

CURRICULUM VITAE

James M. Finley, Ph.D.

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I. BIOGRAPHICAL INFORMATION

PERSONAL INFORMATION:

University Address: Division of Biokinesiology and Physical Therapy
Herman Ostrow School of Dentistry
University of Southern California
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Los Angeles, CA 90033
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EDUCATION AND PROFESSIONAL APPOINTMENTS:

EDUCATION:

2004-2010 Doctorate of Philosophy
Northwestern University, Evanston, IL
Department of Biomedical Engineering (Dr. Eric Perreault and Dr. Yasin Dhaher)
Dissertation Title – Regulation of Feed-Forward and Feedback Contributions to Ankle Stability during Balance Tasks
Funding: NSF Graduate Research Fellowship and a GEM Ph.D. Fellowship

2004-2007 Master of Science
Northwestern University, Evanston, IL
Department of Biomedical Engineering
Thesis Title – Enhanced Inter-joint Reflex Coupling in the Lower Limb of Individuals with Hemiparetic Stroke

2000-2004 Bachelor of Science (Summa Cum Laude)
Florida A&M University, Tallahassee, FL
Department of Mechanical Engineering

POST-GRADUATE TRAINING:

2010-2013 Post-doctoral Fellow, Kennedy Krieger Institute & Johns Hopkins University, Baltimore, MD

Department of Neuroscience (Dr. Amy Bastian)
Funding: NIH T32 HD007414

ACADEMIC APPOINTMENTS:

- 2020 – present Associate Professor of Biokinesiology, Division of Biokinesiology and Physical Therapy, Herman Ostrow School of Dentistry, University of Southern California
- Associate Professor of Biomedical Engineering, Department of Biomedical Engineering, Viterbi School of Engineering, University of Southern California (By Courtesy)
- 2013 – 2020 Assistant Professor of Biokinesiology, Division of Biokinesiology and Physical Therapy, Herman Ostrow School of Dentistry, University of Southern California
- 2017 – 2020 Assistant Professor of Biomedical Engineering, Department of Biomedical Engineering, Viterbi School of Engineering, University of Southern California (By Courtesy)

HONORS, AWARDS, FELLOWSHIPS:

- 2018 Received the Mechanical Engineering Rising Star Alumni Award from the Florida A&M University – Florida State University College of Engineering
- 2017 Received the USC Division of Biokinesiology and Physical Therapy Award for Excellence in Teaching
- 2017 Selected as an American Heart Association Fellow in Training
- 2017 Appointed as a faculty member on an NIH T32 training grant within the USC Neuroscience Graduate Program
- 2015 Interviewed by New Scientist Magazine (<http://bit.ly/1gghnIQ>)
- 2009 Received NIBIB/NIH Student Travel Award - IEEE EMBS Conference
- 2008 Awarded a Community Building Grant from Northwestern University
- 2005 Received an NSF Graduate Research Fellowship
- 2004 Received a GEM Ph.D. Fellowship
- 2002 Inducted into Pi Tau Sigma Mechanical Engineering Honor Society
- 2002 Inducted into Tau Beta Pi Engineering Honor Society

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:

- 2015 – present American Society of Neurorehabilitation
- 2015 – present American Heart Association

2015 – present	American Society of Biomechanics
2011 – present	Society for the Neural Control of Movement
2008 – present	Institute for Electrical and Electronics Engineers
2006 – present	Society for Neuroscience
2003 – present	Pi Tau Sigma Mechanical Engineering Honor Society
2002 – present	Tau Beta Pi Engineering Honor Society

II. ADMINISTRATIVE AND SERVICE ACTIVITIES

UNIVERSITY SERVICE:

USC DIVISION OF BIOKINESIOLOGY AND PHYSICAL THERAPY:

2022 – present	Member, Division of Biokinesiology and Physical Therapy Faculty Search Committee
2022 – 2023	Member of Organizing Committee, Conference to Honor the Career of Dr. Carolee Winstein
2021	Co-organizer and lecturer in the Division of Biokinesiology and Physical Therapy Summer Series for Undergraduate Researchers
2020 – 2021	Chair, Division of Biokinesiology and Physical Therapy Merit Review Committee
2020 – 2021	Member of the Division of Biokinesiology and Physical Therapy Faculty Council
2020 – 2021	Member of the Division of Biokinesiology and Physical Therapy Diversity, Anti-Racism, Inclusion, and Community Engagement Council (DARIC) Admissions Sub-Committee
2020 – present	Faculty advisor of the Division of Biokinesiology and Physical Therapy Black Students Affinity Group
2019 – 2021	Member of the Division of Biokinesiology and Physical Therapy Faculty Affairs Committee
2018	Reviewer for Division of Biokinesiology and Physical Therapy Seed Grants
2018	Hosted 26 high school students for one day as a part of the USC Kinesiology: Moving Minds and Bodies through Sports, Medicine, and Health (CORE-195) Summer Program
2016 – present	Reviewer of applications to the Division of Biokinesiology and Physical Therapy Doctor of Physical Therapy program

- 2015 Co-organized and presented in a faculty forum at the Division of Biokinesiology and Physical Therapy's "Division on the Road" event in Pasadena, CA
- 2015 – present Co-Director of the Computational Motor Control and Learning Journal Club in the Division of Biokinesiology and Physical Therapy
- 2013 – present Member of the Division of Biokinesiology and Physical Therapy Ph.D. Admissions Committee

