Laura A. Baehr, PT, DPT, PhD

April 2023

Assistant Professor of Instruction Department of Health and Rehabilitation Sciences College of Public Health, Temple University 624 Ritter Annex, 1301 Cecil B. Moore Avenue Philadelphia, PA 19122 Email: <u>laura.baehr@temple.edu</u> Pronouns: she/her/hers

Research Interests:

 Rehabilitation Sciences; Spinal Cord Injury; Physical Activity Promotion; Adaptive Exercise; Health Access; Health Equity; Mixed Methodology

 Education

 2023
 PhD: Health and Rehabilitation Science Department of Physical Therapy and Rehabilitation Science Drexel University, Philadelphia, PA Dissertation Title: Impact of group tele-exercise on physical activity determinants and behavior in individuals with spinal cord injury: A mixed method study

 2019
 Doctor of Physical Therapy (DPT) Temple University, Philadelphia, PA

 2012
 Dual Bachelor of Science and Art: Neuroscience and Dance Muhlenberg College, Allentown, PA

Licensure and Certifications

2022-present	Pennsylvania Direct Access Authorization License #DAPT005486
2019-present	Pennsylvania Physical Therapist License #PT027846
2018-present	Basic Life Support, American Heart Association
2018-present	Heartsaver First Aid, American Heart Association

Appointments and Research Experience

2023-present	Assistant Professor of Instruction, Department of Health and Rehabilitation Sciences, Temple University, Philadelphia, PA
2019-2023	Research Fellow: Physical Therapy & Rehabilitation Science, Drexel University, Philadelphia, PA, <u>Mentor</u> : Margaret Finley, PT, PhD
2020-2022	Adjunct Instructor: Health Sciences, Temple University, Philadelphia, PA
2012-2016	Research Specialist, Frontotemporal Degeneration Center, University of Pennsylvania, Philadelphia, PA, <u>Mentors</u> : Murray Grossman, MD, EdD, Corey McMillan, PhD, Dave Meaney, PhD

Research Funding

Ongoing Research Support

Pennsylvania Department of Health RFA 67-127, Tele-exercise for individuals with SCI: Physical, Psychological, and Social Responses

Role: Co-investigator (Lead Research Clinician), December 1, 2022-November 30, 2026.

Craig H. Nielsen Foundation Psychosocial Research, Integrated tele-exercise for individuals with SCI: Psychological and social responses with spinal cord injury Role: Co-investigator (Research Clinician), April 30, 2022-April 29, 2024.

Eunice Kennedy Shriver National Institute of Child Health & Human Development, National Institutes of Health (NIH) Grant number R01HD103904, mHealth-based just-in-time adaptive intervention to improve physical activity levels of individuals with spinal cord injury, Role: Co-investigator, July 2021-June 2026.

Completed Research Support

Drexel University Dean's PhD Student Research Award, Impact of group tele-exercise on determinants of physical activity behavior for individuals with spinal cord injury Role: Principal Investigator, April 1 2022-June 1, 2023.

Drexel University College of Nursing and Health Professions Graduate Fellowship Role: Research Fellow, September 2019 - September 2022.

Cell2Society Aging Research Network Graduate Student Pilot Funding, Looking to the Future: Exploring Aging with Spinal Cord Injury Role: Principal Investigator, July 1, 2020 - December 31, 2021.

Peer-reviewed Publications

Baehr LA, Fisher, K., Finley, M. Perspectives on health with spinal cord injury now and in the future: a qualitative descriptive study. *Physical Therapy*. 2023, *published online January* 31, 2023. https://doi.org/10.1093/ptj/pzad011

Baehr LA, Kaimal G, Hiremath S, et al. Staying active after rehab: Physical activity perspectives with a spinal cord injury beyond functional gains. *PLoSONE*. 2022, 17(3):e0265807. doi: 10.1371/journal.pone.0265807.

Finley MA, **Baehr LA**, Bruneau M, Kaimal G. Group tele-exercise for individuals with spinal cord injury: A mixed methods pilot study. *J of Phys Act Res*. 2022, 7(1):10-17. doi: 101.12691/jpar-7-1-3.

Finley MA, Euiler E, **Baehr LA**, et al. Relationship of psychosocial factors and musculoskeletal pain among individuals with newly acquired spinal cord injury. *Spinal Cord Ser Cases*. 2021;7(1):61. doi: 10.1038/s41394-021-00415-4.

Baehr LA, Frey-Law LA, Finley MA. Quantitative sensory changes related to physical activity in adult populations: A scoping review. *Am J Phys Med Rehabil*. 2021, online ahead of print. doi: 10.1097/PHM.000000000001883.

