

CURRICULUM VITAE

JACK TIGH DENNERLEIN

1 AUGUST 2023

Boston University
Sargent College, Office of the Dean
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EDUCATION:

| | | | | |
|------|-------------------------------|-------|--|---------------|
| 1996 | Mechanical Engineering | Ph.D. | University of California | Berkeley, CA |
| 1989 | Mechanical Engineering | S.M. | M.I.T. | Cambridge, MA |
| 1989 | Advance Course in Engineering | | General Electric | Lynn, MA |
| 1986 | Mechanical Engineering | B.S. | University at Buffalo, State University of New York | Buffalo, NY |

Post-Doctoral Training

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|-----------|------------------------|--------------------|---------------|
| 1997-1998 | Mechanical Engineering | Harvard University | Cambridge, MA |
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ACADEMIC APPOINTMENTS

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|--------------------------|--|
| Boston University | Boston, MA |
| 2023 - | Dean and Professor, College of Health and Rehabilitation Sciences: Sargent College |

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| Bouvé College of Health Sciences, Northeastern University | Boston, MA |
| 2023- | Professor Emeritus, Physical Therapy, Movement, and Rehabilitation Sciences |
| 2012-2023 | Professor, Department of Physical Therapy, Movement, and Rehabilitation Sciences |

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| Harvard T.H. Chan School of Public Health | Boston, MA |
| 2012- | Adjunct Professor of Ergonomics and Safety, Department of Environmental Health |
| 2010-2012 | Senior Lecturer on Ergonomics and Safety, Department of Environmental Health |
| 2004-2010 | Associate Professor of Ergonomics and Safety, Department of Environmental Health |
| 1999-2004 | Assistant Professor of Ergonomics and Safety, Department of Environmental Health |

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| Harvard Medical School | Boston, MA |
| 2009–2014 | Associate Professor of Orthopaedic Surgery, Brigham and Women's Hospital |

MAJOR ADMINISTRATIVE RESPONSIBILITIES:

| | |
|--------------------------|--|
| Boston University | |
| 2023 - | Dean College of Health and Rehabilitation Sciences: Sargent College, |

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| Northeastern University, Bouvé College of Health Sciences | |
| 2022-2023 | Interim Chair Physical Therapy, Movement, and Rehabilitation Sciences |
| 2019-2023 | Program Director PhD program in Human Movement and Rehabilitation Sciences, |

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|-----------|----------------------|---|
| 2015-2016 | Chair | Faculty Council, |
| 2012-2016 | Director of Research | Physical Therapy, Movement, and Rehabilitation Sciences |

Harvard T.H. Chan School of Public Health

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|-----------|--------------------|--|
| 2010-2023 | Associate Director | Center for Work, Health, and Wellbeing, |
| 2001-2018 | Co-Director | Occupational Injury Prevention Research Training Program |

SECONDARY, VISITING APPOINTMENTS, AND OTHER PROFESSIONAL POSITIONS

| | | | |
|-------------|-----------------------|--|-------------------|
| 2023 – | Affiliated Professor | Department of Biomedical Engineering, Boston University | Boston, MA |
| 2023 -- | Affiliated Professor | Department of Environmental Health, Boston University School of Public Health | Boston, MA |
| 2011 - | Full Member | DFCI/Harvard Cancer Center | Boston, MA |
| 2016 - 2023 | Affiliated Professor | Department of Bioengineering, Northeastern | Boston, MA |
| 2009 - 2024 | Mentoring Faculty | Clinical Orthopedic and Musculoskeletal Education and Training (COMET) Program, Brigham and Women's Hospital, | Boston, MA |
| 1999 - 2023 | Affiliated Faculty | Harvard Injury Control Research Center | Boston, MA |
| 2019 | Visiting Scholar, | Institute for Work and Employment Research, Sloane School of Management and Social Sciences, Massachusetts Institute of Technology | Cambridge, MA |
| 2012 - 2018 | Adjunct Scientist | VU Medical Center, EMGO+ Institute | Amsterdam, NL |
| 2004 - 2005 | Visiting Scientist | Human Movement Sciences, VU University | Amsterdam, NL |
| 2004 - 2009 | Faculty | Harvard School of Public Health-Cyprus Program, | Boston, MA |
| 2002 - 2007 | Affiliated-Faculty | Biomechanics at Harvard, NSF IGERT Ph.D. | Cambridge, MA |
| 1991 - 1996 | Research Assistant | University of California | San Francisco, CA |
| 1986 - 1991 | Design Engineer | General Electric Aircraft Engines | Lynn, MA |
| 1985 | Engineering Assistant | West Valley Nuclear Service | West Valley, NY |

AWARDS AND HONORS:

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|-------------|---|
| 2016 - | Fellow, Human Factors and Ergonomics Society |
| 2015 | Excellence in Teaching Citation, Executive and Continuing Professional Education Harvard T.H. Chan School of Public Health |
| 2013 | Northeastern University Research Leadership Initiative Program |
| 2013 | Occupational Medicine Residency Academic Teacher of the Year Award Harvard T.H. Chan School of Public Health |
| 2008 - 2013 | Fulbright Specialist Roster in Public Health |
| 2008 - 2009 | Juror, International Bicycle Design Competition, Taichung, Taiwan |
| 2008 | Occupational Medicine Residency Academic Teacher of the Year Award Harvard T.H. Chan School of Public Health |
| 2004 - 2005 | Junior Faculty Sabbatical Award, Harvard T.H. Chan School of Public Health |
| 2003 | Citation for Excellence in Teaching, Harvard T.H. Chan School of Public Health |
| 2000 - 2003 | Whitaker Foundation Investigator Award |
| 1998 | Harvard University Derek Bok Distinction in Teaching Award |
| 1990 - 1991 | GE Aircraft Engines Young Engineer Award Nomination |
| 1989 | Associate member Sigma Xi, research honor society |
| 1985 - 1986 | Zimmer Memorial Scholarship, SUNY at Buffalo |
| 1985 | Member Pi Tau Sigma, Mechanical Engineering honor society |
| 1984 | Member Tau Beta Pi, engineering honor society |

PROFESSIONAL SERVICE:**Advisory Boards**

- 2022 - Member, Scientific Advisory Board, *Health Enhancement Research Organization* (HERO) <https://hero-health.org/>
- 2022 - Chair, Advisory Board, Occupational Health Surveillance Program, *Department of Public Health, Commonwealth of Massachusetts*.
- 2019- Scientific Advisory Board, *Institute for Work and Health*, Toronto, Canada. <https://www.iwh.on.ca/scientific-advisory-committee>
- 2014 - Co-Scientific Director, Marconi Research Conferences of the *Office Ergonomics Research Committee* (www.oerc.org)
- 2011 - Advisory Board Member, Occupational Health Surveillance Program, *Department of Public Health, Commonwealth of Massachusetts*.

National Academies

- 2017-2022 Project Panel Member, Transportation Research Board of the National Academies of Sciences, Engineering, and Medicine.
- 2017-2019 Member, Committee on Functional Assessment for Adults with Disabilities, National Academies of Sciences, Engineering, and Medicine, Health and Medicine Division
- 2013-2016 Project Panel Member, Transportation Research Board of the National Academies.

Study Sections:

- 2019 Member, Special Emphasis Panel for Occupational Safety and Health Training Project Grants (TPG).
- 2011- Ad hoc reviewer, Safety and Occupational Health (SOH) Study Section, U.S. Department of Health and Human Services
- 2006-2010 Permanent Member, Safety and Occupational Health (SOH) Study Section, U.S. Department of Health and Human Services,
- 2004-2005 Center for Disease Control, Center for Injury Prevention and Control, Review Group (Biomechanics Study Section)
- 2004 National Institute for Occupational Safety and Health Member Conflict Review Group (Ad hoc). Safety and Occupational Health (SOH) Study Section, U.S. Department of Health and Human Services

Working Groups/Task Forces/Committees

- 2021-2022 Working group to create the Society for *Total Worker Health*® and its Bylaws
- 2020-2021 Member, Writing Group, *ANSI/ASSP Voluntary Total Worker Health*® Management Standard
- 2017 Member, Musculoskeletal Conditions and Pain Management Policy Working Group, Stay-at-Work/Return-to-Work (SAW/RTW) Policy Collaborative, *U.S. Department of Labor's Office of Disability Employment Policy (ODEP)*
- 2015-2020 Hospital Ergonomics Stake-Holders Committee Member, *Occupational Health Surveillance Program, Department of Public Health, Commonwealth of Massachusetts*.
- 2012-2014 Hospital Ergonomics Task Force Member, *Occupational Health Surveillance Program, Department of Public Health, Commonwealth of Massachusetts*.
- 2009-2019 Consortium Member, Center for Construction Research and Training, Silver Springs MD
- 2004-2006 Member, ANSI/HFES 100-2007 Committee: *Human Factors Engineering for Computing Work Stations*.

