

## CURRICULUM VITAE

Katrina Shaun Maluf, PT, Ph.D.  
School of Exercise and Nutritional Sciences  
Doctor of Physical Therapy Program  
San Diego State University  
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<https://ens.sdsu.edu/dpt/people/faculty/katrina-maluf/>

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### **EDUCATION**

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#### Education

<b>University Colorado Boulder</b> Post Doctoral Fellow	2005 Neurophysiology
<b>Washington University in St. Louis</b> PhD	2002 Movement Science
<b>Washington University in St. Louis</b> MSPT	1999 Physical Therapy
<b>University of Arizona</b> BS	1996 Microbiology/Chemistry

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### **PROFESSIONAL LICENSURE**

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<u>Licensure</u>	<u>Dates</u>
State of Missouri Licensed Physical Therapist	1999-2004
State of Iowa Licensed Physical Therapist	2005-200
State of Colorado Licensed Physical Therapist (# 8247)	2003-2020
State of California Licensed Physical Therapist	2020-present

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### **TEACHING AND RESEARCH POSITIONS**

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Professor San Diego State University	Fall 2017 - present Clinical Reasoning, Psychosocial Rehabilitation
Research Physical Therapist/Affiliate VA San Diego Healthcare System Center of Excellence for Stress and Mental Health	Fall 2019 – present
Associate Professor San Diego State University	Fall 2014 - 2017 Clinical Reasoning, Psychosocial Rehabilitation
Adjunct Associate Professor University Colorado Boulder	2011 - 2014 Integrative Physiology

Associate Professor and Program Director University Colorado Denver	2010 – 2014 Rehabilitation Science, Clinical Reasoning
Assistant Professor University of Colorado Denver	2007 – 2010 Applied Histology, Evidence Based Practice
Assistant Professor University Iowa	2005 - 2006 Evidence Based Practice
Adjunct Clinical Professor University of Colorado Denver	2004 - 2005 Applied Histology

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## **TEACHING EFFECTIVENESS**

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### **Current Teaching**

*San Diego State University, Doctor of Physical Therapy Program*

DPT 878 Psychosocial Aspects of Rehabilitation, 3 CR, F2F Lecture

DPT 888 Evidence Based Practice IV: Advanced Clinical Reasoning, 3 CR, F2F Lecture/PBL

DPT 897 Doctoral Research, 1 CR, F2F Small Group

DPT 889 Doctoral Project, 2 CR, F2F Small Group

### **Prior Teaching**

*San Diego State University, School of Exercise and Nutritional Sciences*

ENS 499 Special Study, 3 CR, F2F 1:1 Mentoring

*University of Colorado Denver, PhD Program in Rehabilitation Science*

RHSC 7500 Neurophysiology of Pain, 3 CR, F2F Lecture

RHSC 8900 Independent Study in Rehabilitation Science, 3 CR, F2F 1:1 Mentoring

RHSC 7001 Rehabilitation Science Seminar, 1 CR, F2F Graduate Seminar

RHSC 7910 Research Practicum in Rehabilitation Science, 3 CR, F2F 1:1 Mentoring

RHSC 7911 Research Practicum in Rehabilitation Science, 3 CR, F2F 1:1 Mentoring

*University of Colorado Denver, Doctor of Physical Therapy Program*

DPTR 5003 Histology, 3 CR, F2F Lecture

DPTR 5270 Movement Science I, Clinical Lab Assistant, F2F Lab

DPTR 6102 Movement Science II, EMG Unit, F2F Lecture

DPTR 8211 Patient Care Seminar I, 3 CR, F2F Lecture/PBL

DPTR 6612 Patient Care Seminar II, 3 CR, F2F Small Group PBL

DPTR 7613 Patient Care Seminar III, 3CR, Remote Small Group PBL

DPTR 7933 Clinical Education III, 6 CR, F2F 1:1 Mentoring

DPTR 7934 Clinical Education III, 6 CR, F2F 1:1 Mentoring

*University of Colorado Denver, Transitional Doctor of Physical Therapy Program*

DPTR 8111 Evidence Based Practice, 3 CR, Remote Lecture

*Virginia Commonwealth University, Transitional Doctor of Physical Therapy Program*

PHTY Evidence Based Practice II, 3 CR, Remote Lecture

*University of Iowa, Graduate Program in Physical Therapy and Rehabilitation Science*  
101:251 Critical Inquiry in Physical Therapy I, 3 CR, F2F PBL  
101:248 Research in Physical Therapy, 3CR, F2F Lecture

*Washington University in St. Louis, Program in Physical Therapy*  
Kinesiology I, Mechanical Tissue Properties Unit, F2F Lecture  
Diagnosis & Treatment of Movement Impairment Syndromes I, Clinical Lab Assistant, F2F Lab  
Diagnosis & Treatment of Movement Impairment Syndromes II, Clinical Lab Assistant, F2F Lab

*Washington University in St. Louis, PhD Program in Movement Science*  
Biocontrol, Human Posture Unit, F2F Lecture

### **Primary Post-Doctoral Advisor**

**Masataka Umeda, Ph.D.** *Exercise-induced hypoalgesia in patients with fibromyalgia.*  
University of Colorado Denver, Apr 2009-Mar 2011.

**Awards:** 2009 International Association for the Study of Pain John J. Bonica Postdoctoral Trainee Fellowship, 2010 Center for Women's Health, Best Poster Award.

**Current Position:** Assistant Professor of Exercise Psychology, Texas Tech University

### **Primary Ph.D. Thesis Advisor**

**Chelsea Chapman, MS.** *Role of patient-provider communication on clinical outcomes of rehabilitation for chronic musculoskeletal pain.* Joint Doctoral Program in Public Health, San Diego State University/University of California San Diego, Aug 2017-present.

**Awards:** 2019-2021 NIH NICHD Individual Pre-Doctoral Fellowship [F31HD101274-01], 2018 SDSU F31 Biomedical and Health Fellowship Grant Writing Workshop, 2020 European Pain Summer School Fellowship

**Ryan Marker, DPT, PhD.** *Cortical and subcortical contributions to stress-induced muscle activity and relationships to chronic neck pain.* Rehabilitation Science PhD Program, University of Colorado Denver, Sep 2011-Jul 2015.

**Awards:** 2011 Foundation for Physical Therapy Kendall Scholarship, 2012 Delsys Foundation Travel Award, XIX<sup>th</sup> International Society of Electrophysiology and Kinesiology Congress, Brisbane, Australia, 2013 University of Colorado 27<sup>th</sup> Annual Student Research Forum Best Poster Award, 2013 Foundation for Physical Therapy Promotion of Doctoral Studies I (PODS I) Scholarship, 2013 **National Science Foundation (NSF) GK-12 Fellowship**, 2014 Foundation for Physical Therapy Promotion of Doctoral Studies II (PODS II) Scholarship, 2014 University of Colorado Hirs Travel Award

**Current Position:** Assistant Professor, Department of Physical Medicine and Rehabilitation, University of Colorado Denver

**Bahar Shahidi, DPT, PhD.** *Psychological, neurophysiological, and physical risk factors for the development of chronic neck pain.* Rehabilitation Science PhD Program, University of Colorado Denver, Sep 2011-Dec 2014.

**Awards:** 2011 Foundation for Physical Therapy Kendall Scholarship, 2012 Foundation for Physical Therapy Promotion of Doctoral Studies I (PODS I) Scholarship, 2013-2015 Marilyn Gossman Graduate Student Research Seminar Travel Award, Combined Sections Meeting of the American Physical Therapy Association, 2013 Foundation for Physical Therapy Promotion of Doctoral Studies II (PODS II) Scholarship, 2014 Neurobiology of Stress Workshop Travel Award, 2014 University of Colorado Hirs Travel Award

**Current Position:** Assistant Professor, University of California San Diego, Muscle Physiology Laboratory

**David Williams, PT, Ph.D.** *Neuromuscular fatigue of the human quadriceps muscle.* Graduate Program in Physical Therapy & Rehabilitation Science, University of Iowa, Jun 2005-Dec 2006.

**Current Position:** Clinical Assistant Professor, Graduate Program in Physical Therapy & Rehabilitation Science, University of Iowa, Iowa City, IA.

**Jennifer (Stephenson) Davies, Ph.D.** *Motor control of the trapezius muscle during acute exposure to low and high levels of psychosocial stressors.* Clinical Sciences PhD Program, University of Colorado Denver, Sep 2007-Nov 2010.

