

UNIVERSITY *of* WASHINGTON

DEPARTMENT of REHABILITATION MEDICINE

# **37<sup>th</sup> Annual Justus F. Lehmann Symposium**

---

**Tuesday, June 6, 2023  
Center for Urban Horticulture  
8:00 AM – 2:30 PM**



# Schedule of Events

8:00 – 8:30 AM | *Breakfast/social w/friends & colleagues*

8:30 – 8:45 AM | *Welcome and Opening Remarks*  
Mary Beth Brown, PT, PhD, Lehmann  
Symposium Committee Chair  
Peter Esselman, MD, MPT, Department Chair,  
Rehabilitation Medicine

8:45 – 9:45 AM | *Keynote Speaker*  
Anna Kratz, PhD, "On the Shoulders of Giants:  
Reflections on Mentorship and Innovation  
from a Decade of MS Research"

9:45 – 10:00 AM | *Break*

10:00 – 10:25 AM | *Invited Speaker*  
Aaron Turner, PhD, ABPP (RP), "Taking the Long  
View of MS Care: Partnering with Patients to  
Promote Health and Wellness"

10:25 – 10:35 AM | *2023 Awards Presentation*  
Richard H. Adler, Attorney at Law and Law Firm  
of Adler Giersch PS Endowed Fund for the  
Advancement of Traumatic Brain Injury  
Research and Clinical Care Research  
  
Walter C. and Anita C. Stolov Endowed  
Research Fund

10:35 – 10:50 AM | *Lightning Talks I (Past Awardees)*  
Linna Jingyu Jin, MScA, PhC, CCC-SLP, SLP(C)  
Jennifer Brodsky, PT, DPT, PhC  
Siddhi Shrivastav, PT, MS, PhC

10:50 – 11:00 AM | *Break*

11:00 – 11:25 AM | *Invited Speaker*  
Patricia Matsuda, PT, PhD, DPT, "Participation  
and Falls in People with MS: Why it is  
Important"

11:25 – 11:50 AM | *Invited Speaker*  
Sarah Simmons, MD, PhD, "Exercise in MS:  
Who, What, Where, When, and Why?"

11:50 AM – 12:10 PM | *George Kraft & Buster Alvord  
Recognition*  
Dawn Ehde, PhD

12:10 – 12:25 PM | *Community Partner Voice*  
Jeanne Goussev (Video)  
Jennifer Sullivan (National MS Society)

12:25 – 1:25 PM | *Luncheon/social w/friends & colleagues*

1:25 – 1:45 PM | *Mentoring Awards*  
Dawn Ehde, PhD

1:45 – 2:00 PM | *Lightning Talks II*  
Alicia Seeds, MD  
Claire E. Child, DPT, MPH  
Melody (Bishan) Yang, MS, PhC

2:00 – 2:30 PM | *Mentoring Activity*  
Dawn Ehde, PhD

2:30-2:35 PM | *Adjournment & Closing Remarks*  
Mary Beth Brown, PT, PhD

# Speakers

## Keynote

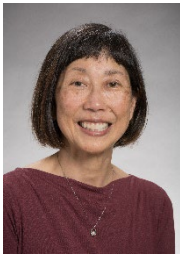


**Anna Kratz, PhD**, is an Associate Professor in the Department of Physical Medicine and Rehabilitation at the University of Michigan. Her education and training include a Clinical Psychology PhD from Arizona State University, a clinical internship at the VA Puget Sound Healthcare System in Seattle, and a postdoctoral research fellowship in the Department of Rehabilitation Medicine at the University of Washington.

Her research focuses primarily on characterizing and treating chronic pain and fatigue that interfere with functional ability in multiple sclerosis, spinal cord injury, and other clinical populations. She has expertise in ambulatory assessment methods and development of accessible mono- and combination therapies to improve symptom management and function. Since starting her faculty position at the University of Michigan in 2011, her work has been supported by grants from the NIH, NIDILRR, the DoD, PCORI, and multiple foundations.