Conference Planning

- 2015 FISH Workshop Steering Committee, *Fishing Partnership Support Services*, Burlington, MA

- 2014-2016 International Scientific Committee, *Ninth International Scientific Conference on Prevention of Work-related Musculoskeletal Disorders*, (PREMUS), Toronto, Canada, 2016
- 2006 Symposium Organizer: "Future Directions for Occupational Biomechanics" American Society of Biomechanics, Blacksburg, VA
- 2004 -2007 Organizing Committee, *Sixth International Scientific Conference on Prevention of Work-related Musculoskeletal Disorders*, (PREMUS), Boston, MA 2007
- 2004 International Program Committee IASTED *International Conference on Biomechanics*
- 2003 Program Committee American Society of Biomechanics Conference

PROFESSIONAL SOCIETIES:

- Member, Human Factors and Ergonomics Society (HFES)
- Member, International Commission of Occupational Health
- Founding Member, Society for Total Worker Health®

DEPARTMENT AND UNIVERSITY SERVICE:

Northeastern University

- 2019-2023 Member and Co-chair (2021-2023) Appointments, Tenure, and Promotions Review Committee, Bouvé College of Health Sciences (College)
- 2019 Search Committee, Dean Bouvé College of Health Sciences.
- 2017-2022 Senator representing Bouvé College of Health Sciences, Faculty Senate.
- 2017 Chair, Ad-Hoc Tenure and Promotions Committee (Department)
- 2016 - 2021 ADVANCE STRIDE Workshop Committee (University)
- 2016 - 2020 Co- Chair, Tenure and Promotions Committee, Department of Physical Therapy, Movement, and Rehabilitation Sciences (Department)
- 2018 - 2019 Faculty Senate Agenda Committee (SAC), University Faculty Senate
- 2014 - 2016 Faculty Council, Bouvé College of Health Sciences (College)
- 2014 - 2016 Provost's Advisory Committee on Tenure and Promotions (University)
- 2014 - 2016 Chair Search Committee, Department of Health Sciences (University)
- 2012 - 2014 Research Committee, Bouvé College of Health Sciences (College)y
- 2012 - 2021 Department Faculty Search Committees (Chair)

Harvard T.H. Chan School of Public Health

- 2008 - 2012 Committee on Admissions and Degrees, (CAD)
- 2007 - 2008 Faculty Advisory Committee for Career Services Office
- 2006 - 2012 Exposure, Epidemiology, and Risk Program Curriculum Committee
- 2005 - 2008 Great Place to Work Committee and Awards Reviewer
- 2002 - 2004 Assistant Professor Representative, Faculty Council
- 2001 - 2004 Working Group on Woman, Gender, and Health
- 2000 - 2012 Faculty Advisory Committee, Center for Continuing and Professional Education

University of California, Berkeley

- 1995-1996 Member, Chancellor's Campus Advisor Committee, for Lesbian, Gay, Bisexual, and Transgender Concerns, University of California, Berkeley
- 1995 -1996 Co-founder and co-director Quenger an LGBTQ+ student group in engineering, science and technology at the University of California
- 1994-1995 Chairperson, UC Berkeley Mechanical Engineering Graduate Student Council
- 1992-1995 Member, UC Berkeley Mechanical Engineering Graduate Student Council

OTHER PUBLIC SERVICE:

- 1988 - Member – Bass player, Longwood Symphony Orchestra
- 2010 - 2016 Founding member of Boston Cyclists' Union, Boston, MA.

1990 - 1991 Board Member, Longwood Symphony Orchestra, Boston, MA
 1985 - 1986 President, New York Nu (Buffalo) Chapter of Tau Beta Pi (Engineering Honor Society)

BUSINESS EXPERIENCE:

1999 - Consultant Clients include, Immersion, Logitech, Intuitive Surgical, WorkSafe, Myan Specialties, and Valeant Pharmaceuticals

EDITORIAL BOARDS:

2021- Faculty Member, *Faculty Opinions* <https://facultyopinions.com/member/1133537>
 2017- Editorial Board, *Safety Science*
 2012 - International Editorial Board: *Applied Ergonomics*
 2011 - Editorial Board: *IIE Transactions on Occupational Ergonomics and Human Factors*
 2007 - Editorial Board: *Human Movement Science*
 2015 Guest Editor for Special Issue *Ergonomics in Design: Combatting the Sedentary Workplace*
 2014 - 2018 Senior Associate Editor, *Ergonomics in Design*
 2013 - 2019 Editorial Board *Preventing Chronic Disease: Public Health Research, Practice, and Policy*
 2005 - 2021 Editorial Board: *Human Factors*
 2002 - 2019 Contributing Editor: *Journal of Applied Biomechanics*

Ad hoc manuscript reviewer for: *American Industrial Hygiene Association Journal*, *American Journal of Industrial Medicine*, *American Society of Mechanical Engineering (ASME) Journal of Biomechanical Engineering*, *American Society of Mechanical Engineering (ASME) Journal of Dynamic Systems, Measurement, and Control*, *Applied Ergonomics*, *Clinical Biomechanics*, *Clinical Orthopaedics and Related Research®*, *Ergonomics*, *Institute of Electronic and Electrical Engineering (IEEE) Transactions on Systems, Man and Cybernetics*, *Institute of Electronic and Electrical Engineering (IEEE) Transactions on Biomedical Engineering*, *Institute of Electronic and Electrical Engineering (IEEE) Transactions on Neural Systems & Rehabilitation Engineering*, *Journal of Applied Physiology*, *Journal of Biomechanics*, *Journal of Electromyography and Kinesiology*, *Journal of Motor Behavior*, *Journal of Occupational and Environmental Hygiene*, *Journal of Occupational and Environmental Medicine*, and *Muscle and Nerve*.

RESEARCH SUMMARY:

My research aims to protect and promote worker safety, health, and well-being through understanding the impact that the design of both tools and workplace policies, programs, and practices have on worker well-being. Utilizing my training as an engineer, my approach to public health research uses systems-level models built in part from the theories of biomechanics, ergonomics, and organizational and industrial psychology to examine this impact.

My research at the Harvard T.H. Chang School of Public Health's Center for Work, Health, & Well-being, a NIOSH *Total Worker Health®* Center of Excellence examines workplace intervention and implementation research in construction, manufacturing, and transportation sectors. These interventions lead to changes in companies' thinking and practices related to the role working conditions have on worker safety, health, and well-being. Based on these experiences, we created guidelines and a framework for organizations to create a culture of health to protect workers. In 2020, we adapted these recommendations for essential workplaces to protect their workers during the COVID-19 pandemic.

My research in human movement sciences, primarily in occupational biomechanics, has focused on how the design of technology, specifically human computer interaction devices, affects upper extremity biomechanics (forces, muscle efforts, and postures) related to injury risk factors. We have examined the design of chairs, workstations (sit-to-stand), keyboard, mice, mobile computer technology and XR displays. Findings from our research have informed design of these devices for three decades.

In exposure science, we have used wearable technology, including sensors designed and developed in our laboratory to address several research questions. We demonstrated how psychosocial factors increase exposure to physical risk factors for computer related musculoskeletal disorders. We have evaluated wearable technology to predict spinal compression loads of workers lifting and carrying materials in real workplaces as well as integrated data from wearable sensors with machine learning algorithms to identify and determine the different surface conditions related to slips, trips, and falls that people encounter while walking and working.