Heim S, McMillan C, Clark R, **Baehr LA**, Ternes K, Olm C, Min N, Grossman M. How the brain learns how few are "many": an fMRI study of the flexibility of quantifier semantics. *Neuroimage*. 2016;125:45-52. doi: 10.1016/j.neuroimage.2015.10.035.

Bisbing T, Olm C, McMillan C, Rascovsky K, **Baehr LA**, Ternes K, Irwin D, Clark R, Grossman M. Estimating frontal and parietal involvement in cognitive estimation: a study of focal neurodegenerative diseases. *Front. Hum. Neurosci.* 2015;9:317. doi: 10.3389/fnhum.2015.00317.

Works in progress (under review)

Baehr LA, Bruneau M, Finley MA. Physical and psychosocial features of exercisers versus non-exercisers with SCI enrolled in a group tele-exercise program, TSCIR, April 2023.

Baehr LA, Kaimal G, Bruneau M, Finley MA. Development and feasibility of a group tele-exercise program for individuals with spinal cord injury, JNPT, January 2023.

Peer-reviewed Conference Presentations (Posters and Symposiums)

Baehr LA, Bruneau Jr. M, Kaimal G, Finley M. "Physical and psychosocial features of exercisers vs. non-exercisers with SCI enrolled in a group tele-exercise program". American Spinal Injury Association Annual Scientific Meeting, Atlanta, GA, 4/17/23.

Baehr LA, Bruneau Jr. M, Kaimal G, Finley M. "Positive psychosocial changes relating to physical activity behavior after participation in a group tele-exercise program for individuals with SCI". American Spinal Injury Association Annual Scientific Meeting, Atlanta, GA, 4/17/23.

Baehr LA, Finley M. "Mixed Methods Assessment of Group Tele-exercise Program Feasibility for Individuals with Spinal Cord Injury". 7th Annual Kay Shepard Qualitative Research Symposium. American Physical Therapy Association Combined Sections Meeting, San Diego, CA, 2/23/23.

Baehr LA, Burns S. "Health Professions Student Perceptions of Physical Activity Counseling for Individuals with Chronic Health Conditions". American Physical Therapy Association Combined Sections Meeting, San Diego, CA, 2/23/23.

Baehr LA. "Using a convergent mixed methods design to evaluate the impact of group tele-exercise program participation on physical activity in individuals with spinal cord injury". Mixed Methods International Research Association Global Conference, 8/3-8/4/22, virtual.

Baehr LA, Finley MA. "Feasibility and preliminary outcomes of a group tele-exercise class for individuals with spinal cord injury". American College of Sports Medicine and World Congress, San Diego, CA, 5/31-6/4/22.

Finley MA, **Baehr LA**, Geigle P. "Pain-related psychological factors in individuals with violent vs. nonviolent spinal cord injury onset". American Physical Therapy Association Combined Sections Meeting, San Antonio, TX, 2/2-2/5/22.

Baehr LA, Fisher K, Finley MA. "Health and aging beyond "rehab mode" with spinal cord injury: A qualitative descriptive study". American Physical Therapy Association Combined Sections Meeting, San Antonio, TX, 2/2-2/5/22.

Baehr LA. "Using a convergent mixed methods design to evaluate the impact of group tele-exercise program participation on physical activity in individuals with spinal cord injury". Mixed Methods International Research Association Global Conference, 8/3-8/4/22, *virtual*.

Baehr LA, Finley MA. "Feasibility and preliminary outcomes of a group tele-exercise class for individuals with spinal cord injury". American College of Sports Medicine and World Congress, 5/31-6/4/22, San Diego, CA.

Finley MA, **Baehr LA**, Geigle P. "Pain-related psychological factors in individuals with violent vs. nonviolent spinal cord injury onset". American Physical Therapy Association Combined Sections Meeting, 2/2-2/5/22, San Antonio, TX.

Baehr LA, Fisher K, Finley MA. "Health and aging beyond "rehab mode" with spinal cord injury: A qualitative descriptive study". American Physical Therapy Association Combined Sections Meeting, 2/2-2/5/22, San Antonio, TX.

Baehr LA, Warchal-King J. "HOMEBody: a multigenerational exploration of community performance and what it means to be home". National Dance Education Conference, 10/8-10/9/22, virtual.

McMillan C, Irwin D, **Baehr LA**, Ternes K, Olm C, Van Deerlin V, Lee V, Trojanowski J, Grossman M. "Neuroimaging-based staging of pathological spread in patients with known tau pathology." American Academy of Neurology, AAN 67th Annual Meeting, 4/18-4/25/15, Washington, DC.

Rascovsky K, Moran E, **Baehr LA**, Irwin D, McMillan C, Grossman M. "Utility and neuroanatomical correlates of the FTLD-NACC neuropsychology module in the differential diagnosis of behavioral variant frontotemporal dementia and Alzheimer's disease." American Academy of Neurology, AAN 67th Annual Meeting, 4/18-4/25/15, Washington, DC.