Dr. Kratz is passionate about mentoring the next generation of rehabilitation researchers and directs two postdoctoral research training programs – funded by NIDILRR and the National MS Society - at the University of Michigan.

## Invited Speakers



**Patricia Noritake Matsuda, PT, PhD, DPT** is an Associate Professor in the UW Department of Rehabilitation Medicine, Director of Service Learning and Community Engagement in the Division of Physical Therapy and Co-Director of the UW-Evergreen Health Physical Therapy Neurologic Residency Program. She was a core team member of the International Multiple Sclerosis (MS) Fall Prevention Research Network (IMSFRN), a group of researchers from the United States, Canada, and Europe (Ireland, Italy, United Kingdom) collaborating on research related to falls and fall prevention in persons with MS. Dr. Matsuda is a past member of the American Physical Therapy Association's (APTA) MS Evidence Database to Guide Effectiveness (EDGE) Task Force II, which recently submitted a systematic review on measures of fatigue, one of the factors associated with falls and a concern of people living with MS. Her overarching research focus area and experience is in falls, fall prevention, and the impact of falls on participation in both older adults and people living with MS and other neurologic diagnoses.



**Aaron Turner, PhD, ABPP** is the Director of Rehabilitation Psychology at the VA Puget Sound Health Care System-Seattle and is a Professor in the Department of Rehabilitation Medicine at the University of Washington. He serves as the Co-Associate Director of Research for the VA MS Center of Excellence-West, one of two national centers dedicated to clinical, educational, and research innovation in the Department of Veterans Affairs. Dr. Turner maintains an active research program examining health behavior change and psychosocial determinants of quality of life among Veterans and individuals with disabilities. He received his Doctorate in Clinical Psychology from the University of Washington.



**Sarah Simmons, MD, PhD** is an Assistant Professor at UW Medicine's Multiple Sclerosis Center in the Department of Rehabilitation Medicine. She completed her PhD in Immunology at UW studying mouse models of MS, her residency in UW's Department of Rehabilitation Medicine, and her neuroimmunology fellowship at Cleveland Clinic's Mellen Center for MS. Her clinical work now focuses on neurorehabilitation of patients with MS, with a research focus on the effects of exercise on symptom severity and underlying disease pathophysiology, particularly remyelination and neurodegeneration.

### **Symposium Planning Committee**

Mary Beth Brown, PT, PhD (Committee Chair)  
Kevin Alschuler, PhD  
Carolyn Baylor, PhD  
Aaron Bunnell, MD, PhD  
Dawn Ehde, PhD

Stefania Fatone, PhD  
David Mack, PhD  
Nicole Mazwi, PhD  
Chet Moritz, PhD  
Katie Smolinski, DO

### **Mentoring Committee**

Dawn Ehde, PhD (Committee Chair)  
Stefania Fatone, PhD  
Tracy Mroz, PhD, OTR/L  
Sean Rundell, PT, PhD  
Nickolas Dasher, PhD  
Mark Harniss, PhD  
Vicente Martinez, PhD

Rhonda Williams, PhD  
Neel Sandhu, MD  
Ny-Ying Lam, MD  
Cherry Junn, MD  
Kevin Gertz, MPH  
Jed McGiffin, PhD  
Amy Chambliss, MD

# Lightning Talks

## Group 1

### "Underrepresented Voices: Experiences of Asian American Speech-Language Pathologists in Graduate Training and Clinical Practice"

Speaker: Linna Jingyu Jin, MScA, PhC, CCC-SLP, SLP(C)

Mentor: Carolyn Baylor, PhD

Authors: Linna Jingyu Jin, Carolyn Baylor, Melody Bishan Yang, Diane Kendall, Jenny Tsai, Bernadette Williams-York, Kathryn Yorkston