RESEARCH SUPPORT

Current Funding

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|-----------|---|------------|--|
| 2007-2026 | NIOSH | Co-PI | U19 OH008861 Harvard T.H. Chan School of Public Health, Center for Work, Health, and Wellbeing (PI – Sorensen G.) 2011-2022 Project B Lead: Integrated Approaches to Health and Safety in the Dynamic Construction Work Environment 2019-2026 Outreach Core Lead \$1,400,000 Total Cost per year |
| 2022-2024 | Workplace Safety and Insurance Board (WSIB) | Co-I | PI: Jetha A, CO-I: Biswas A, Smith MJ, Arrandale VH, Dennerlein J, Smith P, Mustard C. Artificial intelligence and occupational injury and illness in Ontario: Implications for prevention and recovery. Research and Grants Program. \$271,713.20. |
| 2022-2025 | Social Sciences and Humanities Research Council of Canada | Co-I | PI: Jetha A, Co-I: Biswas A, Bonaccio S, Dennerlein J, Frenette M, Gignac MAM, Irvin E, Khan N, Koffi M, Loewen P, Rosella L, Vahid Shahidi F, Smith B, Smith MJ, Smith P, Wu N, Zuberi D. Intelligent machines and human worker inequities: Examining the implications of artificial intelligence in the workplace. \$200,000 |
| 2023-2025 | NIOSH | Consultant | U21 WTC-WORK Study: World Trade Center Non-Traditional Responders' Employment and Mental Health (PI: Peters SE) |

Past funding:

| | | | |
|-------------|---|-------|---|
| 2018 – 2021 | La Superintendencia de Seguridad Social (SUSESO), Chile | Co-PI | “Integrated Approaches for Driver and Crew Health and Safety in a National Transportation Company” (\$100,000 Total cost: Sorensen) |
| 2017-2020 | Alpha Foundation | | |

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|-----------|---------------------------|--------------------|---|
| | | Investigator | Systematic Evaluation of Multi-axial Suspension to Reduce Whole Body Vibration Exposures in Heavy Equipment Mining Vehicle Operators (\$480,818 PI: Kim) |
| 2014-2020 | NIOSH/CPWR ⁱⁱⁱ | PI | U60OH009762. Development and Evaluation of Contractor Safety Pre-Qualification Tool (Subcontract to CPWR, \$986,000). |
| 2011-2016 | NIOSH | Co-PI ⁱ | Northeast Fisheries Winch Safety Improvement Project. (Subcontract from New York Center for Agricultural Disease and Injury Research, Education, and Prevention/(CDC/NIOSH) \$1,196,912) |
| 2010-2016 | NSF ⁱⁱ | Co-PI | 0964220. A Toolkit to Evaluate the Effect of Multitouch Interaction on the Musculoskeletal System and Design Safe Multitouch Systems (Subcontract to Arizona State University, \$476,558) |
| 2013-2014 | Mylan Specialties | PI | Evaluating the Physical Form of Autoinjectors on the Effectiveness of Transmitting Force and Maintaining Position and Orientation of the Injector (\$114,953) |
| 2012-2013 | SHIP ⁱⁱⁱ | Co-PI | Randomized Controlled Trial of a Whole Body Vibration intervention in Truck Drivers (University of Washington) |
| 2014-2019 | NIOSH | Investigator | U60OH009762. Enhancing Safety Climate through OSHA 30 Transformational Leadership Training (CPWR PI: Goldenhar) |
| 2014-2017 | NIOSH | Investigator | R21OH010564. Modifying the Workplace to Decrease Sedentary Behavior and Improve Health. (PI: John) |
| 2013-2019 | NIOSH | PI | 1 R01 OH010097 Randomized Controlled Trial of a Whole Body Vibration intervention in Truck Drivers (\$2,188,880) |
| 2013-2016 | Alpha Foundation | PI | Whole Body Vibration Exposure and Injury Prevention of Heavy Equipment Operators in Open Pit Coal Mine (\$617,204) |
| 2000-2003 | Whitaker Foundation | PI | Predicting the Dynamic Tension of the Finger Flexor Muscles & Tendons of VDT Workers |
| 2009-2014 | NIOSH | PI | U60OH009762-01. Safety Culture/Safety Incentives in the Construction Industry (CPWR). |
| 2008-2013 | NIOSH | PI | R01 OH008781 Interactions of biomechanics & psychosocial stressors & MSDs in the modern office) |
| 2007-2012 | NIOSH | PI | R01 OH008373 Upper Extremity Dynamics during Keying |

ⁱ PI during submission and year 1 at Harvard T.H. Chan School of Public Health, but relinquished PI when appointed at Northeastern

ⁱⁱ National Science Foundation

ⁱⁱⁱ Safety and Health Investment Projects (SHIP) Washington State Department of Labor & Industries

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| 2004-2009 | NIOSH/CPWR ^{iv} | Investigator | U54OH008307 Interventions for falls from ladders in construction (CPWR, PI: Perry) |
| 1999-2009 | NIOSH | PI | R01 OH003997 Tools for exposure assessment of physical risk factors of VDT Workers |

TRAINING

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|-----------|-------|------------------|---|
| 2001-2018 | NIOSH | Program-Director | T42 OH008416 Training Program in Occupational Injury Prevention Research (Part of the Harvard Education and Research Center for Occupational Safety and Health) |
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INTERNAL RESEARCH SUPPORT

| | |
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| 2019 | Opioid Crisis Among Construction Workers Construction Workers (PI: Jack Dennerlein) |
| | Northeastern Tier 1 Interdisciplinary Grants |
| 2016 | Mental health and wellbeing in Construction Workers (PI: Jack Dennerlein) |
| | Northeastern Tier 1 Interdisciplinary Grants |
| 2014 | The relationship between musculoskeletal pain and length of time spent working on commercial construction sites – the workers’ perspective. (NIOSH Harvard ERC Pilot Project PI: Jack Dennerlein with Emily Sparer) |
| 2013 | ‘Standing Up’ Against Sedentary Behavior: A Pilot Study in Office Workers (PI Jack Dennerlein with Denish John) (HSPH Center for Work, Health, and Well-being Pilot Project) |
| 2013 | Simulation modeling of construction workers to estimate and mitigate the effects of the dynamic construction worksite. (PI Jack Dennerlein with Justin Manjourides) (HSPH Center for Work, Health, and Well-being Pilot Project) |
| 2012 | Development and Validation of an Ergonomic Survey Instrument among New England Construction Workers (NIOSH Harvard ERC Pilot Projects PI: Jack Dennerlein) |
| 2012 | Protecting Every Construction worker’s Knee (PECK) Pilot Study (NIOSH Harvard ERC Pilot Projects PI: Jack Dennerlein) |
| 2012 | Examining Safety Climate Perceptions and Health Outcomes (NIOSH Harvard ERC Pilot Projects PI: Jack Dennerlein) |
| 2011 | Biomechanics of the thumb during tablet use (NIOSH Harvard ERC Pilot Projects PI: Jack Dennerlein) |
| 2010 | Upper Extremity Kinematics and Kinetics among Computer Workers with Hand Osteoarthritis (NIOSH Harvard ERC Pilot Projects PI: Jack Dennerlein) |
| 2006 | Cellular responses of muscle cells to mechanical stretch (Department of Environmental Health Jr. Faculty Initiative PI: Jack Dennerlein) |
| 2006 | Physical exposure assessment for epidemiological research of musculoskeletal disorders (NIOSH Harvard ERC Pilot Projects PI: Jack Dennerlein) |
| 2004 | Effects of keyboard horizontal position within the workstation (NIOSH Harvard ERC Pilot Projects PI: Jack Dennerlein) |
| 2001 | Occupational injuries among bicycle messengers (CDC Harvard Injury Center Pilot Projects PI: Jack Dennerlein) |
| 2001 | Postural Stability Measurement of a clinical population (Liberty Mutual Harvard Pilot Projects PI: Maura Iversen) |

^{iv} Center for Construction Research and Training, formally the Center for the Protection of Workers’ Rights

2000 Changes in the EMG signal power spectrum during repetitive tasks (Liberty Mutual Harvard Pilot Projects PI: Jack Dennerlein)

INDUSTRIAL RESEARCH GIFTS

2021 Office Ergonomics Research Committee
 2018 Oculus (Facebook)
 2017 MicroSoft
 2016 Office Ergonomics Research Committee
 2015 MicroSoft
 2012 Contour
 2012 Office Ergonomics Research Committee
 2011 Microsoft
 2010 Office Ergonomics Research Committee
 2008 Microsoft
 2006 Microsoft
 2006 Intuitive Surgical
 2005 Office Ergonomics Research Committee
 2004 Microsoft
 2001 Office Ergonomics Research Committee

