Construction.” Ergonomic Interventions and Research: Preventing Work Place MSDs Conference, Oakland, CA 2008.
- “Construction Ergonomics: A Practical Guide,” American Society of Safety Engineers (ASSE), Cascade Occupational Safety and Health Conference, Eugene, OR, 2008.
- “Stretching: The Rest of the Story” Governors Occupational Safety and Health Conference, Portland, OR 2007.
- “Participatory Ergonomics: A Practical Guide,” Governors Occupational Safety and Health Conference Portland OR, 2007.
- “Comparison of Three Single Person Manual Patient Handling Transfer Techniques for Workers in the Home Environment,” Proceeding of the 16th Triennial World Congress of the International Ergonomics Association (IEA), Maastricht, Netherlands, 2006.
- “Evaluation of Manual Patient Transfer Techniques by a Single Care Provider to Establish Best Practices.” The 6th Annual Safe Patient Handling and Movement Conference, Clearwater FL, 2006.
- “Ergonomics Training Curriculum for EMS,” A 4-hour train-the-trainer curriculum taught in multiple locations across western Oregon, 2006.

“Preventing Strains and Sprains in Construction: It’s More Than Just Stretching.” Governors Occupational Safety and Health Conference, Portland, OR, 2005.

“Construction Ergonomics: A Participatory Intervention to Reduce Low Back Disorder Risk in Concrete.” Construction Safety Conference, Chicago, IL, 2005.

“An Integrated Program to Prevent or Reduce Low-Back Injuries in the Workplace – Successes and Barriers in Practice.” NIOSH, Steps to a healthier Workforce Conference, Washington, DC, 2004.

“The Effect of High Intensity Strength Training on Ankle Inverse Dynamics in Balance Impaired Older Adults.’ Poster at The American Society of Biomechanics Portland, OR, 2004.

“Ergonomic Solutions for Emergency Medical Technicians and Community Based Health Care Workers.” with Laurel Kincl and Helen Moss, Health Care Ergonomics Conference, Portland, OR, 2004.

“An Ergonomic Intervention to Reduce the Risk of Low Back Injury in Construction Workers.” Northwest Occupational Health Conference, Seattle WA, 2003

“Ergonomics for Homecare Workers.” Portland, OR, 2003.

“Construction Ergonomics: An Intervention with Concrete Laborers.” International Society of Biomechanics, Dunedin, New Zealand, 2003.

“Construction Ergonomics: A Participatory Intervention with Concrete Laborers.” NIOSH National Occupational Research Agenda (NORA) Symposium, Washington DC, 2003.

“Ergonomics for Women.” Ergonomics and stretching education for women in construction trades, Portland, OR, 2002.

“Does Stretching at Work Prevent Injury: A Review of the Literature.” SAIF Loss Control Conference, Portland, OR, 2002.

“Worksite Stretching Programs: Do They Prevent Injury?” At the Leading Edge: Moving Ahead in Construction Safety Management Conference, Portland, OR, 2001.

Licenses and Memberships

Oregon State Chiropractic License, #3197, since 2000 and current

Awards and Fellowships

- PhD financial support: Foundation for Chiropractic Education and Research Fellowship (FCER), 1998, 1999, 2000, 2001.
- Master thesis financial support: Foundation for Chiropractic Education and Research (FCER), “Resource-Based Relative Value Scales for Chiropractic Work,” 1995.
- Journal of the Canadian Chiropractic Association (JCCA), Award of Excellence for Best Case Series Manuscript, for headache case series article published in JCCA, 1996.