HERMAN OSTROW SCHOOL OF DENTISTRY OF USC:

- 2024 – present Member, Division of Biokinesiology and Physical Therapy Associate Dean and Chair Search Committee
- 2023 Poster Judge for the Herman Ostrow School of Dentistry Research Day
- 2021 Member, USC Chan Division of Occupational Science and Occupational Therapy Faculty Search Committee
- 2014 Poster Judge for the Herman Ostrow School of Dentistry Research Day

KECK SCHOOL OF MEDICINE OF USC:

- 2018 Reviewer for Keck School of Medicine Dean's Pilot Funding Program

USC VITERBI SCHOOL OF ENGINEERING:

- 2024 Served as a Judge for the Grodins Research Symposium in the Department of Biomedical Engineering
- 2017 Served as a Judge for the 21st Grodins Research Symposium in the Department of Biomedical Engineering

UNIVERSITY OF SOUTHERN CALIFORNIA:

- 2023 – present Member of the Neuroscience Graduate Program Ph.D. Admissions Committee
- 2020 Reviewer for USC Collaboration Fund Program
- 2018 – present Co-Director, USC Sensorimotor Assessment and Rehabilitation Training in Virtual Reality Center (SMART-VR Center)
- 2018 Co-Organizer, 1st Annual USC Virtual Technologies for Health Symposium
- 2018 – 2020 Member of the Neuroscience Graduate Program's Diversity Committee
- 2018 Served as a Judge for the 13th Annual USC Neuroscience Graduate Program Student Research Symposium
- 2017 – 2020 Member of the Neuroscience Graduate Program Executive Committee
- 2016 Member of the Zumberge Individual Award Review Committee

2014 Member of the CTSI Pilot Grant Technology Review Committee

EDITORIAL ACTIVITIES:

EDITORIAL BOARD:

2022 – present Journal of Neurologic Physical Therapy
2019 – 2022 IEEE Transactions in Neural Systems and Rehabilitation Engineering

EDITOR/ASSOCIATE EDITOR/ACADEMIC EDITOR:

Year	Journal (# of Manuscripts Handled)
2022	Associate Editor, IEEE Transactions in Neural Systems and Rehabilitation Engineering (7)
2021	Associate Editor, IEEE Transactions in Neural Systems and Rehabilitation Engineering (10)
2020	Associate Editor, IEEE Transactions in Neural Systems and Rehabilitation Engineering (14)
2019	Associate Editor, IEEE Transactions in Neural Systems and Rehabilitation Engineering (2)

SCIENTIFIC REVIEW FOR JOURNALS:

Year	Journal (# Reviewed)
2024	IEEE Open Journal of Engineering in Medicine and Biology (1) IEEE/RSJ International Conference on Intelligent Robots and Systems (1) Journal of Neurophysiology (2) Journal of Neurologic Physical Therapy (1) PeerJ (1) PLOS Computational Biology (1) Scientific Reports (1) IEEE Transactions on Visualization and Computer Graphics (1)
2023	Current Opinion in Biomedical Engineering (1) IEEE Engineering in Medicine and Biology Conference (6) IEEE/RSJ International Conference on Intelligent Robots and Systems (1) Journal of Experimental Biology (1) Journal of Medical and Internet Research Serious Games (1) Journal of Neurophysiology (1) Nature Communications (1) Neurorehabilitation and Neural Repair (1) Peer J (1)

	PLOS Computational Biology (1)
	Scientific Reports (1)
	Transactions in Neural Systems and Rehabilitation Engineering (1)
2022	IEEE Engineering in Medicine and Biology Conference (6) IEEE Transactions in Neural Systems and Rehabilitation Engineering (2) IEEE Transactions in Human-Machine Systems (1) Journal of Biomechanics (2) Journal of Experimental Biology (1) Journal of Medical and Internet Research - Aging (1) Journal of Neuroengineering and Rehabilitation (1) Journal of Neurophysiology (1) Journal of Neurologic Physical Therapy (1) Nature Communications (1) PLOS ONE (1) Scientific Reports (1)
2021	Gait and Posture (1) IEEE Engineering in Medicine and Biology Conference (5) IEEE Transactions on Biomedical Engineering (1) Journal of Experimental Biology (1) Journal of Neuroengineering and Rehabilitation (1) Journal of Neurophysiology (1) PLOS ONE (1) Proceedings of the National Academy of Sciences of the United States of America (1) Scientific Reports (1)
2020	Clinical Biomechanics (1) Gait and Posture (2) IEEE Transactions on Haptics (1) Journal of Biomechanics (1) Journal of Experimental Biology (1) Journal of Neuroengineering and Rehabilitation (1) Journal of Neurophysiology (3) Neurorehabilitation and Neural Repair (2)
2019	Experimental Brain Research (1) IEEE Engineering in Medicine and Biology Conference (4) Journal of Applied Biomechanics (1) Journal of Biomechanics (1) Journal of Neuroengineering (1) Journal of Neuroengineering and Rehabilitation (2) Journal of Neurologic Physical Therapy (1) Neurorehabilitation and Neural Repair (2)

- Robotics and Automation – Letters (1)
- Transaction in Neural System and Rehabilitation Engineering (1)
- Virtual Reality (1)