REPORT of TEACHING

Northeastern University

2019- Interdisciplinary Seminar on Human Movement and Rehabilitation Sciences (PT7030)
 Course Instructor, 6-10 PhD students.
 2021 Technologies in Movement & Rehabilitation Science (PT7020), 2 PhD students
 2017-2018 Clinical Research (HLTH 5450), 100 Doctoral of Physical Therapy Students.
 2015-2017 Ergonomics and the Work Environment (PT5600), 5 DPT Students
 2012-2023 PT Capstone Project (PT5000) Instructor, ~3 DPT Students

Harvard T.H. Chan School of Public Health

2012 *Transdisciplinary Research in the Study of Occupational Health and Safety* (EH528)
 Grading Instructor: ~ 5 graduate students in public health.
 2008-2012 *Bicycle Environments* (ID539); Co-instructor: ~8 graduate students.
 2003 *Field Methods in Environmental Health* (EH280) Co-instructor: ~10 graduate students.
 2001-2015 *Occupational Safety and Injury Prevention* (EH241), Instructor; ~10 grad students
 2001-2012 *Occupational Biomechanics* (EH296) Course Instructor; ~5 graduate students
 2001-2012 *Industrial Hygiene/Ergonomic Internship* & Environmental Sciences Research Seminar
 (EH 267) Co-Instructor; ~1 graduate student per year
 2000-2012 *Industrial Hygiene/Ergonomics Internship* (EH273) Co-instructor: ~ 1 graduate student
 1999-2014 *Ergonomics and Human Factors* (EH243) Instructor; ~15 graduate students and residents

Harvard John A. Paulson School of Engineering and Applied Sciences

2001 *Muscles, Reflexes and Locomotion* (ES148) Instructor, 18 undergrad and grad students
 1999 *System Analysis with Physiologic Applications* (ES145) Instructor, 30 undergrad and grad
 1997 *Robotics* (ES178) Teaching Fellow, 12 undergraduate and graduate students.

Harvard T.H Chan School of Public Health's Executive Continuing and Professional Education

2015-2021 Work, Health, and Wellbeing: Strategic Solutions for Integrating Wellness and
 Occupational Safety and Health in the Workplace
 2000-2019 Ergonomics and Human Factors: Strategic Solutions for Workplace Safety and Health

2009-2013 Safety in Design & Construction
 2006 Occupational Ergonomics and Safety, Cyprus International Institute, Nicosia, Cyprus

Teaching Assistant

1993 Controls and System Dynamics (ME196) recitation lead, University of California, Berkeley,
 1985 FORTRAN (EAS145) Once/week computer laboratory, University at Buffalo,

GUEST LECTURES

Harvard T.H. Chan School of Public Health

2016 - Ergonomics and Safety (EH241)
 2009 - Bicycle and Urban Designs.
 2003-2018 Women and Gender Health, Introductory Perspectives (WGH 211)
 2001-2011 Exposure Assessment for Epidemiology (EH269)
 2000-2012 Practice of Occupational Health (ID263)
 2000-2009 Analytical Methods and Exposure Assessment (EH 263)
 2000-2006 Environmental and Occupational Epidemiology (EPI 215)
 2000-2004 Epi of Environmental and Occupational Regulations (EH236)
 1999-2012 Intro to Environmental Health (EH201)

Harvard T.H Chan School of Public Health's Executive Continuing and Professional Education

2012-2015 Work, Health, and Wellbeing: Strategic Solutions for Integrating Wellness and
 Occupational Safety and Health in the Workplace
 2006- Guidelines for Laboratory Design
 2002-2015 Comprehensive Industrial Design

Harvard John A. Paulson School of Engineering and Applied Sciences

2000-2003 System Analysis with Physiologic Applications (ES145)

Boston University

2004-2013 Exposure Assessment, Environmental Health, BU School of Public Health

Northeastern

2015-2018 Introduction to Public Health

STUDENTS, POST-DOC FELLOWS, AND EARLY CAREER ADVISEES

| <u>Early Career Investigators Mentees and K-grant trainees</u> | | <u>Position</u> |
|--|------------------------|--|
| 2022 - | Adam Chati | Assistant Professor, Hassan II University of Casablanca, Morocco |
| 2022 - 2023 | Max Shepherd | Assistant Professor, Northeastern University |
| 2021 - 2023 | Leanne Chukoskie | Associate Professor, Northeastern University |
| 2019 - 2021 | Susan E. Peters | Research Associated, Harvard University |
| 2017 - 2019 | Emily Sparer (K) | Director, Occupational Health Surveillance Program, Department of Public Health, Commonwealth of Massachusetts |
| 2016 - 2019 | Lauren Murphy | Private Industry |
| 2015 - 2018 | Jennifer Cavallari (K) | Associate Professor, University of Connecticut Medical Center |
| 2014 - 2017 | Erika Sabbath (K) | Associate Professor, Boston College |
| 2012-2014 | Amea Seitz (K) | Assistant Professor, Northwestern University |

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| 2013-2018 | Dennis Anderson (K) | Instructor in Orthopedic Surgery, Harvard Medical School |
| 2013-2016 | Alberto Caban-Martinez (K) | Associate Professor, University of Miami |
| 2012-2019 | Justin Manjorides | Associate Professor, Northeastern University |
| 2012-2020 | Steven Yen | Clinical Professor, Northeastern University |
| 2005-2009 | Judith Gold (K) | Assistant Professor, Temple University |

| <u>Post-Doctoral Fellows (*co-mentorship)</u> | <u>Current Position</u> |
|---|--|
| 2022-2023 | Joseph Abrams, MD |
| 2020-2022 | S. Javad Mousavi, PhD |
| 2017-2019 | Susan Peters, Ph.D. |
| 2016-2018 | Boyi Hu, Ph.D. |
| 2015-2018 | Philip Dixon, Ph.D. |
| 2014-2016 | Erin Teeple, MD, MOH |
| 2013-2015 | Shu-Ling Chiu, Ph.D. |
| 2013-2014 | Ana Barbir, Ph.D. |
| 2012-2013 | Sohit Karol, Ph.D. |
| 2011-2014 | Lauren Murphy, Ph.D. |
| 2011-2013 | Alberto Cabán-Martinez*, DO, PhD, MPH |
| 2010-2012 | Justin Young |
| 2010-2012 | Gert Faber, Ph.D. |
| 2008-2010 | Xu Xu, Ph.D. |
| 2008-2009 | Robert Catena, Ph.D. |
| 2008-2009 | Che-Hsu Chang, Sc.D. |
| 2007-2007 | Lope Barerro, Sc.D. |
| 2007-2010 | Krishna Asundi, Ph.D. |
| 2005-2007 | Ramaswamy Krishnan* |
| 2002-2004 | Erik Won, MD |
| 2002-2004 | Ernst Lee, MD |
| 2001-2003 | Devin Jindrich, Ph.D. |
| 1999-2001 | Kirsty Bennie Kerin, Ph.D. |
| 1999-2000 | Yanhong Zhou, Ph.D. |
| 1999-2000 | Peter Johnson, Ph.D. |
| | Occupational Medicine Resident, Harvard University |
| | Post-doctoral Fellow, Harvard University |
| | Research Associate, Harvard University |
| | Faculty, University of Florida |
| | Faculty, University of Montreal |
| | Faculty, Worcester Polytechnical Institute (WPI) |
| | Private Industry |
| | Private Industry |
| | Private Industry |
| | User Interface Design, Soptify |
| | Faculty, University of Miami |
| | Faculty, Kittering University |
| | Faculty, VU University |
| | Faculty, NC State University |
| | Faculty, Washington State University |
| | Consultant, Private Industry |
| | Professor and Dean, Javeriana University, Bogota |
| | Private Industry (Apple) |
| | Faculty, Harvard Medical School |
| | Private Practice |
| | Private Practice |
| | Faculty, California State University, San Marcos |
| | Private Industry |
| | Faculty, Huazhong University, China |
| | Faculty, University of Washington |