Abstract: Asians are uniquely underrepresented among speech-language pathologists (SLPs) but not in most other healthcare professions. This phenomenon suggests that there may be unique factors Asian Americans face in pursuing the SLP profession. This presentation will share findings from a qualitative study with Asian speech-language pathologists (SLP) who graduated from American graduate programs, and currently work in the United States. The key findings shed light on their racialized experiences navigating through graduate school and during clinical work, evidence of microaggressions that serve as barriers to their inclusion. However, participants described specific clinical values that diversity in cultural and linguistic knowledge contributes to their clinical work with adults with communication or swallowing disorders. Implications for health professions to empower students from underrepresented minority backgrounds using diversity, equity, and inclusion principles will be discussed.

### "Understanding Vestibular Function in Parkinson Disease"

Speaker: Jennifer Brodsky, PT, DPT, PhC

Mentors: Valerie Kelly, PT, PhD and James O. Phillips, PhD

Authors: Jennifer Brodsky, James Phillips, Andrew Humbert, Carlos Garcia, & Valerie Kelly

Abstract: Prior research shows evidence of vestibular deficits in people with Parkinson disease (PD). However, many studies lack comparison to older adult participants, to distinguish age-related from disease-specific vestibular deficits in PD. Additionally, medication state is not consistently controlled in prior research, despite evidence that dopaminergic medications impact vestibular function. My overall objective is to address these gaps through two projects.

First, is a retrospective study of clinical vestibular diagnostic assessments from people with and without PD. Preliminary results show mixed central and peripheral vestibular dysfunction seen in people diagnosed with PD at the time of vestibular testing, with early signs of brainstem impacts and oculomotor dysfunction in people tested more than 1 year before their PD diagnosis. Second, I am preparing for an observational study to determine PD-specific changes in vestibular function and the effects of dopaminergic medication on vestibular function in people with PD.

This research has important implications for clinical practice by guiding rehabilitation approaches that target vestibular function in PD.

## "Spinal Neuromodulation and Gait Training in Children with Cerebral Palsy"

Speaker: Siddhi Shrivastav, PT, MS, PhC

Mentor: Chet T. Moritz, PhD

Authors: Siddhi R. Shrivastav, Charlotte D. Caskey, Desiree Roge, Kristie F. Bjornson, Katherine M. Steele, Chet T. Moritz

Abstract: This purpose of this study was to evaluate the effects of short burst interval treadmill training (SBLTT), and the combination of transcutaneous spinal cord stimulation (tSCS) and SBLTT on spasticity, walking function and mobility in children with cerebral palsy (CP). Each participant first received SBLTT only followed by tSCS + SBLTT in a cross-over study design. There was an 8-week washout between the two interventions and a 12-week follow-up at the end of tSCS + SBLTT.

Spasticity measured by MAS scores reduced by 21% after SBLTT only and by 68% after tSCS + SBLTT. 38% reductions were observed in Tardieu scores after SBLTT only, and 60% after tSCS + SBLTT. Walking distance, speed, functional mobility, self-reported and community-based outcomes improved after both interventions. Improved spasticity and walking function were sustained for at least 3-months after stopping tSCS + SBLTT, during the follow-up period.

### Group 2

## "The Impact of Gun Violence: Understanding Surgical Intervention for Spinal Cord Injury from Gunshot Wounds"

Speaker: Alicia Seeds, MD

Mentor: Heather Barnett, MD, PhD

Authors: Alicia Seeds and Heather Barnett

Abstract: Surgical management of GSW-related SCIs remains controversial. Time to surgery and indications in this group are not well understood; these factors may impact prior data suggesting patients with GSW-SCI have worse outcomes.