Baehr LA, McMillan C, Rascovsky K, Powers J, Burkholder L, Grossman M. "Strategic problem solving in behavioral variant frontotemporary dementia." American Academy of Neurology, AAN 66th Annual Meeting, 4/26- 5/3/14, Philadelphia, PA.

Invited Presentations

Baehr LA. "Acknowledging and Addressing Social Determinants of Health in Physical Therapy Using Evidence-Based Practice Principles". American Physical Therapy Association Pennsylvania Southeast District Conference. Philadelphia, PA, 4/29/2023.

Baehr LA. "Physical Activity Access and Strategies for Individuals with Chronic Health Conditions". Jefferson University Sidney Kimmel Medical College Fitness and Nutrition Seminar, Philadelphia, PA, 11/13/2022.

Baehr LA. "Investigating and influencing movement systems: The choreography of bodies and built environments". Art-Reach Cultural Accessibility Conference, Philadelphia, PA, 9/20/2022.

Baehr LA. "My Road to DPT and Beyond". Temple University Pre-Physical Therapy Association Guest Lecture, Temple University, 4/4/2022.

Baehr LA. "Qualitative methodology in a virtual environment". Colombia University Studio Discussions, 3/22/2022.

Baehr LA. "Reflecting on benefits and challenges of research from a distance: tele-exercise for individuals with spinal cord injury. Scholars Share, Drexel University, 3/3/2022.

Baehr LA. "Practical Primer on Physical Activity for Individuals with Disabilities". Adaptive Sports Northwest Coaches and Athletes Seminar, 5/22/2021.

Baehr LA. "Contextualizing physical activity perceptions and recommendations of individuals with chronic spinal cord injury". Rehabilitation Sciences Seminar, Drexel University, 4/7/2021.

Baehr LA. "The Practice of Embodied Science". Dance Appreciation in Health Sciences Guest Lecture, Alvernia University, 3/23/2021.

Baehr LA. "My Road to DPT and Beyond". Temple University Pre-Physical Therapy Association Guest Lecture, Temple University, 2/9/2021.

Baehr LA. "Physical Activity and Quantitative Sensory Testing in Adults: A Scoping Review". Rehabilitation Sciences Seminar, Drexel University, 2/3/2021.

Baehr LA. "Qualitative Project Share: Living Well with Spinal Cord Injury". Graduate Mixed Methods Course Flash Talk, Drexel University, 2/2/2021.

Baehr LA. "Looking to the Future" Exploring Aging with Spinal Cord Injury Pilot Study Update". AgeWell Collaboratory Cell2Society Research Meeting, Drexel University, 1/27/201.

Baehr LA. "Looking to the Future" Exploring Aging with Spinal Cord Injury Pilot Study Update". Physical Therapy and Rehabilitation Sciences Seminar, Drexel University, 1/27/201 (virtual)

Baehr LA. "Physical Activity and Quantitative Pain Measures: A Scoping Review". Drexel University Emerging Graduate Scholars Conference, April 23, 2020, Philadelphia, PA.

Baehr LA. "Treatment considerations for chronic pain in spinal cord injury". MossRehab Main Campus Outpatient Physical Therapy Inservice, May 1, 2019, Elkins Park, PA.

Baehr LA. "Student perceptions of community-based exercise for individuals with non-communicable diseases". Temple University College of Public Health Research Day, April 5, 2019, Philadelphia, PA.

Baehr LA. "Student perceptions of community-based exercise for individuals with non-communicable diseases". Temple University Doctor of Physical Therapy Evidence Based Practice Day, October 19, 2018, Philadelphia, PA.

Baehr, LA. "Dance for PD: why movement matters for Parkinson disease." 13th Annual Jean Feldman Memorial Conference, November 6, 2015, Philadelphia, PA.

Baehr LA. "Modeling Musca behavior on a visual discrimination task." Lehigh Valley Society for Neuroscience Research Conference, April 21, 2012, Allentown, PA.

Awards and Honors

Clinician-Scientists Transdisciplinary Aging Research Coordinating Center Health Equity Research Scholar, 2023 Competitively selected as one of 9 early career clinician-scientists to participate in a series of workshops to promote scientific exchange and collaboration on health equity focused scholarship

Workshop in Implementation Science and Health Services (WISH): Advancing Grant Writing Skills for Rehabilitation Researchers, 2023 Competitively selected for small group grant writing workshop sponsored by Learning Health Systems Rehabilitation Research Network

Drexel Graduate College Teaching Assistant Excellence Award, 2022

Drexel University Emerging Graduate Scholars Conference, 2022 3 Minute Thesis People's Choice Award

Drexel University College of Nursing and Health Professions Person of Purpose, 2021 Distinguished College-wide honor for innate desire to heal and a responsibility to serve those whose voices are not heard