| <u>Doctoral Student Advisor (12 total)</u> | | <u>Current Position</u> |
|--|----------------------|---|
| 2015-2019 | Sara Coppola | Teaching Faculty, University of Washington |
| 2013-2016 | Michael Grant | National Institute for Occupational Safety and Health |
| 2013-2015 | Michael Lin | Usability and Product Developer, Google Sunnyvale, CA |
| 2011-2015 | Emily H. Sparer | Director, Occupational Health Surveillance Program Department of Public Health, Commonwealth of Massachusetts |
| 2009-2014 | Oscar Arias | Assistant Professor, University of Wisconsin |
| 2009-2013 | Matthieu Trudeau | Product Development and Testing, Private Industry |
| 2009-2010 | Karen Hopcia | Occupational Health, Mass General Brigham |
| 2008-2013 | Jennifer Bruno Garza | Faculty, University of Connecticut |
| 2005-2010 | Jin Qin | National Institute for Occupational Safety and Health |
| 2004-2007 | Lope Barerro, Sc.D | Professor and Dean, Javeriana University, Bogota |
| 2003-2008 | Joe Chang Sc.D. | Consultant, Private Industry |
| 2003-2007 | David Lee, Sc.D. | Design Ergonomist, Google, Sunnyvale, CA |

| <u>Master Student Advisor (20 total)</u> | | <u>Department and or Current Position</u> |
|--|------------------|---|
| 2020-2022 | Amanda Astrologo | Bioengineering, Northeastern University, Tampa Bay Rays |
| 2020-2021 | Harrison Grogan | Harvard Chan School, Private Industry |

| | | |
|-----------|-----------------------|--|
| 2010-2012 | Lynn Onyebeke | Harvard Chan School, Lawyer Private Practice |
| 2011-2013 | Michael Lin | Harvard Chan School. Graduate Student, Harvard University |
| 2011-2013 | Torey Jerauld | Harvard Chan School, Private Industry |
| 2011-2013 | Michael Grant | Harvard Chan School, National Institute for Occupational Safety and Health |
| 2013-2015 | Emily Eshleman | Medical Student, University of Maine |
| 2014-2016 | John Schilkowsky | Graduate Student, Northeastern University |
| 2015-2016 | Rory Steward | Harvard Chan School, Doctoral Student, Yale University |
| 2009-2011 | Emily Sparer | Harvard Chan School, Director, Occupational Health Surveillance Program Department of Public Health, Commonwealth of Massachusetts |
| 2009-2010 | Julia Roos | Harvard Chan School, Private Industry |
| 2008-2010 | Tawan Udtamadilok | Harvard Chan School, Private Industry |
| 2008-2010 | Hua Chen | Harvard Chan School, Private Industry |
| 2007 | Karen Oude Hengelc | VU University Amsterdam , Faculty VU University |
| 2007 | Annemeik Houwink | Researcher, Radboud University Nijmegen |
| 2003-2004 | Sara Mortenson | MIT Sloane, Private Industry |
| 2002-2004 | Lope Barerro | Dean, Javeriana University, Bogota |
| 2001-2003 | Antonio Chemor-Ruiz | Harvard Chan School, Manager, Mexico Regional Government |
| 2001-2003 | Maria-Helena DiMarino | Harvard Chan School (Deceased 2003) |
| 1999-2001 | Korrie Mapp | Harvard Chan School, CEO of Organic Ergonomics |

Doctoral Student Committee Member or Mentor*, their institution and their current position

| | | |
|-----------|--------------------------------|---|
| 2018-2022 | Patrick Williamson | Boston University, Bioengineering: Private Industry |
| 2015-2017 | Adina Elena Draghici | Northeastern: Bioengineering, |
| 2013-2015 | Jean Alexander Pulido | Javeriana University Student, Bogotá (Deceased 2015) |
| 2012-2014 | Jorge Andrés Alvarado | Javeriana University Assistant Professor, Javeriana, Bogotá |
| 2009-2010 | Christopher Ronk | Harvard: Private Industry |
| 2005-2009 | Chris Richards, Ph.D. | Harvard: Instructor, Royal Veterinary College, London |
| 2007 | Camie Chaumont Menéndez, Ph.D. | University of Texas, Epidemiologist, CDC |
| 2006 | Monica Daley, Ph.D. | Harvard: Professor, University of California, Irvine |
| 2006 | Christopher Wagner, Ph.D. | Harvard: Private Industry |
| 2004 | Solomon Diamond, Ph.D. | Harvard: Faculty, Dartmouth |
| 2002 | J.C. Chen, Sc.D. | Harvard: Faculty, University of Southern California |
| 2000 | Fuji Lai, S.M. | Harvard: Private Industry |
| 2000 | Allison Okamura*, Ph.D. | Stanford: Faculty, Stanford University |
| 1999 | Maria Yang*, Ph.D. | Stanford: Faculty, MIT |
| 1999 | Paris Wellman, Ph.D. | Harvard: Private Industry |

Doctoral Student Defense Opponent

| <u>Doctoral Student Defense Opponent</u> | <u>Degree Offering Institution</u> | |
|--|------------------------------------|--|
| 2020 | Lidewij Renald | VU University, Amsterdam |
| 2016 | Tessy Luger | VU University, Amsterdam |
| 2016 | Morten Villumsen | Aalborg University, Denmark |
| 2013 | Pieter Coenen, Ph.D. | VU University, Amsterdam |
| 2014 | Kaitlin Gallagher | University of Waterloo, Ontario Canada |
| 2011 | John Collins, Ph.D. | University of Limerick, Ireland |
| 2010 | Gert Faber, Ph.D. | VU University, Amsterdam |
| 2004 | Bart Visser, Ph.D. | VU University, Amsterdam |

Undergraduates, their institution, and current position if known

| | | |
|-----------|--------------------|--|
| 2021-2023 | Eiizabeth Khelm | Northeastern University |
| 2020-2021 | Sara Nano | Northeastern University, Graduate Student, Notre Dame |
| 2019-2020 | Gesele Henderson | Northeastern University: University of Maine, Medical School |
| 2017 | Kyle Nameth | Northeastern University: Private Industry |
| 2014-2015 | Mark Janelli | Northeastern University: Private Industry |
| 2013 | Kaylin Mai | University of Massachusetts, Boston |
| 2012 | Erik Iversen | Northeastern University |
| 2009 | Arun Saigal | M.I.T.: Private Industry |
| 2008 | Karen Lin | University of British Columbia |
| 2001-2003 | Aruna Balakrishnan | Harvard: Google User Experience |
| 2000-2001 | Silas Wang | Harvard: M.D., Private Practice |
| 1999-2000 | Thomas J. Withrow | Harvard: Faculty, Vanderbilt University |
| 1999-2001 | Michael Brody | Harvard |
| 1999 | David Martin | Dartmouth |
| 1997-1998 | Jay Kimmelman | Harvard: Founding Principal at New Globe Partners |
| 1997-1999 | Ken Ihara | Harvard: Past Vice President at Citigroup |

DPT Students – Capstone Project Advisor.

| | | |
|-----------|--------------------|-------------------------|
| 2012-2013 | Brian Conlon: | Northeastern University |
| 2012-2013 | Shannon Harrington | Northeastern University |
| 2012-2013 | Linnea Peterson | Northeastern University |
| 2013-2014 | Vanessa Peck | Northeastern University |
| 2013-2014 | Eric Heath | Northeastern University |
| 2013-2014 | Dewang Chauhan | Northeastern University |
| 2015-2016 | Kelsey Jonas | Northeastern University |
| 2015-2016 | Nickolas Ing | Northeastern University |
| 2016-2017 | Jessica L Orpen | Northeastern University |
| 2016-2017 | Marin Kitamura | Northeastern University |
| 2017-2018 | Tavia Allen | Northeastern University |
| 2017-2018 | Kayla Wegener | Northeastern University |
| 2017-2018 | Meghan McPhee | Northeastern University |

INVITED TALKS and GUEST LECTURESNATIONAL & INTERNATIONAL:

| | |
|------|--|
| 1994 | <u><i>Fingertip Kinematics and Forces During Typing.</i></u> Marconi Conference, Office Ergonomics Research Committee, Marshall CA. |
| 1996 | <u><i>Force Transmission of the Fingertip Pulp During Keyboard Like Work.</i></u> Marconi Conference, Office Ergonomics Research Committee, Marshall CA |
| 1996 | <u><i>In Vivo Measures of Finger Flexor Tendons Force.</i></u> Occupational Medicine Research in Progress Forum, University of California, San Francisco |
| 1996 | <u><i>Determining Tissue Dosage: In Vivo Finger Flexor Tendon Force.</i></u> MPH Seminar Series, Department of Public Health, University of California, Berkeley |
| 1996 | <u><i>The Biomechanics and Control of Human Finger Movement During Computer Keyboard Work: The Forces of the extrinsic finger muscles.</i></u> The Occupational and Industrial Orthopaedic Center, Hospital for Joint Diseases and New York University. |
| 1997 | <u><i>Tendon Force during a Keystroke.</i></u> Marconi Conference, Office Ergonomics Research Committee, Marshall CA, 1997. |