- 2018 Archives of Physical Medicine and Rehabilitation (1)
- Experimental Brain Research (1)
- Frontiers in Neuroscience (1)
- IEEE Engineering in Medicine and Biology Conference (6)
- IEEE Neural Engineering Conference (5)
- Journal of Experimental Biology (1)
- Journal of Neuroengineering and Rehabilitation (1)
- Journal of Neurophysiology (1)
- Neurorehabilitation and Neural Repair (2)
- Scientific Reports (1)
- Transactions in Neural Systems and Rehabilitation Engineering (1)

- 2017 IEEE Engineering in Medicine and Biology Conference (4)
- Gait and Posture (1)
- Journal of Neurophysiology (1)
- Journal of Physiology (1)
- Neurorehabilitation and Neural Repair (2)
- Neuroscience Letters (1)
- Scientific Reports (1)

- 2016 Gait and Posture (1)
- Human Factors (1)
- IEEE Engineering in Medicine and Biology Conference (8)
- Journal of Applied Biomechanics (1)
- Journal of Biomechanics (1)
- Journal of Neuroengineering and Rehabilitation (1)
- Neurorehabilitation and Neural Repair (1)
- PLOS ONE (1)
- Transactions in Neural Systems and Rehabilitation Engineering (2)

- 2015 Experimental Brain Research (2)
- IEEE Engineering in Medicine and Biology Conference (7)
- Journal of Neuroengineering and Rehabilitation (1)
- Journal of Neurologic Physical Therapy (1)
- Neurorehabilitation and Neural Repair (1)
- PLoS Computational Biology (2)

- 2014 Experimental Brain Research (1)
- Frontiers in Neuroscience (1)
- IEEE Engineering in Medicine and Biology Conference (7)
- IEEE Conference on Healthcare Innovation & Point-of-Care Technologies (1)
- IEEE/RSJ International Conference on Intelligent Robots and Systems (1)

- Journal of Neuroengineering and Rehabilitation (1)
Journal of Neurophysiology (2)
Neurorehabilitation and Neural Repair (1)
PLoS Computational Biology (1)
- 2013 IEEE Engineering in Medicine and Biology Conference (9)
Journal of Biomechanics (1)
Journal of Neuroengineering and Rehabilitation (2)
Journal of Neurologic Physical Therapy (1)
- 2012 IEEE Engineering in Medicine and Biology Conference (8)
Journal of Neurophysiology (2)
- 2011 IEEE Engineering in Medicine and Biology Conference (7)
Journal of Neurophysiology (1)
Transactions in Neural Systems and Rehabilitation Engineering (1)
- 2010 IEEE Engineering in Medicine and Biology Conference (3)
Journal of Neurophysiology (2)

GRANT REVIEW:

- 2023 – present Standing Member of the National Institutes of Health Musculoskeletal Rehabilitation Sciences Study Section
- 2023 Ad-hoc Reviewer for the National Science Foundation
- 2022 Ad-hoc Reviewer for the National Science Foundation
- 2021 Reviewer for the National Science Foundation
- 2021 National Institutes of Health, Center for Scientific Review
Reviewer for Musculoskeletal Rehabilitation Sciences Study Section
- 2018 Reviewer for the National Science Foundation
- 2016-2017 National Institutes of Health, Center for Scientific Review
Early Career Reviewer, MOSS-V (15) SBIR-MRS Special Emphasis Panel
- 2016-2017 Research Foundation Flanders
Grant Reviewer
- 2014, 2017 Ad-hoc Reviewer for National Science Foundation
- 2014 Toronto Rehabilitation Institute
External pre-reviewer

SERVICE ACTIVITIES IN PROFESSIONAL ORGANIZATIONS:

- 2023 – present Program Chair, American Society of Biomechanics Annual Meeting

2023	Member of Program Committee, American Society of Biomechanics
2022 – 2023	Program Chair-Elect, American Society of Biomechanics
2022 – present	Member of Executive Board, American Society of Biomechanics
2022 – 2023	Co-organizer, NSF Conference on Computational Neurorehabilitation
2022	Co-organizer, Locomotion and Virtual Reality Session, 9 th World Congress of Biomechanics
2022	Judge for IEEE Robotics and Automation Letters Paper Competition, IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechatronics.
2021	Mentor, Annual Biomedical Research Conference for Minority Students
2021	Poster Judge, Annual Biomedical Research Conference for Minority Students
2021	Associate Editor, IEEE Engineering in Medicine and Biology Conference, Guadalajara, Mexico
2020	Program Committee, Neuromatch 3.0 Conference
2020	Poster Judge, Annual Biomedical Research Conference for Minority Students
2020	Mentor, American Society of Biomechanics Mentorship Program
2020	Invited Panel Member of Academic Career Panel, American Society of Biomechanics Annual Meeting
2020	Session Moderator, American Society of Biomechanics Annual Meeting
2020	Associate Editor, IEEE Engineering in Medicine and Biology Conference, Montreal, Canada
2020	Co-Chair of Scientific Program, Dynamic Walking, Pittsburgh, PA
2019 – present	Member of Diversity and Inclusion Committee, National Biomechanics Day
2019	Associate Editor, IEEE Engineering in Medicine and Biology Conference, Berlin, Germany
2018-2019	Member of American Society of Biomechanics Award Committee
2017	Represented the American Society of Biomechanics at the Annual Biomedical Research Conference for Minority Students
2017	Mentor, American Society of Biomechanics Mentorship Program
2017	Chair, Session on Neuromuscular Systems, IEEE Engineering in Medicine and Biology Conference, Jeju Island, Korea
2017	Co-Chair, Session on Human Performance, IEEE Engineering in Medicine and Biology Conference, Jeju Island, Korea