**Awards:** 2008 Clinical Science Program Outstanding PhD Student in Clinical Investigation, 2010 International Association for the Study of Pain Travel Award to attend 13<sup>th</sup> World Congress on Pain, Montreal, QC, 2010 International Motoneuron Society and UCD Clinical Science Program Travel Awards to attend International Motoneuron Meeting, Paris, France, 2010 Transcranial Magnetic Stimulation Summer School Best Poster Award, Oxford, UK

**Current Position:** Research Assistant, School of Healthcare Sciences, Cardiff University, UK

**Ph.D. Comprehensive/Qualifying Examination and Dissertation Committee Member**

*San Diego State University, Joint Doctoral PhD Program in Public Health*

Fall 2019 Chelsea Chapman. Qualifying Examination Committee (Chair)

TBD 2021 Adhana McCarthy. Qualifying Examination Committee

TBD 2022 Patricia Dionicio. Qualifying Examination Committee

*University of Colorado Denver, Rehabilitation Science PhD Program*

Sum 2016 Andrew Kittelson. Dissertation Committee

Spr 2014 Andrew Kittelson. Comprehensive Examination Committee

Fall 2014 Bahar Shahidi. Dissertation Committee (Chair)

Fall 2014 Ryan Marker. Dissertation Committee (Chair)

*University of Colorado Denver, Clinical Sciences PhD Program*

Fall 2010 Jennifer Stephenson. Dissertation Committee

*University of Colorado Boulder, PhD Program in Integrative Physiology*

Spr 2012 Matthew Holmes. Dissertation Committee

Fall 2010 Michael Pasco. Dissertation Committee

Fall 2009 Mark Jesunathadas. Dissertation Committee

Fall 2009 Matthew Holmes. Comprehensive Examination Committee

Fall 2008 Michael Pasco. Comprehensive Examination Committee

Spr 2008 Zachary Riley. Dissertation Committee

Fall 2007 Zachary Riley. Comprehensive Examination Committee

Spr 2007 Mark Jesunathadas. Comprehensive Examination Committee

*University of Iowa, PhD Graduate Program in Physical Therapy and Rehabilitation Science*

Fall 2006 David Williams. Dissertation Committee (Chair)

Fall 2006 Jennifer Lee. Comprehensive Examination Committee

Sum 2006 Smita Rao. Dissertation Committee

Sum 2006 Masaki Iguchi. Comprehensive Examination Committee

Spr 2006 Sangeetha Madhavan. Dissertation Committee

**DPT Doctoral Project Committee Member**

*San Diego State University, DPT Doctoral Project Chair*

Spring 2020 David Dellaserra, Matthew Friedman, Paige Kettenburg, Brenna Lewman, Sydney Stuber, Jaime Zinn. *Factors predicting non-adherence to physical therapy referral for spine pain in a federally qualified health center.*

Spring 2019 Rachel De Los Santos, Ryan Kirschmann, Ethan Morgan, Sonnen Olson, Jenny Ross, Samantha Stack. *Association between disrupted sleep and pain modulation in adults with chronic spine pain: A pilot study.*

Spring 2018 Christina Crossen, Jessica Herman, Marie Krouse, Victor Larios, Elana Miller. *Sedentary behavior and pain-related anxiety is associated with reduced mechanical pain tolerance in healthy pain-free adults.*

Spring 2017 Zane Brandt, Jaclyn Christopher, Chelsea Kane, Tonia Malave, Megan Moffat, Tianna Woods. *Association between psychological health and affective responses to pain.*

*San Diego State University, DPT Doctoral Project Committee Member*

Spring 2020 Alexis Alcaraz, Jessica Harris, Danielle Postma, Courtney Shutts, Lauren Union, Stephanie Williams. *The association between fear of movement, pain catastrophizing and movement behavior in people with low back pain: A case series.*

Spring 2019 Brittany Atkins, Rex Brunner, Alejandra Hernandez, Katy Ransone, Sloane Roeser, Courtney Turner, Mariah Weber. *Ecological monitoring of lumbar spine posture and movement during daily activities in individuals with chronic low back pain: a case series.*

Spring 2018 Taylor Autry, Caitlin Kemp, Monique Lassaga-Bishop, Michaela Mettenleiter, Haley Shetter, Janelle Zukowski. *Hip exercises improve pelvic floor muscle strength in postmenopausal women.*

Spring 2017 Thomas Henson, Bradley Whitley, Amber Winkler *Associations between shoes, orthotic and heel pad use, and injury occurrence in high school cross country runners.*

Spring 2016 Sara-Rosabelle Barreyro, Jillian Gerbracht, Heather Lyons, Supamas Tseng, Jeffrey Wood.

Spring 2015. Jared Brown, Jason Averilla, Jessica Sacks.

**Research Project Advisor**

*San Diego State University*

Jan 2020 – May 2020 Special Studies Advisor. Alexandra Levy.

Nov 2019 – present Research Volunteer. Brenden Patch

Jan 2017 – May 2019 Special Studies Advisor. Tristen Giron.

Jan 2016 – May 2018 Special Studies Advisor. Luisa Davila-Pablo.

Jan 2016 – May 2017 Special Studies Advisor. Paige Kettenberg.

Sum 2016 & Sum 2017 Summer Undergraduate Research Advisor. Luisa Davila-Pablo.

Aug 2015 – May 2017 Special Studies Advisor. Jaime Zinn

*University of Colorado Denver*

Sep 2013 – Nov 2013. Denver High School Student Training in Research Science  
 Research Advisor. Karina Mosqueda

Sep 2012 – Jan 2013. Clinical Education IV Research Advisor. Jennifer Molner

Aug 2012 – Dec 2013. Work-Study Research Advisor. Emily Matthews

Aug 2012 – Dec 2014. Work-Study Research Advisor. Stephanie Foster

Jan 2012 – Dec 2013. Work-Study Research Advisor. Kristen Knowles

Aug 2011 – May 2012. Work-Study Research Advisor. Lisa Walde

Aug 2011 – Dec 2013. Work-Study Research Advisor. Betsy Kyle

Aug 2011 – Dec 2013. Work-Study Research Advisor. Danika Friedley

Jan 2012- May 2012. Undergrad Psychology Research Internship Advisor. Ashley Haight

May 2011 – Jun 2011. Aurora LIGHTS Minority Summer Research Internship Advisor.  
 HRSA Health Careers Opportunity Program (HCOP). Magnolia Landa-Posas

Jun 2011 – Sep 2011. Summer Research Internship Advisor. Ryan Novoa

Aug 2010 – Sep 2012. Work-Study Research Advisor. Jennifer Molner

Aug 2009 – Sep 2011. Work-Study Research Advisor. Crystal Langer

Aug 2009 – Sep 2011. Work-Study Research Advisor. AnaLuisa Miller

Mar 2009 – Sep 2010. Work-Study Research Advisor. Courtney Wiseman

Mar 2009 – Sep 2010. Work-Study Research Advisor. Carly Nagel

Oct 2008 – Sep 2010. Work-Study Research Advisor. Linell Griffin

May 2008 – Jan 2011. Work-Study Research Advisor / Clinical Education III Research Advisor.  
 Ryan Marker

Feb 2008 – May 2009. Work-Study / Clinical Education IV Research Advisor. Bahar Shahidi

Sep 2007 – Jan 2009. Work-Study / Clinical Education III Research Advisor. Angela Bruflat

Sum 2006. Undergraduate Summer Research Opportunity Program Advisor. Ayanna Porter

Aug 2005 – Apr 2006. DPT Student Research Advisor. Nathan Kauk, Erin Lyles, Erin Noe,  
 Heather Ralston

Jul 2003 – Aug 2004. Undergraduate Student Research Advisor. Jennifer Stephenson

Jan 2001 – May 2001. Independent Study Research Advisor. Sara Scholtes

**DPT Student Faculty Advisor***San Diego State University, Doctor of Physical Therapy Program*

2020-2023 Monica Bari, Blake Johnson, Stephanie Lenz, Marlene Mendoza, Matthew Nauman

2019-2022 Celine Lum, Todd McKay, Meagan Margheim, Joseph Marshall

2018-2021 Jayme Lee, Krista Lum, Alex Lytle

2017-2020 Paige Kettenburg, Brenna Lewman, Emily Maxwell, Tina Nguyen

2016-2019 Alex Harrington, Matthew Hemphill, Alejandra Hernandez, Christopher Hill

2015-2018 Sarah McCabe, Michelle Medicke, Michaela Mettenleiter, Elana Miller, Sarah  
 Nalbandian

2014-2017 Erin Menefee, Katie Mitchell, Megan Moffat, Brian Montz, Milan Patel

*University of Colorado Denver, Program in Physical Therapy*

2013-2014 Julia Ebert, Megan Kovarik, Christopher Trzcinski

2012-2014 Foster, Madisen Klumpp, Matthew Pomeroy

2011-2014 Farris, Leshelle Lencioni, Jenna Traeger

2010-2013 Carrie Eckenhoff, Jennifer Molner, Amanda Watson

2009-2012 Jill Carson, Jenna Kempf, Sarah Mann

2008-2011 Ryan Marker, Tasia Robertson

2007-2010 Lindsey Kramer, Kelly Patton

University of Iowa, PhD Graduate Program in Physical Therapy and Rehabilitation Science  
2006-2007 Lindsay Burhenn, Abby Hovey, Amy Jiskoot, Elizabeth Naughton, Kim Schmutge  
2005-2006 Nathan Kauk, Erin Lyles, Erin Noe, Heather Ralston