- 2001 *The biomechanics and exposure assessment of computer interface designs*
Robens Centre for Health Ergonomics, University of Surrey, United Kingdom
- 2002 *Haptic Technologies for Computer Pointing Devices.*
Marconi Conference, Office Ergonomics Research Committee, Marshall CA.
- 2002 *Exposure assessment of computer interface designs: from biomechanics to human factors.*
Department of Industrial Engineering Seminar Series, University at Buffalo, State University of New York
- 2002 *Aspects of finger biomechanics during touch typing.*
Center for Ergonomics Seminar Series, University of Michigan, Ann Arbor, MI
- 2003 *Work-related musculoskeletal disorders and injuries: From office workers to bicycle messengers*
ENVH 580 Department of Environmental Health, University of Washington, Seattle, WA.
- 2004 *Dynamical aspects of the finger during typing and tapping*
Rehabilitation Institute of Chicago, Northwestern University, Chicago, IL
- 2004 *Dynamical aspects of the finger during typing and tapping*
Department of Biomedical Engineering, Marquette University Milwaukee, WI
- 2004 *Occupational Ergonomics and Injury Prevention*
Jishou University, Jishou, China
- 2004 *Finger biomechanics during typing and tapping*
Faculty of Human Movement Sciences, VU University, Amsterdam, The Netherlands
- 2005 *Relating Worker Fatigue with Keyboard Forces and Typing Performance.*
Marconi at Marigold Conference, Office Ergonomics Research Committee, Marigold, MI
- 2005 *The Office Environment and Health.*
IIDEX (International Interior Design Exhibition), Toronto, Ontario
- 2006 *Measuring biomechanics in the field for ergonomic studies.* Athens University Medical School, Greece
- 2006 *The Contribution of the Wrist, Elbow and Shoulder Joints to fingertip tapping.* Center for Ergonomics Seminar Series, University of Michigan, Ann Arbor, MI, 2006.
- 2007 *Validating Computer Usage Monitors,*
Marconi at Marigold Conference, Office Ergonomics Research Committee, Marigold, MI
- 2008 *Urban design for biking: Removing environmental impediments around safety in the United States*
Cycling and Health Tech Industry R&D Center, Taichung, Taiwan
- 2009 *Estimating Computer Exposures* ,
Marconi Conference, Office Ergonomics Research Committee, Marshall, CA
- 2009 *Injury rates on cycle tracks: the myth that bike lanes are unsafe*
Cycling and Health Tech Industry R&D Center, Taichung, Taiwan
- 2009 *Biomechanical Exposures: Determining Injury and Disorder Mechanisms* **Keynote Speaker:** X2009 Sixth International Conference on Innovations in Exposure Assessment, Boston, MA
- 2010 *Linking Research to Reality - Prevention of Upper Extremity Musculoskeletal Injury:* **Keynote Speaker.** Association of Canadian Ergonomists 41st Annual Conference, Kelowna, BC October, 2010
- 2010 *Fatigue of the forearm muscles associated with repetitive wrist movements.*
Ergonomic Interventions and Research: Preventing Musculoskeletal Fatigue and Injury Conference, University of Michigan and University of California, Oakland, CA, December 2010
- 2011 *Using a Work Systems Analysis to Redesign Computer Task Exposures in Radiologists.*
Marconi Conference, Office Ergonomics Research Committee, Marshall CA. January 2011
- 2012 *Tablet computer use and upper extremity postures and muscle load,* Marconi at Marigold Conference, Office Ergonomics Research Committee, Holland, MI, June 2012

- 2012 Preventing work-related musculoskeletal disorders in the modern office. Lawrence Berkeley National Laboratory Ergonomics Distinguished Lecture Series, Berkeley, CA. July 2012
- 2012 Evidence-based Ergonomics in Computer Use. **Keynote Speaker**. Twenty-Fifth Annual Occupational Safety and Health Institute, University of California, Center for Occupational and Environmental Health, Oakland, CA July 2012
- 2014 How mobile technology is changing the paradigm of office ergonomics. **Featured Speaker**, Applied Ergonomics Conference, Orlando, FL 26 March 2014
- 2014 Occupational physical activity in health care and construction: work's contribution to workers' weekly recommended levels of physical activity. Chevron Global Wellness Network Meeting. (Remote Presentation) 20 May 2014
- 2014 Physical Ergonomics Biomechanics and Ergonomics of the Modern Office: Identifying Injury Pathways. **Keynote Speaker**. HFES Inter-University Workshop, University of Buffalo, Buffalo NY, 15 November 2014.
- 2015 Improving Safety Culture through Workplace Programs. National Perspectives on Ergonomics, Workplace Design, and Health, 2015 Center for Occupational and Environmental Health Lela Morris Symposium, Berkeley, California. 22 May 2015
- 2015 Demystifying ergonomics for the modern office. Ergo-X (Human Factors and Ergonomics Society), **Featured Speaker**. Anaheim, CA 18 June 2015
- 2015 Safety management and culture. **Keynote Speaker** Working on Safety 2015, www.wos2015.net, University of Minho, Porto, Portugal, 24 September 2015
- 2016 The effects of systems and design on employee health and safety from the office to the construction site: identifying causal pathways through modern ergonomics and human factors. ERC Weekly Seminar, School of Public Health, University of Michigan, 8 January 2016
- 2016 Building-SAFE: Safety Incentives and Safety Climate in Construction. Webinar, The Center for Construction Research and Training – CPWR, 20 January 2016
- 2016 Reflecting on experiences and lessons learned in integrated approaches for worker health and safety. **Keynote/Closing Session Speaker**. Mutual Summit 2016, Santiago, Chile, 27 May 2016
- 2016 Safety Incentives, Safety Climate, and Total Worker Health® in the Dynamic Environment of Commercial Construction. The Summer Institute, Oregon Health State University and Portland State University, Portland Oregon, 17 July 2016
- 2017 Demystifying ergonomics in the Modern Office. **Hallman Lecture**, Applied Health Sciences, University of Waterloo, Ontario, Canada. 26 October 2017
- 2017 The effects of systems and design on employee health and safety from the office to the construction site: identifying causal pathways through modern ergonomics and human factors. Student Chapter of the Human Factors and Ergonomics Society, Virginia Tech, Blacksburg, VA 16 November 2017
- 2018 Ergonomics and the surgeon: Ideas to optimize performance and improve wellbeing. American Society for Reconstructive MicroSurgery Annual Meeting, Phoenix AZ 14 January 2018
- 2018 Making the Business Case for Total Worker Health® Workers' Compensation. Educational Conference and Safety & Health Conference, Orlando FL, 16 August 2018
- 2018 A Total Worker Health® Intervention on Commercial Construction Sites. Work Wellness and Disability Prevention Institute (WWDPI) and Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD) Webinar 18 September 2018
- 2018 Assessment of contractor safety (ACES) through prequalification organizational surveys. The Center for Construction Research and Training (CPWR) Webinar, 26 September 2018
- 2018 Moving from wellness to well-being with sit-stand desks. Human Factors and Ergonomics Society Webinar 22 October 2018