2017	Organizer, Symposium on Energetic Optimization Principles in Motor Control, American Society of Biomechanics Conference, Boulder, CO
2016	Organizer, Symposium on Neuromechanics and Human Locomotor Stability, International Society of Electrophysiology and Kinesiology Conference, Chicago, IL
2016	Organizer, Workshop on Social Networking in Science, Neural Control of Movement Conference, Montego Bay, Jamaica
2010-2015	Research in Review Editorial Team, Neurology Section of the American Physical Therapy Association
2014	Judge, Doctoral Research Competition, World Congress of Biomechanics

COMMUNITY SERVICE ACTIVITIES:

2024	Hosted a lab tour for ~40 students from Bravo Medical Magnet High School
2024	Led a 1-week module on using data science to examine how decision-making influences fall risk during walking at Bravo Medical Magnet High School
2023	Scientific advisor for the California Science Center World of Life Gallery
2021	Hosted a virtual lab tour for ~40 students in the Girls with Nerve virtual summer camp
2021	Hosted a virtual lab tour for STEM Academy of Hollywood
2021- 2023	Mentor for the Johns Hopkins Neural Networking Initiative
2021	Mentor for Future Leaders in Mechanical and Aerospace Engineering National Webinar Series
2021	Judge for Brains@Play Brain and Games International Design Fiction Competition
2021	Speaker at Ernest McBride High School Career Day (~60 students reached)
2020-present	Member of the Florida A&M University Division of Student Affairs Advisory Council
2019	Hosted a group of 34 students from Miramar Campus High School for National Biomechanics Day in collaboration with the Musculoskeletal Biomechanics Research Laboratory
2019	Panelist for USC Brothers Breaking B.R.E.A.D. (Barriers, Regrets, Egos, Animosity, and Doubt) Professional Development workshop for Black Males
2019	Guest speaker on the Life After Stroke Podcast
2017	Speaker for Strokefocus Online Web Series

- 2017 Volunteered as a guest speaker for Pathway Assessments Program at Ernest S. McBride High School in Long Beach, CA
- 2015 Volunteered as a guest speaker at Ernest S. McBride High School in Long Beach, CA
- 2014 Served as a guest speaker at Centennial High School during the American Physiology Society's Physiology Understanding (PhUn) Week
- 2014 Served as a guest speaker at Compton High School's All Things Science Day

III. SCHOLARLY ACTIVITIES

PUBLICATIONS:

Asterisks indicate direct student or post-doctoral mentee; underline indicates senior author on publication; equal contributions are denoted by §

REFEREED JOURNAL ARTICLES – ORIGINAL RESEARCH:

- 2024 Cornwell T*, Novotny R*, **Finley JM**. Associations between asymmetry and reactive balance control during split-belt walking. *Journal of Biomechanics*.
- 2024 Jain S*, Schweighofer N, **Finley JM**. Aberrant Decision-Making as a Risk Factor for Falls in Aging. *Frontiers in Aging Neuroscience*. 16: 1384242.
- 2024 Kettlety SA, **Finley JM**, Leech KA. (*Accepted*). Visuospatial skills explain differences in the ability to use propulsion biofeedback post-stroke. *Journal of Neurologic Physical Therapy*.
- 2024 Liu C*, Valero-Cuevas F, **Finley JM**. Generalizability of foot-placement control strategies during unperturbed and perturbed gait. *Royal Society Open Science*. 11: 231210.
- 2024 Valero-Cuevas FJ, **Finley JM**, Orsborn A, Fung N, Hicks JL, Huang H, Reinkensmeyer D, Schweighofer N, Weber D, Steele KM. The 2023 NSF DARE Conference on Transformative Opportunities for Modeling in Neurorehabilitation: The Organizers' Perspective. *Journal of Neuroengineering and Rehabilitation*. 21 (1).
- 2023 Sánchez N, Schweighofer N, Mulroy SJ, Roemmich RT, Kesar TM, Torres-Oviedo G, Fisher BE, **Finley JM**§, Winstein CJ§. Multi-site identification and generalization of clusters of walking impairment in individuals with chronic stroke. *Neurorehabilitation and Neural Repair*. 37: 810-822.
- 2023 Lee-Confer JS, **Finley JM**, Kulig K, Powers C. Reactive Responses of the Arms Increase the Margins of Stability and Decrease Center of Mass Dynamics During a Slip Perturbation. *J Biomech*. 157:111737.