### **Continuing Education in Instructional Methods and Administration**

Fall 2020 Integrative Therapies for Stress Syndromes, International Association for the Study of Pain, Virtual Workshop  
Sum 2020 Technologies for Improved Understanding and Management of Pain, NIH Pain Consortium, Virtual Symposium  
Sum 2020 NIH HEAL Engaging Patients in the Research Process, Virtual Workshop  
Sum 2019 Fostering Development of Clinical Reasoning Using Educational Technology, American Physical Therapy Association Academy of Education, Chicago, IL.  
Sum 2016 AlterMed Research Foundation Integrative Medicine Conference.  
Spr 2016. American Physical Therapy Association Spiritual and Health Implications for Physical Therapy Practice.  
Fall 2015 UCSD Workshop on Practice-Based Research and Pragmatic Studies.  
Spr 2015 SDSU Center for Teaching and Learning. Facilitating Discussions of Difficult Topics.  
Spr 2015 SDSU Center for Teaching and Learning. Active Learning Techniques and the Flipped Classroom.  
Spr 2015 SDSU Center for Teaching and Learning. Getting Started with an Interactive Classroom.  
Spr 2013 Physical Therapy Program Teaching Methods seminar. Wiki Use for Student Centered Learning  
Spr 2013 University of Colorado Faculty Development Seminar. How to Teach Clinical Reasoning.  
Spr 2010 University of Colorado Faculty Development Seminar. How to Design and Teach a Course; Using Learning Objectives in Teaching.  
Spr 2010 University of Colorado Faculty Development Seminar. Giving a Talk at a Scientific Meeting.  
Spr 2009 National Clinical and Translational Research Educational Annual Meeting, Washington DC. Workshops attended: Building Multidisciplinary Team Mentoring, NIH Update for Educators, Strategies for Meeting Clinical and Translational Education Needs across Health Professions

### **Teaching Awards**

2017 San Diego State University School of ENS Most Influential Faculty Award  
2016 Mortar Board Outstanding Faculty Award

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## **PROFESSIONAL GROWTH**

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### **Refereed Journal Articles**

1. Chapman CR, Woo NT, **Maluf KS**. Communication Strategies Used by Physical Therapists in Chronic Pain Care: A qualitative systematic review and meta-synthesis. *Pain* [Submitted Oct 2020]
2. Shahidi BS, Bursch R, Carmel J, Carranza A, Cooper KS, Lee JV, O'Connor C, **Maluf KS\***, Schiehser D\*. Greater severity and functional impact of post-traumatic headache in veterans

with comorbid neck pain following traumatic brain injury. *Military Medicine* [Submitted Sep 2020] \*Co-Senior Authors

3. Lang AJ, Malaktaris A, **Maluf KS**, Kangas J, Sindel S, Hebert M, Bomyea J, Simmons A, Weaver J, Valez D, Liu L. A randomized controlled trial of yoga versus nonaerobic exercise for veterans with PTSD: Understanding efficacy and mechanisms of change. *Contemporary Clinical Trials*. [Submitted Jun 2020]
4. Kittleson A, Schmiede S, **Maluf KS**, Schenkman M, George S, Stevens-Lapsley J. Determination of pain phenotypes in knee osteoarthritis using latent profile analysis. *Pain Medicine* [In Press Oct 2020]
5. Shahidi B, **Maluf KS**. Adaptations in evoked pain sensitivity and conditioned pain modulation after development of chronic neck pain. *Biomedical Research International*, 2017.
6. Domingo AR, Diek M, Goble K, **Maluf KS**, Goble DJ, Baweja HS. Short duration therapeutic massage reduces resting upper trapezius muscle activity. *Neuroreport*. 18;28(2):108-110; Jan 2017.
7. \* Marker RJ, Campeau S. **Maluf KS**. Psychosocial stress alters the strength of reticulospinal input to the human trapezius muscle. *Journal of Neurophysiology*. 1;117(1):457-466. Jan 2017.
8. \* Neu M, Pan Z, Haight A, Fehringer K, Emmett P, Harrington MJ, **Maluf KS**. Hormonal and neuromuscular responses to breast feeding: a pilot study. *Biological Research for Nursing*. 1-10; Mar 2017.
9. \* Marker RJ, Balter JE, Nofsinger ML, Anton D, Fethke NB, **Maluf KS**. Upper trapezius muscle activity in healthy office workers: reliability and sensitivity of occupational exposure measures to differences in sex and hand dominance. *Ergonomics*. 2016;28:1-10.
10. \* Gaffney BM, **Maluf KS**, Davidson BS. Evaluation of novel EMG biofeedback for postural correction during computer use. *Applied Psychophysiology Biofeedback*. 2016;41(2):181-9.
11. \* Shahidi B, Curran-Everett D, **Maluf KS**. Psychosocial, physical, and neurophysiological risk factors for chronic neck pain: a prospective inception cohort study. *Journal of Pain*. 2015;16(12):1288-99. (See FILE [P-2])
12. \* Shahidi B, Sannes T, Laudenslager M, **Maluf KS**. Cardiovascular responses to an acute psychosocial stressor are associated with the cortisol awakening response in individuals with chronic neck pain. *Physiology and Behavior*. 2015;150:93-98. (See FILE [P-3])
13. Umeda M, Corbin LW, **Maluf KS**. Pain mediates the association between physical activity and the impact of fibromyalgia on daily function. *Clinical Rheumatology*. 2015;34:143-149.
14. \* Umeda M, Corbin LW, **Maluf KS**. Examination of contraction-induced muscle pain as a behavioral correlate of physical activity in women with and without fibromyalgia. *Disability and Rehabilitation*. 2014;20:1-6.
15. Marker RJ, **Maluf KS**. Effects of electrocardiography contamination and comparison of ECG removal methods on upper trapezius electromyography recordings. *Journal of Electromyography & Kinesiology*. 2014;24(6):902-9.
16. Gaffney BM, **Maluf KS**, Davidson BS. Associations between cervical and scapular posture and the spatial distribution of trapezius muscle activity. *Journal of Electromyography & Kinesiology*. 2014;24(4):542-9.
17. Marker RJ, Stephenson JL, Kluger BM, Curran-Everett D, **Maluf KS**. Modulation of intracortical inhibition in response to acute psychosocial stress is impaired among individuals with chronic neck pain. *Journal of Psychosomatic Research*. 2014;76(3):249-56 (See FILE [P-4])
18. Kittelson A, George SZ, **Maluf KS**, Stevens-Lapsley JL. Future directions in painful knee osteoarthritis: harnessing complexity in a heterogeneous population. *Physical Therapy*.



- 2014;94(3):422-32.
19. Shahidi B, Haight A, **Maluf KS**. Differential effects of mental concentration and acute psychosocial stress on cervical muscle activity and posture. *Journal of Electromyography & Kinesiology*. 2013;23(5):1082-9.
  20. Balter JE, Molner JL, Kohrt WM, **Maluf KS**. Mechanical pain sensitivity and the severity of chronic neck pain and disability are not modulated across the menstrual cycle. *Journal of Pain*. 2013;14(11):1450-9. (See FILE [P-5])
  21. Umeda M, Corbin LW, **Maluf KS**. Preliminary investigation of absent nociceptive flexion reflex responses among more symptomatic women with fibromyalgia syndrome. *Rheumatology International*. 2013;33(9):2365-72.
  22. Shahidi B, Johnson CL, Curran-Everett D, **Maluf KS**. Reliability and group differences in quantitative cervicothoracic measures among individuals with and without chronic neck pain. *BMC Musculoskeletal Disorders*. 2012;13(1):215.
  23. Bruflat AK, Balter JE, McGuire D, Fethke NB, **Maluf KS**. Stress management as an adjunct to physical therapy for chronic neck pain. *Physical Therapy*. 2012;92(10):1348-59.
  24. Stephenson JL, **Maluf KS**. Dependence of the paired motor unit analysis on motor unit discharge characteristics in the human tibialis anterior muscle. *Journal of Neuroscience Methods*, 2011;198(1):84-92.
  25. Stephenson JL, Christou EA, **Maluf KS**. Discharge rate modulation of trapezius motor units differs for voluntary contractions and instructed muscle rest. *Experimental Brain Research*, 2011;208(2):203-215.
  26. Stephenson JL, **Maluf KS**. Discharge behaviors of trapezius motor units during exposure to low and high levels of acute psychosocial stress. *Clinical Neurophysiology*, 27(1):52-61, 2010.
  27. VanDillen LR, **Maluf KS**, Sahrman SA. Further examination of modifying patient-preferred movement and alignment strategies in patients with low back pain during symptomatic tests. *Manual Therapy* 2009;14(1):52-60.
  28. **Maluf KS**, Barry BK, Riley ZA, Enoka RM. Reflex responsiveness of a human hand muscle when controlling isometric force and joint position. *Clinical Neurophysiology* 2007;118(9):2063-71.
  29. Mottram CJ, **Maluf KS**, Stephenson JL, Anderson MK, Enoka RM. Prolonged vibration of the biceps brachii tendon reduces time to failure when maintaining arm position with a submaximal load. *Journal of Neurophysiology* 2006;95(2):1185-93.
  30. Tracy BL, **Maluf KS**, Hunter SK, Stephenson JL, Enoka RM. Variability of motor unit discharge and force fluctuations across a range of muscle forces in older adults. *Muscle & Nerve* 2005;32:533-40.
  31. **Maluf KS**, Shinohara M, Stephenson JL, Enoka RM. Muscle activation and time to task failure differ with load type and contraction intensity for a human hand muscle. *Experimental Brain Research* 2005;26:1-13.
  32. **Maluf KS** and Enoka RM. Task failure during fatiguing contractions performed by humans *Journal of Applied Physiology* 2005; 99:389-396.
  33. Keenan KG, Farina D, **Maluf KS**, Merletti R, Enoka RM. The influence of amplitude cancellation on the simulated surface electromyogram. *Journal of Applied Physiology*. 2005; 98:120-131.
  34. Lott DJ, **Maluf KS**, Sinacore DR, Mueller MJ. Relationship between changes in activity and plantar ulcer recurrence in a patient with diabetes mellitus. *Physical Therapy*. 2005; 85:579-588.
  35. **Maluf KS**, Mueller MJ, Strube MJ, Engsborg JR, Johnson JE. Tendon Achilles lengthening for the treatment of neuropathic ulcers causes a temporary reduction in forefoot pressure associated with changes in plantar flexor power rather than ankle motion during gait.