Patients with traumatic SCI from July 2012-July 2022 (n=1569) were identified from our level 1 trauma center Trauma Registry. Patients with GSW-SCI were less likely to undergo surgery compared to other etiologies (24.3% vs. 70.2%,  $p < 0.0001$ ). Time to surgery for GSW-SCI was longer than for other etiologies ( $49.2 \pm 92.9$  vs.  $30.6$  hours  $\pm 46.0$ ,  $p = 0.012$ ). The most common reason for delay in spinal surgery was other emergent surgery (52%). The most common indications for surgery were retained bullet (20%) and unstable spine (20%).

Surgery was delayed in patients with GSW-SCI compared to other etiologies with average time to surgery  $> 48$  hours and high variability in both timing and indication. These details should be considered in interpretation of surgical outcomes after GSW-SCI.

## "Remote Exercise Risks and Risk Mitigation in Lymphangiomyomatosis (LAM): A Delphi Study"

Speaker: Claire E. Child, DPT, MPH

Mentors: Mary Beth Brown, PT, PhD and Anne M. Turner, MD, MPH, MLIS

Authors: Claire E. Child, Anne M. Turner, Tracy L. Jirikowic, Joshua M. Liao, Mary Beth Brown

Abstract: Patients with the rare interstitial lung disease lymphangiomyomatosis (LAM) have unique disease-specific risks during exercise, which must be mitigated to optimize safety during exercise. We conducted a two-round modified Delphi study to synthesize expert opinions related to exercise preparticipation screening in LAM. A Delphi study is an acceptable methodology for generating consensus when there is a paucity of available literature and an urgent need to develop guidelines and products. Purposive sampling was used to engage a diverse, international panel of 15 professionals with clinical and research expertise in LAM in a first round online survey and a second round, in-person meeting. An anonymous survey was also sent to patients with LAM to obtain patient perspectives on risks during exercise training. A tool was developed for LAM-specific exercise preparticipation screening prior to initiation of a remote, asynchronously monitored exercise program.

## "Environmental Impact on Community Participation Experienced by People with Multiple Sclerosis: A Community-Engaged Mixed Methods Study Protocol"

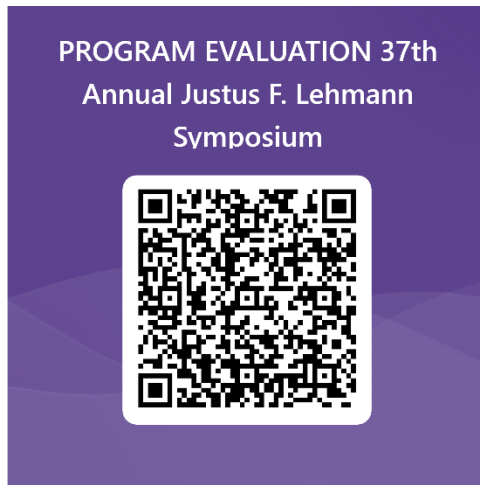
Speaker: Melody (Bishan) Yang, MS, PhC

Mentor: Danbi Lee, OTD, PhD, OTR/L

Authors: Bishan Yang, Danbi Lee, Ivan Molton, Carolyn Baylor, Dawn Ehde, Andrew Humbert, Sarah Iribarren

Abstract: While full participation is an important goal for people with MS (PwMS), they are often dissatisfied with their ability to participate in what they want and need to do. Factors contributing to restricted participation are multifaceted; however, most existing MS research primarily focused on documenting the significant impact of impairments but less so on external barriers. This dissertation project aims to conduct a community-engaged sequential mixed methods study to understand how environments influence community participation among PwMS and engage stakeholders to co-identify actions needed to support their participation. A community advisory board will be involved throughout the project to ensure its relevance to the MS community's needs. This study will include (1) a quantitative secondary analysis of GPS-measured and self-reported participation and environment data, (2) focus groups exploring perspectives on the focused topic, and (3) a town hall meeting inviting stakeholders' input to identify collective actions and next steps.

## Evaluations & Certificates



Please contact [rehabchair@uw.edu](mailto:rehabchair@uw.edu) for questions, comments, or assistance with evaluations and certificate requests.