- 2023 Bonilla Yanez, M, Kettlety SA, **Finley JM**, Schweighofer N, Leech KA. Gait speed and individual characteristics can be used to predict specific gait metric magnitudes in neurotypical adults. *Scientific Reports*. 13:8069.
- 2023 Boyer KA, Hayes KL, Umberger BR, Adamczyk PG, Bean JF, Brach JS, Clark BC, Clark DJ, Ferrucci L, **Finley JM**, Franz JR, Golightly YM, Hortobagyi T, Hunter S, Narici M, Nicklas B, Roberts T, Sawicki G, Simonsick E, Kent JA. Age-related changes in gait biomechanics: Impact on the metabolic cost of walking. *Experimental Gerontology*. 173:112102.
- 2023 Kettlety SA, **Finley JM**, Reisman DS, Schweighofer S, and Leech KA. Speed-dependent biomechanical changes vary across individual gait metrics post-stroke relative to neurotypical adults. *Journal of Neuroengineering and Rehabilitation*. 20(1):14.
- 2022 Liu C*, McNitt-Gray JL, **Finley JM**. Impairments in the mechanical effectiveness of reactive balance control strategies during walking in people post-stroke. *Frontiers in Neurology*. 13:1032417.
- 2022 Johnson RT*, Bianco NA, and **Finley JM**. Patterns of asymmetry and energy cost generated from predictive simulations of hemiparetic gait. *PLOS Computational Biology*. 18 (9) e1010466.
- 2022 Park S*, **Finley JM**. Manual stabilization reveals a transient role for balance control during locomotor adaptation. *Journal of Neurophysiology*. 128: 808 – 818.
- 2022 Abram SJ, Poggensee KL, Sanchez N, Simha SN, **Finley JM**, Collins SH, Donelan JM. General variability leads to specific adaptation toward optimal movement policies. *Current Biology*. 32: 2222 – 2232.
- 2022 Liu C* and **Finley JM**. The choice of reference axis for computing angular momentum during walking affects inferences about patterns of intersegmental coordination during walking. *PeerJ*. 10:e13371.
- 2022 Johnson RT*, Lakeland D, **Finley JM**. Using Bayesian inference to estimate plausible muscle forces in musculoskeletal models. *Journal of Neuroengineering and Rehabilitation*. 19:34.
- 2021 Zamani N, Abass A, Shetkar M, Dureja S, Li M, Culbertson H, **Finley JM**. Integrating haptic feedback into a virtual reality mobility training game for people with Parkinson's disease. *Proceedings of the 2021 IEEE World Haptics Conference (WHC)*. 875-875
- 2021 Monaghan AS, **Finley JM**, Mehta SH, Peterson DS. Assessing the impact of dual-task reactive step practice in people with Parkinson's disease: A feasibility study. *Human Movement Science*. 80:102876.

- 2021 Reuter K, Liu C*, Le N, Angyan P, **Finley JM**. Comparative analysis of general practice and digital methods to recruit stroke survivors to a clinical mobility study. *Journal of Medical and Internet Research*. 23(10):e28923.
- 2021 Chung Y-C, Fisher BF, **Finley JM**, Kim A*, Petkus AJ, Schiehser DM, Jakowec MW, Petzinger GM. Cognition and Motor Learning in a Parkinson's Disease Cohort: Importance of Recall in Episodic Memory. *Neuroreport*. 32: 1153-1160.
- 2021 Sanchez N*, Schweighofer NS, **Finley JM**. Different biomechanical variables explain within-subjects versus between-subjects variance in step length asymmetry post-stroke. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*. 29: 1188-1198.
- 2021 Park S*, Liu C*, Sanchez N, Tilson JK, Mulroy SJ, **Finley JM**. Using biofeedback to reduce spatiotemporal asymmetry impairs dynamic balance in people post-stroke. *Neurorehabilitation and Neural Repair*. 35: 738-749.
- 2021 Adlakha G, Singh S, Patil A, Nuthalapati K, Khandve P, Bhattacharyya P, Manoharan S, Santhanam SM, Lachica IF, **Finley JM**, Lympouridis V. Development of a Virtual Reality Assessment of Visuospatial Function and Oculomotor Control. *Proceedings of the IEEE Conference on Virtual Reality and 3D User Interfaces*. 753-754.
- 2021 Sanchez N, Simha S, Donelan JM, **Finley JM**. Using asymmetry to your advantage: Learning to acquire and accept external assistance during prolonged split-belt walking. *Journal of Neurophysiology*. 125:344-357.
- 2021 **Finley JM**, Gotsis M, Lympouridis V, Jain S*, Kim A*, Fisher BE. Design and Development of a Virtual Reality-based Mobility Training Game for People with Parkinson's disease. *Frontiers in Neurology*, 11, 1692.
- 2020 Buurke TJW*, Liu C*, Park S*, den Otter R, **Finley JM**. Maintaining sagittal plane balance compromises frontal plane balance during reactive stepping in people post-stroke. *Clinical Biomechanics*, 80, Dec. 2020.
- 2020 Marin-Pardo O, Laine CM, Rennie M, Ito KL, **Finley JM**, Liew S-L. A virtual reality muscle-computer-interface for neurorehabilitation in chronic stroke: a pilot study. *Sensors (Basel)*. 2020;20(13):E3754.
- 2020 Liu C* and **Finley JM**. Asymmetric gait patterns alter the control of intersegmental coordination in response to perturbations during walking. *PLOS One*. 2020; 15(5):e0224187
- 2019 Rebula J, Schaal S, **Finley JM**, Righetti L. A robustness analysis of inverse optimal control of bipedal walking. *IEEE Robotics and Automation Letters*, 4 (4).