- Journal of Biomechanics*. 2004;37:897-906.
36. **Maluf KS**, Morley RE, Richter EJ, Klaesner JW, Mueller MJ. Foot pressures during level walking are strongly associated with pressures during other ambulatory activities in patients with diabetic neuropathy. *Archives of Physical Medicine & Rehabilitation*. 2004;85:253–60.
  37. **Maluf KS** and Mueller MJ. **Novel Award 2002**. Comparison of physical activity and cumulative plantar tissue stress among subjects with and without diabetes mellitus and a history of recurrent plantar ulcers. *Clinical Biomechanics*. 2003;18:567-575.
  38. Kwon OY, Minor SD, **Maluf KS**, Mueller MJ. Comparison of muscle activity during walking in subjects with and without diabetic neuropathy. *Gait & Posture*. 2003;18:105-113.
  39. Mueller MJ and **Maluf KS**. Tissue adaptation to physical stress: A proposed “Physical Stress Theory” to guide physical therapist practice, education, and research. *Physical Therapy*. 2002;82:383-403.
  40. Morley RE, Richter EJ, Klaesner JW, **Maluf KS**, Mueller MJ. In-shoe multi-sensory data acquisition system. *IEEE Transactions in Biomedical Engineering*. 2001;48:815-820.
  41. **Maluf KS**, Morley RE, Richter EJ, Klaesner JW, Mueller MJ. Monitoring in-shoe plantar pressures, temperature, and humidity: reliability and validity of measures from a portable device. *Archives of Physical Medicine & Rehabilitation*. 2001;82:1119-1127.
  42. **Maluf KS**, Sahrman SA, VanDillen LR. Use of a classification system to guide nonsurgical management of a patient with chronic low back pain. *Physical Therapy*. 2000;80:1097-1111. [Reprinted in *Writing Case Reports: A How-To Manual for Clinicians*. McEwen I, ed. Alexandria, VA: American Physical Therapy Association; 2001.]
  43. Turkin VV, **Monroe KS**, Hamm TM. Organization of recurrent inhibition and facilitation in motor nuclei innervating ankle muscles of the cat. *Journal of Neurophysiology*. 1998;79:778-790.

#### **Non-refereed Journal Articles / Invited Editorial**

1. **Maluf KS**. A lesson from John Hughlings Jackson. *Journal of Orthopedics and Sports Physical Therapy* 2002;32(3):84-85.

#### **Refereed Scientific Conference Abstract Presentations**

1. Chapman CR, Woo NT, **Maluf KS**. Communication Strategies Used by Physical Therapists in Chronic Pain Care: A Qualitative Systematic Review and Meta-Synthesis. 2020 World Congress on Pain. Amsterdam Aug (Postponed to 2021 due to COVID-19).
2. Dellaserra D, Friedman M, Gombatto S, Kettenburg P, Khasira M, Lewman B, Stuber S, Van Dyke J, Zepeda Y, Zinn J, **Maluf KS**. Referral and Utilization of Physical Therapy Services for Spine Pain in a Federally Qualified Health Center. World Congress on Pain. Amsterdam Aug 2020 (Postponed due to COVID-19).
3. Alcaraz A, Union LM, Postma DJ, Williams SJ, Shutts CR, Harris JL, Taylor N, **Maluf KS**, Gombatto SP. The Association between Fear of Movement and Movement Behavior in People with Chronic Low Back Pain: A Case Series. World Congress on Pain. Amsterdam Aug 2020 (Postponed due to COVID-19).
4. Bursch R, Carmel J, Carranza A, Cooper KS, Lee JV, **Maluf KS**, O’Connor C, Schiehser D, Shahidi B. Prevalence and Impact of Neck Pain in Veterans with Traumatic Brain Injury and Persistent Headache. SDSU Student Research Symposium Apr 2020; Combined Sections Meeting of the American Physical Therapy Association. Denver, CO Feb 2020.
5. **Maluf KS**, Chapman C, Davila-Pablo L, Giron T, Maluf KS. Association between habitual sleep patterns and endogenous pain modulation in people with and without chronic spine

- pain. SDSU Student Research Symposium. Mar 2018; World Congress on Pain. Boston, MA. Sep 2018
6. **Maluf KS**, Crossen C, Herman J, Krouse M, Larios V, Miller E. Sedentary behavior is related to reduced mechanical pain tolerance in healthy pain-free adults. Combined Sections Meeting of the American Physical Therapy Association. New Orleans, LA. Feb 2018.
  7. **Maluf KS**, Zinn J, Davila-Pablo L, Kettenburg P. Association between habitual physical activity and mechanical pain sensitivity in healthy adults. American College of Sports Medicine, Denver, CO. Jun 2017. [Featured in Runner's Magazine June 2017]
  8. Zinn J, Davila-Pablo L, Kettenburg P, **Maluf KS**. Association between physical activity and mechanical pain sensitivity. SDSU Student Research Symposium. Mar 2017.
  9. Davila-Pablo, Kettenburg P, Brandt Z, Kane C, Malave T, Woods T, Moffat M, **Maluf KS**. Ethnic differences in pain sensitivity and associations with psychological health. SDSU Student Research Symposium. Mar 2017.
  10. Brandt Z, Kane C, Malave T, Woods T, Moffat M, Kettenburg P, Davila-Pablo, **Maluf KS**. Ethnic differences in pain-related anxiety and modulation of affective responses to evoked heat and pressure pain. Combined Sections Meeting of the American Physical Therapy Association. San Antonio, TX. Feb 2017.
  11. Judd D and **Maluf KS**. Evidence-based practice in a Doctor of Physical Therapy curriculum: from classroom to clinical practice. University of Colorado Education Symposium, Denver, CO. Jan 2017.
  12. Brandt Z, Kane C, Malave TJ, Moffat M, Woods T, **Maluf KS**. Association between acculturation stress and pain sensitivity in first-generation Hispanic Americans. 16<sup>th</sup> World Congress on Pain, Yokohama Japan. Sep 2016.
  13. Marker RJ, Campeau S, **Maluf KS**. Psychosocial stress alters the strength of reticulospinal input to the human upper trapezius muscle. Neurobiology of Stress Workshop. Newport Beach, CA. Apr 2016.
  14. Marker RJ, **Maluf KS**. Associations between workday heart rate variability, trapezius muscle activity, and anxiety in office workers. American College of Sports Medicine. San Diego, CA. May 2015.
  15. Shahidi B, Haight A, **Maluf KS**. Physical, psychological, and neurophysiological risk factors for development of neck pain: A prospective cohort study. Combined Sections Meeting of the American Physical Therapy Association. Indianapolis, IN. Feb 2015. [**Marilyn Gossman Graduate Student Research Forum Travel Award**]
  16. Marker RJ, Shahidi B, **Maluf KS**. Relationships between autonomic and motor activity in office workers at risk of developing neck pain. Combined Sections Meeting of the American Physical Therapy Association. Indianapolis, IN. Feb 2015.
  17. Marker RJ, **Maluf KS**. Relationships between heart rate variability and upper trapezius muscle activity in office workers during whole-day work shifts. Neurobiology of Stress Workshop, Cincinnati, OH. Jun 2014. [**Hirs Travel Award**]
  18. Shahidi B, Sannes T, Laudenslager M, **Maluf KS**. Cortisol awakening response predicts cardiovascular response to acute psychosocial stress in individuals with neck pain. Neurobiology of Stress Workshop, Cincinnati, OH. Jun 2014. [**Neurobiology of Stress Travel Award; Hirs Travel Award**]
  19. Marker RJ, Balter JE, Nofsinger ML, Anton D, Fethke NB, **Maluf KS**. Characterization of upper trapezius motor patterns from worksite electromyography in healthy office workers. 20th Congress of the International Society of Electromyography and Kinesiology, Rome, Italy. July 2014.
  20. Shahidi B, Balter JE, Nofsinger ML, Anton D, **Maluf KS**. Static muscle activity and muscular rest throughout the workday predict development of chronic neck pain in office workers. 20th Congress of the International Society of Electromyography and Kinesiology,

