

# CURRICULUM VITAE

## JACK TIGH DENNERLEIN

1 AUGUST 2023

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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

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

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

**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

**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

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

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### MAJOR ADMINISTRATIVE RESPONSIBILITIES:

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

**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,

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

### Harvard T.H. Chan School of Public Health

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:

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](http://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)
- 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*.

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## 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*

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		

		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 <sup>iii</sup>	PI	U60OH009762. Development and Evaluation of Contractor Safety Pre-Qualification Tool (Subcontract to CPWR, \$986,000).
2011-2016	NIOSH	Co-PI <sup>i</sup>	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 <sup>ii</sup>	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 <sup>iii</sup>	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

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

<sup>ii</sup> National Science Foundation

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

2004-2009	NIOSH/CPWR <sup>iv</sup>	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**

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**

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)	

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<sup>iv</sup> 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	Amee Seitz (K)	Assistant Professor, Northwestern University

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

Post-Doctoral Fellows (\*co-mentorship)

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

Doctoral Student Advisor (12 total)

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	Mathieu 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

Master Student Advisor (20 total)

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

Degree offering Institution

2020	Lidewij Renald	VU University, Amsterdam
2016	Tessy Luger	VU University, Amsterdam
2016	Morten Villumsen	Aalbor 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 LECTURES**NATIONAL & 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](http://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](https://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/](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](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/GWtLOR2tUKRoeb9ymEU2l/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](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](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](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](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>

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**BIBLIOGRAPHY**


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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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