- 2019 Kim A*, Schweighofer N, **Finley JM**. Locomotor skill acquisition in virtual reality shows sustained transfer to the real world. *Journal of Neuroengineering and Rehabilitation*, 16(1):113.
- 2019 Sánchez, N*[§], Simha S[§], Donelan JM, **Finley JM**. Taking advantage of external mechanical work to reduce metabolic cost: the mechanics and energetics of split-belt treadmill walking. *Journal of Physiology*, 597:4053-4068.
- 2019 Nozari PP*, **Finley JM**. Development of a platform to evaluate principles of bipedal locomotion using dynamical movement primitives. *Proceedings of International IEEE/EMBS Conference on Neural Engineering, 2019*, pp. 1062-1065.
- 2018 Kim A*, Kretch KS*, Zhou Z*, **Finley JM**. The quality of visual information about the lower extremities influences visuomotor coordination during virtual obstacle negotiation. *Journal of Neurophysiology*, 120:839-847.
- 2018 Sánchez N*, **Finley JM**. Individual differences in locomotor function predict the capacity to reduce asymmetry and modify the energetic cost of walking post-stroke. *Neurorehabilitation and Neural Repair*, 32:701-713.
- 2018 Liu C*, Macedo LD*, **Finley JM**. Conservation of reactive stabilization strategies in the presence of step length asymmetries during walking. *Frontiers in Human Neuroscience*, 12, 251.
- 2018 Havens KL, Mukherjee T*, **Finley JM**. Analysis of biases in dynamic margins of stability introduced by the use of simplified center of mass estimates during walking and turning. *Gait and Posture*, 59, 162-167.
- 2017 Sánchez N*, Park S*, **Finley JM**. Evidence of energetic optimization during adaptation differs for metabolic, mechanical, and perceptual estimates of energetic cost. *Scientific Reports*, 7(1):7682.
- 2017 Kim A*, Darakjian N*, **Finley JM**. Walking in fully immersive virtual environments: a feasibility test for older adults and individuals with Parkinson's disease. *Journal of Neuroengineering and Rehabilitation*, 14, 16.
- 2017 **Finley JM**, Bastian AJ. Associations between foot placement asymmetries and metabolic cost of transport in hemiparetic gait. *Neurorehabilitation and Neural Repair*, 31, 168-177.
- 2017 Kim A*, Zhou Z*, Kretch K*, **Finley JM**. Manipulating the fidelity of lower extremity visual feedback to identify obstacle negotiation strategies in immersive virtual reality. *Proceedings of Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2017*, pp. 4491-4494.

- 2017 Park S*, **Finley JM**. Characterizing dynamic balance during adaptive locomotor learning. *Proceedings of Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, 2017, pp. 50-53.
- 2016 Nagamori A, Valero-Cuevas F^s, **Finley JM^s**. Unilateral eccentric contraction of the plantarflexors leads to bilateral alterations in leg dexterity. *Frontiers in Physiology*, 7, 582.
- 2016 Marjaninejad A*, **Finley JM**. A model-based exploration of the role of pattern generating circuits during locomotor adaptation. *Proceedings of Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, 2016, pp. 21-24.
- 2015 **Finley JM**, Long A, Bastian AJ, Torres-Oviedo G. Spatial and temporal control contribute to step length asymmetry during split-belt adaptation and hemiparetic gait. *Neurorehabilitation and Neural Repair*, 29, 786-795.
- 2015 Smith BA, Trujillo-Priego I, Lane CJ, **Finley JM**, Horak F. Daily quantity of infant leg movement: wearable sensor algorithm and relationship to walking onset. *Sensors*, 15, 19006-19020.
- 2015 Long AW, **Finley JM**, Bastian AJ. A marching-walking hybrid induces step length adaptation and transfers to natural walking. *Journal of Neurophysiology*, 113, 3905-3914.
- 2015 Porterfield JH, Sindhurakar A, **Finley JM**, Bradley NS. Drift during overground locomotion in newly hatched chicks varies with light exposure during embryogenesis. *Developmental Psychobiology*, 57, 459-469.
- 2014 **Finley JM**, Statton MS, Bastian AJ. A novel optic flow pattern speeds split-belt locomotor adaptation. *Journal of Neurophysiology*, 111, 969-976.
- 2013 **Finley JM**, Dhaher YY, Perreault EJ. Acceleration-dependence and task-specific modulation of short- and medium-latency reflexes in the ankle extensors. *Physiological Reports*, 1(3), 2013, e00051.
- 2013 Trumbower RD^s, **Finley JM^s**, Shemmell J, Honeycutt CF, Perreault EJ. Bilateral impairments in task-dependent modulation of the long-latency stretch reflex following stroke. *Clinical Neurophysiology*, 124, 1373-1380.
- 2013 **Finley JM**, Bastian AJ, Gottschall JS. Learning to be Economical: Metabolic cost of walking tracks motor adaptation. *Journal of Physiology*, 591, 1081-1095.
- 2012 **Finley JM**, Dhaher YY, Perreault EJ. Contributions of feed-forward and feedback strategies at the human ankle during control of unstable loads. *Experimental Brain Research*, 217, 53-66.

- 2009 **Finley JM**, Dhaher YY, Perreault EJ. Regulation of feed-forward and feedback strategies at the human ankle during balance control. *Proceedings of Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual Conference, 2009*, 7265-7268.
- 2008 **Finley JM**, Perreault EJ, Dhaher YY. Stretch reflex coupling between the hip and knee: Implications for impaired gait following stroke. *Experimental Brain Research*, 131, 305-319.

EDITORIAL MATERIAL IN PEER-REVIEWED JOURNALS:

- 2017 **Finley JM**. Splitting the difference: New insights into distinguishing features of human versus feline models of adaptive locomotor control. *Journal of Physiology*, 595(17):5723-5724.