- Rome, Italy. July 2014.
21. Shahidi B, Haight AE, **Maluf KS**. Motor control during a cervical extensor endurance task in office workers who develop chronic neck pain. 20th Congress of the International Society of Electromyography and Kinesiology, Rome, Italy. July 2014.
  22. **Maluf KS** and Shahidi B. Motor responses to simulated workplace stressors do not predict development of chronic neck pain in office workers. 20th Congress of the International Society of Electromyography and Kinesiology, Rome, Italy. July 2014.
  23. Shahidi B, Haight AE, **Maluf KS**. Alterations in pain processing before and after development of neck pain. Combined Sections Meeting of the American Physical Therapy Association. Las Vegas, NV. Feb 2014. [**Marilyn Gossman Graduate Student Research Forum Travel Award**]
  24. Marker RJ, **Maluf KS**. Effects of visual feedback on voluntary muscle relaxation in the upper trapezius. Combined Sections Meeting of the American Physical Therapy Association. Las Vegas, NV. Feb 2014.
  25. Gaffney BM, **Maluf KS**, Davidson BS. Correlation between cervicospinal position and the spatial distribution of trapezius muscle activity. Combined Sections Meeting of the American Physical Therapy Association. Las Vegas, NV. Feb 2014.
  26. Shahidi B, Laudenslager M, **Maluf KS**. Associations between chronic stress and pain processing in healthy individuals. Society for Neuroscience. San Diego, CA. Nov 2013.
  27. Gaffney BM, **Maluf KS**, Davidson BS. Evaluation of novel biofeedback in changes of activation of the trapezius. American Society of Biomechanics. Omaha, NE. Sep 2013.
  28. Gaffney BM, **Maluf KS**, Davidson BS. High-density surface EMG biofeedback from the trapezius for real time postural correction. Proceedings of the American Society of Mechanical Engineering (ASME) Bioengineering Conference. Sunriver, OR. Jun 2013.
  29. Shahidi B, Kyle BL, **Maluf KS**. Contribution of scapular strength to cervical co-contraction during the prone neck extensor endurance test. Combined Sections Meeting of the American Physical Therapy Association. San Diego, CA. Jan 2013. [**Marilyn Gossman Graduate Student Research Forum Travel Award**]
  30. Molner J, Balter JE, Stark R, Knowles SK, Friedley D, Coleman B, Anton D, **Maluf KS**. Associations between trait anxiety, perceived stress, and habitual muscle activity in the workplace. Combined Sections Meeting of the American Physical Therapy Association. San Diego, CA. Jan 2013.
  31. Marker RM, Kluger BM, Stephenson JL, **Maluf KS**. Measurement of short-interval intracortical inhibition during low intensity contractions of the upper trapezius muscle. Society for Neuroscience. New Orleans, LA. Oct 2012.
  32. Marker RJ, Stephenson JL, **Maluf KS**. Effects of psychosocial stress on intra-cortical inhibition in healthy adults. 8<sup>th</sup> International Motoneuron Meeting, Sydney, Australia, Jul 2012; University of Colorado 27<sup>th</sup> Annual Student Research Forum, Dec 2012. [**Best Poster Award**]
  33. Shahidi B, **Maluf KS**. Characterization of tonic and phasic motor unit discharge in the trapezius muscle. 8<sup>th</sup> International Motoneuron Meeting, Sydney, Australia, Jul 2012.
  34. Shahidi B, Landa-Posas M, **Maluf KS**. Association between changes in cervical posture and muscle activity during exposure to an acute psychosocial stressor. XIX Congress of the International Society of Electrophysiology and Kinesiology. Brisbane, Australia, Jul 2012
  35. Marker RJ, **Maluf KS**. Validation of a novel method of cardiac artifact removal from trunk muscle electromyography. XIX Congress of the International Society of Electrophysiology and Kinesiology. Brisbane, Australia, Jul 2012. [**Delsys Foundation Travel Award for Oral Platform Invitation**]
  36. Shahidi B, Johnson C, **Maluf KS**. Reliability and discriminant validity of cervicothoracic impairment measures in individuals with and without chronic neck pain. American Physical

Therapy Association Combined Sections Meeting, Chicago, IL, Feb 2012. [**APTA Orthopaedics Section Best Poster Nominee**]

37. Marker RM, Jesunathadas M, **Maluf KS**, Enoka RM. Simulated variability of muscle force is altered by the distribution of mechanical twitch properties across the motor unit pool. Society for Neuroscience Abstracts #590.4. San Diego, CA; Nov 2010.
38. Umeda M, Nagel CA, Balter JE, Nofsinger ML, Corbin LW, **Maluf KS**. The effects of isometric handgrip exercise on pain perception and nociceptive reflexes in women with and without fibromyalgia. University of Colorado Women's Health Research Symposium, Aurora, CO, Sep 2010 [**Best Poster Award**].
39. Umeda M, Nagel CA, Balter JE, Nofsinger ML, Corbin LW, **Maluf KS**. The effects of isometric handgrip exercise on pain perception and nociceptive reflexes in women with and without fibromyalgia. *13<sup>th</sup> World Congress on Pain*. Montreal, Canada, Aug 2010.
40. Stephenson JL, Marker RJ, **Maluf KS**. Effects of acute exposure to a psychosocial stressor on corticospinal excitation and inhibition in individuals with chronic neck pain. *13<sup>th</sup> World Congress on Pain*. Montreal, Canada, Aug 2010. [**International Association for the Study of Pain Travel Award**]
41. Shahidi B, Stephenson JL, Balter JE, Griffin L, **Maluf KS**. Sex differences in the association between basal HPA activity and responses to acute psychosocial stress in individuals with chronic neck pain. *13<sup>th</sup> World Congress on Pain*. Montreal, Canada, Aug 2010.
42. Balter JE, Wiseman CE, **Maluf KS**. Changes in regional pain sensitivity across the menstrual cycle in women with chronic neck pain. *13<sup>th</sup> World Congress on Pain*. Montreal, Canada, Aug 2010; University of Colorado Women's Health Research Symposium, Aurora, CO, Sep 2010.
43. Stephenson JL, **Maluf KS**. Factors influencing the magnitude of persistent inward current estimates in the human tibialis anterior muscle. *7<sup>th</sup> International Motoneuron Meeting*, Paris, France, Jul 2010. [**International Motoneuron Society Travel Award**]
44. Stephenson JL, Marker RJ, **Maluf KS**. Effects of acute exposure to a psychosocial stressor on corticospinal excitation and inhibition in individuals with chronic neck pain. Transcranial Magnetic Stimulation Summer School, Oxford, England, Jun 2010 [**Best Poster Award**].
45. **Maluf KS**. A national survey on the demand for PhD prepared faculty among physical therapy program directors. American Physical Therapy Association Combined Sections Meeting, San Diego, CA, Feb 2010.
46. Bruflat AK, Balter JE, McGuire D, **Maluf KS**. Outcomes of stress management as an adjunct to standard physical therapy intervention for chronic work-related neck pain in four female office workers. American Physical Therapy Association Combined Sections Meeting, San Diego, CA, Feb 2010.
47. Stephenson JL, Christou EA, **Maluf KS**. Spontaneous discharge of trapezius motor units during periods of instructed rest exhibits modulation at respiratory frequencies. Society for Neuroscience Abstracts #179.2, Chicago, IL Oct 2009.
48. Stephenson JL, **Maluf KS**. Effects of acute psychosocial stress on corticospinal excitation and inhibition. Section on Research Retreat of the American Physical Therapy Association, Monterey, CA, Aug 2009.
49. Stephenson JL, Christou EA, **Maluf KS**. Acute psychosocial stress does not alter single motor unit discharge behavior during feedback-controlled voluntary contractions or instructed rest in healthy females. Section on Research Retreat of the American Physical Therapy Association, Monterey, CA, Aug 2009.
50. Johnson CL, Balter JE, Bruflat A, **Maluf KS**. Discriminant validity of a clinical screening tool for occupational myalgia. National Clinical and Translational Research Educational Annual Meeting, Washington DC, Apr 2009.
51. Johnson CL, Balter JE, Bruflat A, **Maluf KS**. Stress-evoked activation of the upper trapezius