APTA Academy of Research Qualitative SIG Post-Professional Student Researcher Liaison, 2021 Invited lead membership role to engage doctoral students interested in pursuing qualitative and mixed methodology research initiatives across the United States Drexel University Emerging Graduate Scholars Conference, 2020

Provost's Award: Second Place Oral Research Presentation

Invited Alumna Panelist, Muhlenberg Dance Wellness Symposium, 2020

Graduate College "Blue" Fellowship, Drexel University, 2019 Awarded to highly qualified doctoral students in support of pre-candidacy work

College of Public Health Graduation Speaker, Temple University, 2019

Outstanding Original Research Presentation Award, Temple University, 2018 Community-Based Exercise for Individuals with Non-Communicable Diseases Mentors: Scott Burns, PT, DPT, Elizabeth Thompson, PT, PhD

Hyman Dervitz Scholarship, Temple University, 2018 For high performance in academics, collaborative leadership, volunteerism, social conscience

Invited Panelist, Visionaries and Innovators: Joys and Challenges of Being a Woman in STEM, Montgomery County Commission on Women and Families, 2013

Best Oral Presentation in Neurosciences, Lehigh Valley Society for Neuroscience, 2012 Modeling Musca behavior on a visual discrimination task Mentor: Dr. Patrick Williams

Seena Marcus Arts Scholarship, Muhlenberg College, 2012

Muhlenberg Presidential Merit Scholarship, Muhlenberg College, 2008-2012

Talent Grant (Dance), Muhlenberg College, 2008-2012

Community-Engaged Practice

Movement instruction	
	Pennsylvania Center for Adaptive Sports Seated Fitness Lead Instructor Teach weekly online exercise focused on mindfulness, stability, strength, and cardiovascular training for individuals with chronic mobility impairments including spinal cord injury, cerebral palsy, traumatic brain injury, and lower limb amputations
2020-Present	Encore Program Teaching Artist, Art-Reach Develop and instruct adapted dance sessions for Einstein Health Network and other Philadelphia-based partners serving individuals requiring accessible services.
2018-Present	Guest STEM Educator, College of Physicians Junior Fellows Program, Philadelphia, PA Lead classes on stress physiology to Philadelphia high school students interested in STEM careers.
2021	Inaugural OnDemand Adapted Exercise Instructor, Move United Sport, Rockville, MD OnDemand Virtual Platform Instructor reaching 300,000 individuals nationwide Invited Yoga teacher: Annual Junior Nationals Competition for aspiring Paralympic athletes
2012-2016	Dance for Parkinson's Disease Teacher, Philadelphia, PA Develop and instructed community dance classes to individuals with Parkinson's Disease. Appointments: 954 Dance Movement Collective, MossRehab Elkins Park.

Professional Service

<u>Clinical</u> 2022-Present	Physical Therapist and Clinical Instructor, CPH Community Health Center, Philadelphia, PA Provide pro-bono community health consult physical therapy services to individuals living in North Philadelphia including movement education, physical activity promotion, and group-exercise. Instruct Doctor of Physical Therapy Students on psychomotor and communication skills, as well as addressing social determinants of health	
2019-2020	Physical Therapist, Sheller 11 th Street Family Health Services, Philadelphia, PA Provide pro-bono physical therapy services to individuals living in North Philadelphia. Collaborate and co-treat alongside art therapists for complex medical cases such as those living with chronic pain.	
<u>Professional Membership</u> Member, Mixed Methods International Research Association, 2021-present		
Member, American Physical Therapy Association, 2016-present Research/Orthopedics/Neurology/Health Policy Sections Qualitative Research Special Interest Group Post-Professional Researcher Liaison Disability Justice and Anti-Ableism Catalyst Group		
Member, Pennsylvania Physical Therapy Association, 2016-present		
<u>Journal Referee</u> 2022-Present	British Medical Journal (BMJ) Open	
<u>Online Publications</u> Baehr LA . "Chronic Pain: It's More than Mechanical. Shifting healthcare explanations from cause-based to mind body management". Curable. 2020. https://www.curablehealth.com/blog/chronic-pain-more-than- mechanical.		

Baehr LA. "What's the Evidence for Compassion? The Art and Science of Physical Therapy". Covalent Careers, 2020. https://eyesoneyecare.com/resources/whats-the-evidence-for-compassion-the-art-and-science- of-physical-therapy.

Baehr LA. "Meaningful Movement Facilitates Functional Goals: The Benefits of Pilates Through a Physical Therapy Lens Following Total Hip Replacement". Pilates PT. 2019. https://pilatespt.wixsite.com/home/single-post/2018/06/25/meaningful-movement-facilitates-functional-goals-the-benefits-of-the-pilates-through-a-ph