PEER-REVIEWED JOURNAL ARTICLES – IN PROGRESS:

- Lachica IJ*, Kalkar A, **Finley JM**. (*In Revision*). Aging modulates the effects of scene complexity on visual search in naturalistic virtual environments.
- Kettlety SA, **Finley JM**, Leech KA. (*In Revision*). Within-session propulsion asymmetry changes have a limited effect on gait asymmetry post-stroke.
- Upadhyay J, Cherin J, Banerjee P, Culbertson H, **Finley JM**, Kutch J. (*Submitted*). Effects of surf therapy on patients with chronic overlapping pain conditions: a pilot study.

NEWS RELEASES:

- 2023 “Scientists Probe How Surfing Could Help Chronic Pain,” USC Division of Biokinesiology and Physical Therapy News. Available as of 3/9/2023:
<https://pt.usc.edu/news/scientists-probe-how-surfing-could-help-chronic-pain/>
- 2021 “Locomotor Learning and Rehabilitation,” The Explorer, Available as of 5/21:
<https://dentistry.usc.edu/wp-content/uploads/2021/05/Explorer-2021rs.pdf>
- 2021 “Ada Twist, Scientist review: Brilliant children's TV for the curious,” New Scientist, Available as of 9/25/21:
<https://www.newscientist.com/article/2291415-ada-twist-scientist-review-brilliant-childrens-tv-for-the-curious/>
- 2020 “A trio of faculty members explore how VR can help combat neurological diseases,” USC News, Available as of 8/4/20:
<https://news.usc.edu/173412/neurological-diseases-vr-virtual-reality-alzheimers-parkinsons-stroke-usc-research/>
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<https://parkinson.fit/usc-develops-virtual-reality-application-for-parkinsons-physiotherapy/>
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<https://pt.usc.edu/2018/10/03/a-real-showcase-for-virtual-technologies/>
- 2018 "Getting stroke survivors back on their feet", USC News. Available as of 09/28/2018:
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- 2018 "USC professor shines as rising star of mechanical engineering alumni", FAMU-FSU College of Engineering News. Available as of 05/14/2018:
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- 2017 "A potential new way for physical therapists to treat stroke survivors", USC News. Available as of 01/05/2017:
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- 2016 "Virtual reality-based rehab system could one day help people with Parkinson's", USC News. Available as of 09/26/2016: <https://news.usc.edu/108150/virtual-reality-based-rehab-system-could-one-day-help-people-with-parkinsons-disease/>
- 2016 "Running is always blind", Nautilus Magazine. Available as of 07/07/2016: <http://nautil.us/issue/38/noise/running-is-always-blind>
- 2013 "New lab director to study locomotion of stroke survivors", USC News. Available as of 10/17/2013: <https://news.usc.edu/56448/new-lab-director-to-study-locomotion-of-stroke-survivors/>

MAJOR PUBLIC PRESENTATIONS:

INVITED, INTERNATIONAL

- 2023 **Finley, JM.** Identifying Principles of Motor Skill Learning to Improve Mobility. McMaster University, Department of Kinesiology.
- 2022 **Finley, JM.** Impairments in Reactive Balance Control during Walking in People Post-Stroke. World Congress of Biomechanics in Taipei, Taiwan (Virtual).
- 2022 **Finley, JM.** Assessing Sensorimotor Control during Walking through Use of Interactive Virtual Environments. International Society for Virtual Rehabilitation Webinar Series.
- 2022 **Finley, JM.** Learning to Take Advantage of Assistance. Keynote Presentation at the 9th IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechatronics in Seoul, South Korea.
- 2022 **Finley, JM.** Identifying Principles of Locomotor Skill Learning to Improve Mobility. VU Amsterdam Department of Human Movement Sciences Seminar in Amsterdam, The Netherlands.
- 2022 **Finley, JM.** Adaptation, Compensation, and Restitution in the Context of Post-Stroke Gait Rehabilitation. KU Leuven Department of Movement Sciences Seminar in Leuven, Belgium.
- 2022 **Finley, JM.** Identifying Principles of Motor Skill Learning to Improve Mobility during Neurological Rehabilitation. Digital Health Lunch Series at Friedrich-Alexander-Universität Erlangen-Nürnberg in Erlangen, Germany.
- 2022 **Finley, JM.** Balancing Trade-offs between Effort and Stability during Healthy and Pathological Gait. EPFL Bioengineering Seminar in Lausanne, Switzerland.