- muscle differs for women with and without chronic neck pain. American Physical Therapy Association Combined Sections Meeting, Las Vegas, NV, Feb 2009.
52. Stephenson JL, **Maluf KS**. Effects of psychosocial stress on intrinsic activation of human trapezius motoneurons. Society for Neuroscience Abstracts #75.5, Washington DC, Nov 2008.
  53. Stephenson JL and **Maluf KS**. Discharge rate modulation in human trapezius motoneurons. Mechanisms of Plasticity and Disease in Motoneurons Meeting, Seattle, WA, Jun 2008.
  54. Hammerich AS and **Maluf KS**. Effects of biofeedback on stress-evoked activation of the upper trapezius muscle in subjects with chronic neck pain. American Physical Therapy Association Combined Sections Meeting, Nashville, TN, Feb 2008.
  55. Kauk ND, Lyles EM, Noe EE, Porter A, Ralston HM, Thippareddy G, **Maluf KS**. Effects of psychosocial stress on cervicospinal muscle activity in healthy females. American Physical Therapy Association Combined Sections Meeting, Boston, MA, Feb 2007.
  56. **Maluf KS**, Riley ZA, Anderson MK, Barry BK, Aidoor SS, Enoka RM. Heteronymous reflexes in the primary agonist are enhanced when supporting an inertial load. *Journal of Neurologic Physical Therapy* 29(4): Dec 2005.
  57. **Maluf KS**, Hunter SK, Mottram CJ, Rudroff T, Enoka RM. Mechanisms of task failure during fatiguing contractions in healthy humans. Workshop on Investigation of Human Muscle Function In Vivo. Nashville, TN. Oct 2005.
  58. Mottram CJ, **Maluf KS**, Anderson MK, Stephenson JL, Enoka RM. Vibration of the biceps brachii tendon reduces time to failure when maintaining limb position during a fatiguing contraction. *Journal of Neurologic Physical Therapy* 29(4): Dec 2005.
  59. **Maluf KS**, Riley ZA, Anderson MK, Barry BK, Aidoor SS, Enoka RM. Effects of load type on electrically and mechanically evoked reflexes in a human hand muscle. Society for Neuroscience Abstracts #515.16, Washington DC, Nov 2005.
  60. Mottram CJ, **Maluf KS**, Stephenson JL, Anderson MK, Enoka RM. Sub-threshold vibration of the biceps brachii tendon does not influence the time to task failure for a submaximal fatiguing contraction. Society for Neuroscience Abstracts #188.7, San Diego, CA, Oct 2004.
  61. **Maluf KS**, Shinohara M, Stephenson JL, Enoka RM. Position-control is associated with enhanced muscle activation and a briefer time to task failure compared with force-control during low intensity contractions of an intrinsic hand muscle. Society for Neuroscience, San Diego, CA Oct 2004.
  62. Enoka RM, Hunter SK, **Maluf KS**, Rudroff T. Task requirements and the mechanisms that limit task failure during submaximal fatiguing contractions. *Proceedings of the Xth International Symposium on Motor Control*. Sofia, Bulgaria, Sep 2004.
  63. Stephenson JL, **Maluf KS**, Tracy BL, Hunter SK, Enoka RM. Fluctuations in isometric force are associated with motor unit discharge rate variability in older adults. American College of Sports Medicine Annual Meeting, Indianapolis, IN, Jun 2004. *Medicine and Science in Sports and Exercise*. 36:S123.
  64. Lott DJ, Bohnert KL, Klaesner JW, **Maluf KS**, Mueller MJ, Sinacore DR. Amount and intensity of activity during off-loading treatment and the healing of neuropathic plantar ulcers. American Physical Therapy Association Combined Sections Meeting, Nashville, TN, Feb 2004.
  65. Keenan KG, Farina D, **Maluf KS**, Merletti R, Enoka RM. Age-associated changes in motor unit properties reduce signal cancellation in the simulated electromyogram. Society for Neuroscience Annual Meeting, New Orleans, LA, Nov 2003.
  66. VanDillen LR, Sahrman SA, **Maluf KS**. Directions of alignment and movement strategies associated with symptom reproduction in patients with low back pain. American Physical Therapy Association Combined Sections Meeting, Tampa, FL, Feb 2003.
  67. VanDillen LR, Sahrman SA, **Maluf KS**. Modifying patient-preferred movement and

- alignment strategies during symptom testing: a follow-up report. American Physical Therapy Association Combined Sections Meeting, Tampa, FL, Feb 2003.
68. Mueller MJ, **Maluf KS**, Sinacore DR, Hastings MK, Strube MJ, Engelsberg JR, Johnson JE. Effect of tendo Achilles lengthening on forefoot plantar pressures, ankle motion, and plantar flexor power during walking in subjects with diabetes and peripheral neuropathy: a prospective controlled clinical trial. VIII EMED Scientific Meeting, Kananaskis, Canada, Aug 2002.
  69. **Maluf KS**, Mueller MJ. Comparison of physical activity and cumulative plantar tissue stress among subjects with and without diabetes mellitus and a history of recurrent plantar ulcers. VIII EMED Scientific Meeting, Kananaskis, Canada, Aug 2002.
  70. **Maluf KS**, Morley RE, Richter EJ, Klaesner JW, Mueller MJ. Development and validation of a portable device for in-shoe multisensory data acquisition. Washington University Biomedical Engineering Workshop. St. Louis, MO, Mar 2002.
  71. **Maluf KS**, Mueller MJ, Hastings MK, Henry JD, Johnson JE. Effect of tendon Achilles lengthening on ambulatory plantar loads in patients with diabetes mellitus. American Physical Therapy Association Combined Sections Meeting, Boston, MA, Feb 2002. *Journal of Orthopedics and Sports Physical Therapy*. 2002;32:A33-34.
  72. **Maluf KS**, Mueller MJ, Hastings MK, Henry JD, Johnson JE. Effect of tendon Achilles lengthening on gait characteristics in patients with diabetes mellitus. American Physical Therapy Association Combined Sections Meeting, San Antonio, TX, Feb 2001. *Journal of Orthopedics and Sports Physical Therapy*. 2001;31:A3-4.
  73. **Maluf KS**, Richter EJ, Morley RE, Pickard WF, Klaesner JW, Mueller MJ. Validity of measurements obtained from an electronic monitoring system in diabetic footwear. American Physical Therapy Association Combined Sections Meeting, New Orleans, LA, Feb 2000. *Journal of Orthopedics and Sports Physical Therapy*. 2000;30:A12.
  74. **Maluf KS**, VanDillen LR. Classification and use of a functional approach in the treatment of a patient with chronic low back pain. American Physical Therapy Association Combined Sections Meeting, New Orleans, LA, Feb 2000. *Journal of Orthopedics and Sports Physical Therapy*. 2000;30:A12.
  75. Richter EJ, Morley RE, Pickard WF, **Maluf KS**, Klaesner JW, Mueller MJ. In-shoe multisensory data acquisition. BMES & EMBS Joint Conference, Atlanta, GA, Oct 1999. Proceedings 6.3.1-2.
  76. Turkin VV, **Monroe KS**, Hamm TM. Organization of recurrent inhibition and facilitation in motor nuclei innervating ankle muscles of the cat. Undergraduate Biology Research Program Conference, Tucson, AZ, Jan 1996.

### Scholarly Awards

- 2012 Washington University in St. Louis, Program in Physical Therapy Distinguished Alumni Award
- 2002 NOVEL Award for outstanding research. EMED Scientific Meeting, Kananaskis, Canada.

### Research Grants

1. **NIH National Institutes of Neurological Disorders and Stroke [R21-NS109852]**. Project Role: Multiple Principal Investigator. *Imaging central and peripheral impairments in chronic post-traumatic headache*. (\$275K awarded 2019-2021)
2. **NIH National Institutes of Minority Health and Health Disparities Research Cooperative Agreement [U54-MD012397]**. Project Role: Project Co-Lead, *Cognitive Behavioral Physical Therapy for Latinos with chronic spine pain*. SDSU HealthLINK Center for Transdisciplinary Health Disparities Research. (\$21M Center budget; \$1.6M Project budget awarded 2018-2023)

3. **NIH National Institutes of Arthritis and Musculoskeletal and Skin Diseases. [R01-AR056704]** Project Role: Principal Investigator. *Stress-evoked muscle activity in occupational myalgia*. (\$1.24M awarded 2010-2015)
4. **SDSU President's Leadership Fund.** Project Role: Principal Investigator. *Association between psychological health and affective responses to pain* (\$12K awarded 2015 –2016).
5. **NIH National Institutes of Aging [R21-AG044710].** Project Role: Co-Investigator, *Determination of pain phenotypes in older adults with knee osteoarthritis* (\$275K awarded 2014-2016)
6. **UC College of Nursing ORS Small Research Grant.** Project Role: Co-Investigator, *Feasibility study to assess maternal-infant emotional availability and infant stress during feeding*. (\$10K awarded 2012 –2013).
7. **University of Colorado School of Medicine Academic Enrichment Fund, New Strategic Research Initiative** Project Role: Co-Investigator, *Development of an Interdisciplinary Movement Science Laboratory* (\$149K awarded 2008 –2011)
8. **NIH National Institutes of Arthritis and Musculoskeletal Skin Disorders [R21-AR054181]** Project Role: Principal Investigator, *Effects of psychosocial stress on intrinsic activation of human motor neurons* (\$237K awarded 2007 –2010)
9. **Foundation for Physical Therapy Magistro Research Grant** Project Role: Principal Investigator, *Evaluation of a novel biofeedback approach in patients with work-related neck pain* (\$40K awarded 2007)