- 2018 *Sent from my phone, please excuse the new functional challenges for thumbs.* **Keynote Speaker**, 3rd International Thumb Osteoarthritis Workshop (ITOW 2018), Palo Alto, CA 9 November 2018
- 2019 *Applying Total Worker Health®: Key Characteristics to Build a Culture of Health*, **Plenary Speaker** The Danish Working Environment Authority and The National Research Centre for the Working Environment, 12 March 2019
- 2019 *Worker safety, health, and wellbeing: Applying Ergonomics within a Total Worker Health® framework*. Program in Public Health, Oregon State University, Corvallis, OR, 23 April 2019
- 2019 *Total Worker Health® : Evidence for integrating workplace policies, programs, and practices.* **Keynote Speaker** Central New York Healthy Workforce Business Conference, Hamilton New York, October 15, 2019
- 2019 *Design of Head Mounted Displays & Cervical Spine Loading*, Ergo X 2019, Seattle, Washington, 28 October 2019
- 2020 *Expanding ergonomics to improve human wellbeing: From Job Rotation to Total Worker Health*, WOSH Meeting ORCHSE Strategies, Sonoma, California 25 February 2020
- 2020 *Total Worker Health® approaches to foster worker & organizational resilience during a pandemic*. BSR HealthCare Working Group Meeting, Remote Presentation, 18 November 2020
- 2021 *Well-Being: What Does it Have to Do With Safety?* **Plenary Session Speaker**. Safety 2021, American Society of Safety Professionals, Austin Texas 14 September 2021.
- 2021 *Total Worker Health® Approaches: Building Organizational Resilience During the Time of COVID-19*. Education and Research Center Seminar, University of Cincinnati, ERC Seminar, 9 November 2021
- 2021 *Occupational Safety in Construction: The Association Of Worker Safety Climate With Organizational Safety Management Systems And Safety Incentives Programs*. Department of Environmental Health Seminar, University of Cincinnati, Ohio, 10 November 2021
- 2022 *Total Worker Health®: Why business leaders should care*. Velocity EHS Seminar (Remote). 2 March 2022
- 2022 *Office Work: Input Devices Matter in Preventing MSD*. Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD) Waterloo, Ontario, 23 March 2022. (Remote Presentation)
- 2022 *Linking MSDs to Total Worker Health® -- A Town Hall*, National Safety Council, Virtual Town Hall Meeting, (bit.ly/NSCTownHall). November 10, 2022
- 2022 *Strengths, Limits and Challenges: Total Worker Health, Work Environments Safe and Healthy, and the European Network for Health Promotion at Work* – a Panel Discussion, Primer Congreso de Entornos Laborales Seguros y Saludables, Mexican Social Security Institute (IMSS), Monterrey, Mexico, November 17, 2022
- 2022 *Global Perspectives of the Future of Occupational Health– a Panel Discussion*, Primer Congreso de Entornos Laborales Seguros y Saludables, Mexican Social Security Institute (IMSS), Monterrey, Mexico, November 18, 2022
- 2022 *What's Work got to do with it: Health Promotion at work and the Integrated Approach* Occupational Health Seminar, Pontifical Catholic University of Chile, Santiago (Remote Presentation), December 2, 2022
- 2023 *Total Worker Health in construction*, Total Worker Health Society Peer Learning Series (Remote presentation/discussion) 26 Jan 2023

REGIONAL (New England)

- 1997 Sensing the Forces of the Human Hand during Touch-Typing. Harvard Robotics Seminar Series, Cambridge, MA

- 1998 Finger flexor tendon forces and the control of finger movements during typing.
Boston University Neuromuscular Research Center Seminar Series, Boston MA
- 1999 Forces of a finger flexor tendon during keyboard-work: They're higher than you think.
University of Massachusetts, Lowell, Lowell MA
- 1999 Biomechanics of the Hand and Finger: An Ergonomic Question.
Sargent College of Physical Therapy, Boston University, Boston MA
- 2000 Adding Vibrotactile Feedback to Real-World Telerobots
Quarterly Biomedical Engineering and Minimally Invasive Surgery Symposium,
University of Massachusetts, Worcester, MA.
- 2000 The Role of Passive & Active Muscle Force During Touch-Typing
Biodynamics and Ergonomics: Improving Health and Human Performance and
Identifying Opportunities for Technology Transfer Symposium, Department of Medicine,
University of Connecticut, Farmington, CT.
- 2001 The Ergonomics of a Force-Feedback Mouse,
Media Lab, Massachusetts Institute of Technology, Cambridge, MA
- 2002 Office Ergonomics Workshop Lecture, **Keynote Speaker**
Eighth Annual Millender Occupational Medicine Conference, New England Baptist
Hospital, Boston, MA.
- 2002 Musculoskeletal Disorders and the Computer Workstation: Research Supporting
Ergonomic Interventions.
NECOEM/MaAOHN Annual Conference, Bedford, MA
- 2003 Office Ergonomics Workshop Lecture
Ninth Annual Millender Occupational Medicine Conference, New England Baptist
Hospital, Boston, MA
- 2003 Exposure Assessment of Computer Work: From Design to Usability.
Dept of Work Environment, University of Massachusetts, Lowell, MA
- 2003 Bicycle Messenger Injuries: Lessons from Urban Cyclists
Moving Together 2003: Massachusetts Statewide Bicycle and Pedestrian Conference,
Worcester, MA
- 2004 Occupational Bicycle Injuries
Department of Environmental and Occupational Medicine, Yale University New Haven,
CT
- 2004 Ergonomics for the operating room nurse
Association of periOperative Registered Nurses (AORN), Massachusetts Chapter 1,
Boston, MA
- 2005 - Exposure Assessment for Work-Related Injury and Musculoskeletal Disorders, Boston
University
- 2006 Ergonomics and Musculoskeletal Disorders
Workplace Theory and Policy seminar, Yale Law School
- 2006 The Contribution of the Wrist, Elbow and Shoulder Joints to fingertip tapping.
Kinesiology Department Seminar, University of Massachusetts, Amherst.
- 2007 The dynamics of the finger and upper extremity during repetitive occupational tasks
Department of Mechanical Engineering, Cornell University
- 2008 Upper extremity dynamics during keying.
Department of Mechanical Engineering, Tufts University
- 2008 Ergonomics and Injury Prevention in Health Care
Grand Rounds, Department of Radiology, Beth Israel Deaconess Medical Center,
Boston MA
- 2008 Ergonomics and Upper Extremity Disorders Among Computer Users.
NECOEM/MaAOHN Annual Conference, Bedford, MA
- 2009 Work-related musculoskeletal disorders: identifying injury pathways through
biomechanics. Grand Rounds to the Harvard Combined Orthopaedic Surgery Residency
Program, Boston, MA

- 2010 Applying ergonomics in health care: The challenges and successes for radiology. Grand Rounds, Department of Radiology, Beth Israel Deaconess Medical Center, Boston MA
- 2011 Motor Control in Ergonomics: Applications in Human Computer Interfaces. The Boston Action Club, Northeastern University.
- 2012 Prevention of Work and Computer Related Musculoskeletal Disorders< Department of Occupational Therapy Student Seminar Series, Boston University, Boston, MA
- 2012 Fundamental ergonomics in design. Rhode Island School of Design, Providence, RI, October
- 2013 Upper extremity biomechanics in environmental and public health, from design to behavior. Rhode Island Hospital, Lifespan. February 2013
- 2014 Occupational physical activity in health care and construction: work's contribution to workers' weekly recommended levels of physical activity. Massachusetts Department of Public Health, Occupational Health Surveillance Seminar. 20 March 2014
- 2014 Ergonomics of the modern office: mobile technology to dynamic workstations: Harvard Club and the Massachusetts Chapter of the Fulbright Association. 18 November 2014
- 2017 Safety Culture and Climate: Construction Worker Safety and Health. New England Chapter of American Industrial Hygiene Meeting, Norwood, MA, 1 November 2017
- 2017 Improving Conditions of Work: What Impacts Worker Health? Massachusetts Working on Wellness Webinar Series, 6 December 2017
- 2018 Safety Culture and Climate: Construction Worker Safety and Health. OSHA Summer Summit, Amherst, MA, 14 June 2018
- 2018 Ergonomics – Design and Systems for Human Wellbeing. Northeastern University STEM summer program for high school students. <https://stem.neu.edu/summer/ysp/>
- 2019 Building a culture of safety, health, and wellbeing for construction workers: Overcoming (or not) the organizational challenges. MIT Sloan School of Management and Social Sciences, February 8, 2019
- 2019 Construction Worker Safety, Health and Well-being: Ten years of research in New England Commercial Construction Industry. OSHA District 1 Construction Safety Round Table, Boston, MA 11 June 2019
- 2019 The three domains of modern ergonomics in worker health and safety research. Department of Environmental Safety and Health, Massachusetts Institute of Technology, Cambridge, MA, June 20, 2019