### Training Grants

1. **NIH National Center for Medical Rehabilitation Research [F31-HD101274].** Project Role: Faculty Mentor for Pre-doctoral Fellow, Chelsea Chapman. *Role of patient-provider communication on clinical outcomes of rehabilitation for chronic spine pain*. (\$102K awarded 2019-2022)
2. **San Diego State University Summer Undergraduate Research Program.** Project Role: Faculty Mentor; Undergraduate trainee: Luisa Davila-Pablo; *Quantitative sensory testing in the transition to chronic neck pain and disability* (\$3K awarded 2017).
3. **San Diego State University Summer Undergraduate Research Program.** Project Role: Faculty Mentor; Undergraduate trainee: Luisa Davila-Pablo; *Quantitative sensory testing in the transition to chronic neck pain and disability* (\$3K awarded 2016).
4. **San Diego State University Division of Undergraduate Studies Mini-Grant for Undergraduate Research.** Project Role: Faculty Mentor; Undergraduate trainee: Jaime Zinn; *Physical activity in the transition to chronic neck pain* (\$1K awarded 2016).
5. **Foundation for Physical Therapy Promotion of Doctoral Studies Level II.** Project Role: Faculty Mentor; Pre-doctoral trainee: Ryan Marker; *Pre-doctoral training grant* (\$15K awarded 2014-2015).
6. **National Science Foundation GK-12 Graduate Fellowship.** Project Role: Faculty Mentor; Pre-doctoral trainee: Ryan Marker. (\$40.5K awarded 2013-2014).
7. **Foundation for Physical Therapy Promotion of Doctoral Studies Level II.** Project Role: Faculty Mentor; Pre-doctoral trainee: Bahar Shahidi; *Pre-doctoral training grant* (\$15K awarded 2013-2014).
8. **Foundation for Physical Therapy Promotion of Doctoral Studies Level I.** Project Role: Faculty Mentor; Pre-doctoral trainee: Ryan Marker; *Pre-doctoral training grant* (\$7.5K awarded 2013-2014).
9. **Foundation for Physical Therapy Promotion of Doctoral Studies Level I.** Project Role: Faculty Mentor; Pre-doctoral trainee: Bahar Shahidi; *Pre-doctoral training grant* (\$7.5K awarded 2012-2013).
10. **Foundation for Physical Therapy Kendall Scholarship.** Project Role: Faculty Mentor;



- Pre-doctoral trainee: Ryan Marker; *Pre-doctoral training grant* (\$5K awarded 2011-2012).
11. **Foundation for Physical Therapy Kendall Scholarship.** Project Role: Faculty Mentor; Pre-doctoral trainee: Bahar Shahidi; *Pre-doctoral training grant* (\$5K awarded 2011-2012).
  12. **Center for Women's Health Research Junior Faculty Research Development Award** Project Role: Junior Faculty Fellow *Sex and age effects on stress-evoked motor activity in patients with chronic neck pain* (\$25K awarded 2009 –2011)
  13. **International Association for the Study of Pain, John J. Bonica Trainee Fellowship** Project Role: Faculty Mentor; Post-doctoral trainee: Masataka Umeda, *Exercise-induced hypoalgesia in patients with chronic pain* (\$37K awarded 2009 – 2010)
  14. **NIH National Center of Research Resources K12 Institutional Training Grant [TL1-RR025778]** Project Role: Colorado Clinical and Translational Science Institute Junior Faculty Fellow; *Mechanisms and treatment of stress-evoked muscle activity* (\$384K awarded 2008 – 2011)
  15. **NIH Clinical Loan Repayment Grant** Project Role: Principal Investigator; Repayment of professional student loan debt to support clinical research on neuromuscular control of muscle fatigue (\$92.6K awarded 2004 –2010)
  16. **NIH Kirschstein – NRSA Post-Doctoral Individual Training Grant [F32-NS048650]** Project Role: Post-doctoral trainee; *Task dependent mechanisms of neuromuscular fatigue* (Awarded 2004; not accepted in lieu of faculty position)
  17. **NIH Kirschstein – NRSA Post-Doctoral Institutional Training Grant [T32-AG00279]** Project Role: Post-doctoral trainee; (Awarded 2003 –2005)
  18. **Foundation for Physical Therapy Promotion of Doctoral Studies II** Project Role: Pre-doctoral trainee; PODS II grant to support dissertation research (\$15K awarded 2001–2002)
  19. **Foundation for Physical Therapy Promotion of Doctoral Studies I** Role: Pre-doctoral trainee; PODS I grant to support pre-candidacy phase of graduate studies (\$7.5K awarded 2000 –2001)
  20. **NIH National Center for Medical Rehabilitation Research Pre-Doctoral Institutional Training Grant [T32-HD07434]** Project Role: Pre-doctoral trainee; (Awarded 2001 –2002).
  21. **NIH National Institutes of Child Health and Human Development Pre-Doctoral Institutional Training Grant [T32-HD07434]** Project Role: Pre-doctoral trainee; (Awarded 1999 –2000).

### **Invited Extramural Lectures, Symposia, and Continuing Education Courses**

1. Nov 2020. *The challenge and necessity of quantitative sensory testing for pain risk and recovery.* Invited Speaker, CAL-PT-Fund Research Symposium, Physical Therapy Pain Summit, Virtual Seminar.
2. Jun – Aug 2020. *Cognitive Behavioral Based Physical Therapy Management of Chronic Spine Pain.* Developer and Instructor, California Physical Therapy Association approved Continuing Education Course [4.8 CEUs]. Virtual Workshop.
3. Jan 2019. *Risk stratification in the prevention of spine pain: Who, Why, and When?* Invited Speaker, Orthopaedic Surgery Research Conference. University of California San Diego, San Diego, CA.
4. Jun 2017. *Preventing chronic pain through multidisciplinary approaches: an overview.* Invited Presentation and Panelist, NIH Pain Consortium Symposium on Multidisciplinary Strategies for Pain. Bethesda, MD.
5. Oct 2016. *Mechanisms and Prevention of Stress-Related Chronic Pain.* VA Center of Excellence for Stress and Mental Health, San Diego, CA. Orthopaedic Surgery Research Conference. University of California San Diego, San Diego, CA.
6. Nov 2015. *Neurophysiologic Investigations of Stress-Related Chronic Pain.* Invited Speaker, Orthopaedic Surgery Research Conference. University of California San Diego, San Diego,

- CA.
7. Nov 2015. *Neurophysiologic Investigations of Stress-Related Chronic Pain*. Invited Speaker, Orthopaedic Surgery Research Conference. University of California San Diego, San Diego, CA.
  8. Jul 2015. *Piecing Together the Pain Puzzle: the Biopsychosocial Model*. Invited Speaker and Discussion Panel Member. American Physical Therapy Association Section on Research Retreat, Smithfield, RI.
  9. Feb 2015. *Transitioning from Acute to Chronic Pain: Predictors and Prevention*. Combined Sections Meeting of the American Physical Therapy Association, Invited Educational Workshop, Indianapolis, IN.
  10. Nov 2014. *Stress Related Pain Conditions*. Colorado Physical Therapy Association, Invited full-day Continuing Education Course for Physical Therapists. Parker, CO.
  11. July 2014. *Motor Responses to Simulated Workplace Stressors do not Predict Development of Chronic Neck Pain in Office Workers*. 20th Congress of the International Society of Electromyography and Kinesiology, Rome, Italy.
  12. May 2014. *Exercise is Medicine: Translating Science to Practice*. 33rd Annual Meeting of the American Pain Society Invited Educational Symposium, Orlando, FL.
  13. Dec 2013. *Prospective Evaluation of Stress Related Risk Factors for Chronic Neck Pain*. Department of Physical Therapy and Rehabilitation Science Seminar, University of Iowa.
  14. Oct 2013. *Update on Mechanisms and Management of Stress-related Chronic Pain for Physical Therapists*. Invited Keynote Speaker, New York Physical Therapy Association Continuing Education Course, Albany, NY.
  15. Jul 2012. *Respiratory Modulation of Trapezius Motor Units in Young and Old Adults with Chronic Neck Pain*. 8<sup>th</sup> International Motoneuron Meeting, Sydney, Australia.
  16. Jul 2010. *Motor Responses to an Acute Psychosocial Stressor in Patients with Chronic Neck Pain*. 7<sup>th</sup> International Motor Neuron Meeting, Paris, France.
  17. Apr 2010. *Mechanisms and Clinical Implications of Psychomotor Responses to Stress in Chronic Neck Pain*. Department of Health and Exercise Science. Colorado State University. Fort Collins, CO.
  18. Aug 2009. *Mechanisms Underlying Disordered Movement: Impairments with Force Generation*. Moderator, American Physical Therapy Section on Research Retreat. Monterey, CA
  19. Jun 2008. *Mechanisms of Stress-Evoked Motor Unit Activity in the Human Trapezius Muscle*. Mechanisms of Plasticity and Disease in Motor Neurons Conference. Seattle, WA.
  20. Feb 2008. *Stress-Evoked Changes in Neuromuscular Activation: Basic Mechanisms and Implications for Chronic Neck Pain*. Department of Integrative Physiology Colloquium. University of Colorado, Boulder, CO.
  21. Oct 2005. *Mechanisms of Task Failure during Fatiguing Contractions in Healthy Humans*. NIH Workshop on Investigation of Human Muscle Function In Vivo. Nashville, TN.
  22. May 2004. *Identifying Mechanisms of Neuromuscular Fatigue: Does the Task Matter?* Interdisciplinary Program in Movement Science, Washington University, St. Louis, MO.
  23. Feb 2004. *Preventing the Recurrence of Foot Ulcers in Patients with Diabetes: Experimental Application of the Physical Stress Theory*. University of Colorado Health Sciences Center, Denver, CO.
  24. Jun 2003. *Biological Adaptation to Changes in the Mechanical Environment: Application to Physical Therapy Practice*. Invited Educational Symposium. Annual Conference of the American Physical Therapy Association, Washington DC.
  25. Feb 2001. *Meet the Authors* forum of selected journal authors. American Physical Therapy Association Section on Research, Combined Sections Meeting, San Antonio, TX.

**Professional Associations**

2003 – 2015	Society for Neuroscience
2009 – 2015	Society for Clinical and Translational Science
2012 – 2015	International Society of Electrophysiology & Kinesiology
2014 – 2015	American Pain Society
1997 –	American Physical Therapy Association, Section on Research, Section on Education
2008 –	International Association for the Study of Pain, Pain and Movement Special Interest Group

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**SERVICE FOR THE UNIVERSITY, THE PROFESSION, AND THE COMMUNITY**


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**Service for the University***Program Committees*

1. 2020 – present. Physical Therapy Program Curriculum Committee Member, SDSU
2. 2020 – present. Physical Therapy Program Student Affairs Committee Member, SDSU
3. 2019 – 2020. Physical Therapy Program Commission on Accreditation of Physical Therapy Education (CAPTE) Reaccreditation Task Force
4. 2015 – 2020. Physical Therapy Program Curriculum Committee Chair, SDSU
5. 2012 – 2014. Clinical Reasoning Task Force Chair, Physical Therapy Program, University of Colorado Denver
6. 2009 – 2014. Program Advisory Committee, Physical Therapy Program, University of Colorado Denver
7. 2008 – 2014. Interdisciplinary Movement Science Laboratory Operations Committee, University of Colorado Denver
8. 2008 – 2014. Student Affairs Committee, Physical Therapy Program, University of Colorado Denver
9. 2007 – 2014. Program Advisory Committee Chair, Rehabilitation Science PhD Program, University of Colorado Denver
10. 2010 – 2011. Medicine Faculty Search Committee, Physical Therapy Program, University of Colorado Denver
11. 2008. Pediatric Faculty Search Committee, Physical Therapy Program, University of Colorado Denver
12. 2005 – 2006. Data & Safety Monitoring Board, Physical Therapy and Rehabilitation Science Program, University of Iowa

*School/Department Committees*

1. 2019 – 2020. School of Exercise and Nutritional Sciences Retention, Promotion, and Tenure Peer Review Committee Chair
2. 2017 – 2018. School of Exercise and Nutritional Sciences Retention, Promotion, and Tenure Peer Review Committee Member
3. 2015 – 2016. School of Exercise and Nutritional Sciences Director Search Committee, San Diego State University
4. 2015 – 2016. School of Exercise and Nutritional Sciences Director's Advisory Group, San Diego State University
5. 2012 – 2014. Departmental Advisory Committee for Academic Promotion and Tenure, Department of Physical Medicine & Rehabilitation, University of Colorado School of Medicine

*College and University Committees*

1. 2020 – present. Environment and Safety Committee, SDSU
2. 2014– 2020. Intercollegiate Athletic Council with service on Scholarship Appeals Committees, SDSU
3. 2016 – present. University Senate, College of Health and Human Services Representative, SDSU
4. 2009 – 2013. Data Safety and Monitoring Board, Independent Protocol Monitor, University of Colorado Denver

**Service for the Profession**

*Invited Membership on Research Grant Review Panels*

1. 2019 - 2023. NIH Motor Function, Speech and Rehabilitation (MFSR) Study Section standing member. Three review cycles per year.
2. June 2018. National Institutes of Health Motor Function, Speech and Rehabilitation (MFSR) Study Section ad hoc member.
3. 2015. Longer Life Foundation, Washington University in St. Louis
4. 2013 – 2016. Foundation for Physical Therapy Scientific Review Panel  
Three review cycles per year for independent research foundation of the American Physical Therapy Association
5. 2012 – 2013. NIH Center for Scientific Review, Musculoskeletal Rehabilitation Sciences (MRS) Study Section ad hoc member
6. 2011. NIH Center for Scientific Review, NCCAM ZAT1 HS-04 Mind/Body and Manual Therapy Translational Tools Study Section ad hoc member
7. 2011. Research Growth Initiative Scientific Review Panel, University of Wisconsin Madison
8. 2010. Colorado Clinical and Translational Science Institute, KL2 Scientific Review Panel

*Invited External Reviewer for Tenure and Promotion*

1. Dec 2019. Ericka Merriwether, PT, Ph.D. Third year review for Assistant Professor. Department of Physical Therapy, New York University.
2. Aug 2018. Cory Christiansen, PT, Ph.D. Promotion review for Professor. Department of Physical Medicine and Rehabilitation, University of Colorado Denver.
3. June 2015. Sangeetha Manhavan, PT, Ph.D. Promotion review for Associate Professor with tenure. Department of Physical Therapy, University of Illinois at Chicago.
4. June 2011. Marie Hoeger Bement, PT, Ph.D. Promotion review for Associate Professor with tenure. Doctor of Physical Therapy Program. Marquette University.

*Invited Editorial Board Membership*

1. 2016 – present. Editorial Board Member for the Physical Therapy Journal, official journal of the American Physical Therapy Association (ranked 5<sup>th</sup> among 65 rehabilitation journals internationally)

*Manuscript Reviewer (20 manuscript reviews per month on average)*

1. 2020 – present                      Ergonomics
2. 2020 – present                      Scandinavian Journal of Pain
3. 2019 – present                      PAIN
4. 2019 – present                      PLOSOne
5. 2017 – present                      European Journal of Applied Physiology
6. 2017 – present                      Human Movement Science
7. 2017 – present                      Neuroscience Letters

8. 2016 – present	BMC Musculoskeletal Disorders
9. 2015 – present	Clinical Journal of Pain
10. 2015 – present	Physiology and Behavior
11. 2015 – present	Motor Control
12. 2015 – present	Gait and Posture
13. 2014 – present	Frontiers in Neuroscience
14. 2013 – present	Clinical Neurophysiology
15. 2013 – present	Journal of Orthopedic and Sports Physical Therapy
16. 2012 – present	Experimental Physiology
17. 2012 – present	Journal of Clinical Neurophysiology
18. 2011 – present	Journal of Hand Therapy
19. 2011 – present	International Journal of Psychophysiology
20. 2011 – present	Journal of Pain
21. 2010 – present	Journal of Physiology
22. 2010 – present	Archives of Physical Medicine & Rehabilitation
23. 2010 – present	Journal of Applied Biomechanics
24. 2009 – present	Medicine and Science in Sports and Exercise
25. 2008 – present	Journal of Neurophysiology
26. 2003 – present	Exercise and Sport Sciences Reviews
27. 2003 – present	Journal of Applied Physiology
28. 2000 – present	Physical Therapy

### **Service for the Community**

#### *Invited Clinical and Community Education Lectures*

1. Dec 2019. *Channeling Socrates to develop critical thinkers*. Invited Educational Seminar, School of Exercise and Nutritional Sciences Teaching Methods Seminar, SDSU, San Diego, CA.
2. Sep 2018. *Assessment and management of sleep to improve pain outcomes in Physical Therapy practice*. Invited In-service, Physical Medicine and Rehabilitation Services. Veteran's Administration San Diego Healthcare System, San Diego, CA.
3. Nov 2012. *Know your Body: Managing the Physical Consequences of Psychological Stress*. Let's Talk: Conversations about Women's Health. University of Colorado Hospital and the Center for Women's Health Research Community Outreach Symposium.
4. Mar 2012. *Yoga for Chronic Headache in Adolescents: A Team Approach*. Developmental Psychobiology Research Group Seminar. University of Colorado School of Medicine, Aurora, CO.
5. Fall 2012. Neurophysiology Instruction and Research Demonstration, Vista Academy High School, Erie, CO.
6. Spr 2011. *Searching for Evidence to Improve Clinical Practice*. University of Colorado Denver Alumni Association Clinical Instructor Continuing Education Course, University of Colorado Denver, Aurora, CO.
7. Oct 2010. *Motor Responses to Psychosocial Stress in Chronic Neck Pain*. University of Colorado Physical Therapy Student Association Seminar. University of Colorado Denver, Aurora, CO.
8. Jun 2008. *Effects of Myofeedback on Stress-Evoked Muscle Activity in Patients with Chronic Neck Pain*. Department of Physical Medicine & Rehabilitation Gersten Research Seminar. University of Colorado Denver, Aurora, CO.
9. Apr 2008. *Evaluation of a Novel Biofeedback Approach for Chronic Neck Pain*. University of Colorado Physical Therapy Program Alumni Association Seminar. University of Colorado Denver, Aurora, CO.

10. Aug 2002. *Physical Stress Theory: A model of tissue adaptation to physical stress*. Jefferson Barracks Veteran's Administration Hospital, Rehabilitation Department in-service, St. Louis, MO

*Community Volunteer*

1. 2018-2019. First Tech Challenge (FTC) Robotics Assistant Coach, Black Mountain Middle School, San Diego CA
2. 2017-2018. First Lego League (FLL) Robotics Coach, Black Mountain Middle School, San Diego CA
3. 2009 – 2012. Senior Research Project Panelist, Denver High School of Science and Technology, Denver, CO
4. 2007. Nine News Health Fair, Denver, CO