Selected Citations in the General Media

- Boston Globe** Goldberg D. (2002) Dicey deliveries survey finds risk runs high for Boston's bike couriers. 21 November 2002. <http://www.messarchives.com/articles/articles2002/bostonglobe211102.html>
- Seattle Times.** Sanders E (2003). Keeping Downtown Rolling: Flouting the system and serving it, messengers deliver. <http://old.seattletimes.com/pacificnw/2003/0831/cover.html>
- Boston Globe** Lewis E. (2004) Lab aims to cut rate of injuries on the job. http://archive.boston.com/business/globe/articles/2004/06/28/lab_aims_to_cut_rate_of_injuries_on_the_job/ 28 June 2004
- Slate** Perlstein L (2010) Rethinking the School Desk: Is the best way to fix the American classroom to improve the furniture? 26 October 2010 http://www.slate.com/articles/news_and_politics/the_hive/2010/10/rethinking_the_school_desk.html
- Boston Globe** (2011) Health Answers. 14 March 2011

- Los Angeles Times** (2012) Harvard study finds the iPad can be a pain in the neck. 25 January 2012
<http://latimesblogs.latimes.com/technology/2012/01/harvard-researchers-ergonomics-ipad.html>
- Boston Globe** Kotz, D. (2012) 3 ways to avoid iPad neck strain. 6 February 2012
<https://www.bostonglobe.com/lifestyle/health-wellness/2012/01/30/ways-avoid-ipad-neck-strain/iAnSo2Y84p6kOzAqg09p1O/story.html>
- Boston Globe** Pierce K. (2012) Many employees abandon sitting while working 31 May 2012
<https://www.bostonglobe.com/business/2012/03/25/employees-take-stand/GWtLOR2tUKRoeuB9ymEU2l/story.html>
- New York Times Magazine**
 Kennedy P (2012) Who Made That Escape Key? 5 October 2012
http://www.nytimes.com/2012/10/07/magazine/who-made-that-escape-key.html?_r=0
- New York Times** Parker-Pope T (2013) Ask Well: Help for the Deskbound. 15 January 2013
<http://well.blogs.nytimes.com/2013/01/15/ask-well-help-for-the-deskbound/>
- Cook's Illustrated** (2013) Chef's Knives. September 2013
https://www.cooksillustrated.com/equipment_reviews/1433-chefs-knives
- The Wall Street Journal**
 Fowler G. (2014) Find the Best Phone-Screen Size for you. 26 March 2014
<http://www.wsj.com/articles/how-to-find-the-phone-that-fits-your-hand-1395795606>
- Wired** Bonnington C (2014) A Bigger iPhone May Not Be Better, But It Makes Sense for Apple. 8 August 2014. <http://www.wired.com/2014/08/a-bigger-iphone/>
- Cook's Illustrated** (2016) Sauciers. February 2016
https://www.cooksillustrated.com/equipment_reviews/1661-sauciers
- Forbs** Chamary JV (2016) Was Steve Jobs Right About Apple's Small iPhone SE? 23 March 2016 <http://www.forbes.com/sites/jvchamary/2016/03/23/small-phone-ergonomics/#6d3d53b336ff>
- The Wall Street Journal**
 Johannes L (2016) A Cure for Digital Addicts' 'Text Neck'? 23 March 2016
<http://www.wsj.com/articles/a-cure-for-digital-addicts-text-neck-1464019660>
- Business Insurance** Gonzalez G (2016) OSHA puts incentive plans under scrutiny 27 March 2016
<http://www.businessinsurance.com/article/20160327/NEWS08/303279982/osh-puts-workplace-safety-incentive-plans-under-scrutiny?tags=%7C80%7C304>
- Boston Magazine** Ducharme J (2016) Six Tips for Using Standing Desks Correctly 10 May 2016
<http://www.bostonmagazine.com/health/blog/2016/05/10/standing-desks/print/>
- The Washington Post**
 Cavanaugh Simpson, J. (2016) Digital disabilities – text neck, cellphone elbow – are painful and growing. 13 June 2016
https://www.washingtonpost.com/national/health-science/digital-disabilities--text-neck-cellphone-elbow--are-painful-and-growing/2016/06/13/df070c7c-0afd-11e6-a6b6-2e6de3695b0e_story.html
- Wired** Rhodes, M (2016) You'll Miss the Escape Key Even Less Than Your Headphone Jack. 27 October 2016. <https://www.wired.com/2016/10/youll-miss-escape-key-even-less-headphone-jack/>

- Reuters** Rapaport, L. (2016) Safe patient handling linked to fewer worker injuries. 4 November 2016 <http://www.reuters.com/article/us-health-safety-patient-handling-idUSKBN12Z25G>
- Boston Globe** Ruckstuhl L (2018) Is your device giving you 'iPad neck,' 'i-hunch,' or 'text neck'? 28 June 2018 <https://www.bostonglobe.com/metro/2018/06/28/your-device-giving-you-ipad-neck-hunch-text-neck/5MWkMc9O7ZS8HR3UDugHaN/story.html>
- Washington Post** Fowler GA (2018) Review: Apple's new iPad Pro still isn't a laptop 10 November 2018 <https://www.dailyherald.com/business/20181110/review-apples-new-ipad-pro-still-isnt-a-laptop>
- New York Times:** Murphy H (2019) Here's How to Type Faster on Your Phone Get those index fingers off your screen. October 4, 2019 <https://www.nytimes.com/2019/10/04/technology/phone-typing.html>
- WHYY** Radio Times with Marty Moss-Coane: Office Space Episode Panelist <https://whyy.org/episodes/office-space/> November 7, 2019
- New York Times** Haag, M. (2020) Virus Rules Let Construction Workers Keep Building Luxury Towers. New York Times, <https://www.nytimes.com/2020/03/25/nyregion/coronavirus-nyc-construction.html>. March 25, 2020
- Wall Street Journal** Smith, J. (2020) Wearable Devices Take Ergonomics to a New High-Tech Place The technology—which uses sensors to let warehouse workers know when their posture is off—could reduce injuries from repetitive tasks. <https://www.wsj.com/articles/wearable-devices-take-ergonomics-to-a-new-high-tech-place-11583267614> 5 March 2020
- USC** Giles Bruce (2020) University of Southern California Center for Health Journalism How can reporters stay safe while getting the story during COVID-19? <https://www.centerforhealthjournalism.org/2020/04/19/how-can-reporters-stay-safe-while-getting-story-during-covid-19> April 21, 2020
- Colombia Spector** Stephanie Lai (2020), Columbia Daily Spector Columbia construction workers ordered to return to sites as COVID cases peak in NYC <https://www.columbiaspectator.com/news/2020/04/21/columbia-construction-workers-ordered-to-return-to-sites-as-covid-cases-peak-in-nyc/> April 21, 2020
- Los Angeles Times** Nathan Fenno, Andrew Khouri, Roger Vincent (2020) Los Angeles Times L.A. hunkered down. But it hasn't stopped building mansions, stadiums and apartments. <https://www.latimes.com/business/story/2020-04-24/coronavirus-construction-jobs> April 24, 2020
- BIM Today** BIMToday (2020) Reclaiming innovation: How to manage change amid industry tech growth. Embracing the impact of new and disruptive building technology in the construction industry means also managing the organisational change that comes with it. <https://www.pbctoday.co.uk/news/bim-news/building-technology-growth/84633/> 26 October 2020
- Construction Dive** Joe Bousqin (2020) Construction's COVID-19 record might be worse than you think: Academic studies and local health authorities find more outbreaks in construction than commonly thought. <https://www.constructiondive.com/news/constructions-covid-19-record-might-be-worse-than-you-think/589258/> 19 November 2020
- Wall Street Journal** Sebastian Herrera (2021) Amazon Makes Push to Reduce Worker Injuries Online retailer rolls out safety videos, on-the-job stretching exercises and staff

meditation zones. <https://www.wsj.com/articles/amazon-makes-push-to-reduce-worker-injuries-11621245602> 18 May 2021

Wall Street Journal Lisa Lombardi (2022) Your Biggest Questions About Standing Desks, Answered. <https://www.wsj.com/buyside/home/standing-desk-questions-01653614094>

BIBLIOGRAPHY

My bibliography on PubMed <https://www.ncbi.nlm.nih.gov/myncbi/jack.dennerlein.1/bibliography/public/>

Google Scholar: <https://scholar.google.com/citations?user=MQP2PRUAAAAJ&hl=en>

Google Scholar Indices • Citations: 11,246, H index: 61, i10 index: 187

ORCID: <https://orcid.org/0000-0001-7703-643X>

PEER-REVIEWED JOURNAL ARTICLES:

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