- 2020 **Finley, JM.** Design and development of XR applications for mobility training: Moving from the lab to the clinic via user-centered design. Shift Medical 2020 (Virtual).
- 2020 **Finley JM.** Human Locomotor Learning: From Adaptation to Rehabilitation. Groningen Lecture in Movement Sciences at the University of Groningen in Groningen, The Netherlands.
- 2020 **Finley JM.** Human Locomotor Learning: From Adaptation to Rehabilitation. Radboudumc in Nijmegen, The Netherlands.
- 2019 **Finley JM.** Give and take: learning to use asymmetry to reduce energy cost during walking. ISB/ASB in Calgary, Canada.
- 2019 **Finley JM.** The costs and benefits of asymmetry during healthy and pathological gait. Society for Experimental Biology in Seville, Spain.
- 2019 **Finley JM,** Kim A, Fisher BE, Lympouridis V, Gotsis M. Development of low-cost virtual reality applications to assess sensorimotor function and improve real-world mobility. International Society for Posture and Gait Research World Congress in Edinburgh, Scotland.
- 2016 **Finley JM.** Neural control of locomotion. 3rd Annual European Computational Motor Control Summer School, in Montpellier, France.
- 2016 **Finley JM.** Modulation of adaptive locomotor learning through manipulation of optic flow. 17th Annual International Multisensory Research Forum, in Suzhou, China.
- 2015 **Finley JM.** Adaptive locomotor control: principles and applications. Laboratoire Informatique Robotique Microelectronique Montpellier (LIRMM), in Montpellier, France.
- 2014 **Finley JM.** Seminar and tutorial on neuromechanics. 1st Annual European Computational Motor Control Summer School, in Montpellier, France.
- 2009 **Finley JM,** Dhaher YY, Perreault EJ. Probing the role of feed-forward and feedback control during a balance task. Noise, Time Delay, and Balance Control Workshop in Banff, Alberta.

INVITED, NATIONAL

- 2023 **Finley, JM.** Collaboration as a Core Feature of a Fulfilling Scientific Career. Keynote Presentation at the University of North Carolina Human Movement Science Symposium.
- 2023 **Finley, JM** and Liew S-L. Writing for Publication. Wayne State University Research Workshop. Department of Physical Therapy.

- 2023 **Finley, JM.** Learning to Take Advantage of Assistance. University of California, Los Angeles. Department of Mechanical and Aerospace Engineering.
- 2022 **Finley, JM.** Learning to Take Advantage of Assistance. Columbia University Department of Mechanical Engineering.
- 2022 **Finley, JM.** Learning to Take Advantage of Assistance. Closed-Loop Engineering for Advanced Rehabilitation Seminar Series. NC State/UNC Joint Department of Biomedical Engineering (Virtual).
- 2022 **Finley, JM.** Identifying Principles of Motor Skill Learning to Improve Mobility. Claremont Colleges Neurosciences Program in Claremont, CA.
- 2021 **Finley, JM.** Reimagining the Future of Mobility Training Through Use of Immersive Technologies. Johns Hopkins Applied Physics Laboratory (Virtual).
- 2021 **Finley, JM.** Identifying Principles of Motor Skill Learning to Improve Mobility during Neurological Rehabilitation. Department of Cognitive Sciences Seminar. University of California, Irvine (Virtual).
- 2021 **Finley, JM.** Adaptation, compensation, and restitution in the context of post-stroke gait rehabilitation. NIH NIA Workshop on Causes & Consequences of Age-Related Changes in Gait Biomechanics: The Metabolic Cost of Walking (Virtual).
- 2021 **Finley, JM.** Physiological control of short and long-latency stretch reflexes. NSF Integrated Movement Sciences Institute Summer Research Institute (Virtual).
- 2021 **Finley, JM.** Panelist during Lessons Learned Mentoring Session at the 2021 American Society of Neurorehabilitation Annual Meeting (Virtual).
- 2021 **Finley, JM.** Adaptation, compensation, and restitution in the context of gait and balance rehabilitation. Personalized Rehabilitation Symposium at the 2021 American Society of Biomechanics Meeting (Virtual).
- 2021 **Finley, JM.** Invited panel speaker for session on neural control and decision making in locomotion. Dynamic Walking (Virtual).
- 2021 **Finley, JM.** Understanding the link between asymmetry, effort, and stability during post-stroke gait. NIH NCMRR Rehabilitation Research Speaker Series (Virtual).
- 2021 **Finley, JM.** Identifying principles of motor skill learning to improve mobility. MossRehab/MRRI Trends in Rehabilitation Science Speaker Series (Virtual).
- 2021 **Finley, JM.** Embracing variability to identify reactive control strategies for whole-body dynamic balance during healthy and post-stroke gait. Keynote Talk at the Human

- Movement Variability and Great Plains Biomechanics Joint Conference. University of Nebraska Omaha. (Virtual).
- 2021 **Finley, JM.** Reimagining the Future of Mobility Training Through Use of Immersive Technologies. National Academies of Sciences, Engineering, and Medicine Distinctive Voices Lecture Series (Virtual).
- 2021 **Finley, JM.** Identifying Principles of Motor Skill Learning to Improve Mobility during Neurological Rehabilitation. Clinical Neuropsychology Seminar. University of California, San Diego (Virtual).
- 2021 **Finley, JM.** Balancing Trade-offs between Effort and Stability during Healthy and Pathological Gait. Boston Action Club. (Virtual).
- 2020 **Finley, JM.** A Well-Balanced Effort: Managing Trade-offs between Effort and Stability during Locomotor Learning and Post-Stroke Gait. Plenary Talk at the Advances in Motor Learning & Motor Control Conference (Virtual).
- 2020 **Finley, JM.** Development of low-cost VR applications to assess sensorimotor function and improve real-world mobility. University of Cincinnati, Center for Cognition, Action, & Perception (Virtual).
- 2019 **Finley, JM.** Neuromechanical principles of locomotor learning in healthy and pathological gait. University of Delaware Biomechanics and Movement Science Seminar in Newark, DE.
- 2019 **Finley JM.** Neuromechanics of locomotor learning in healthy and pathological gait. Johns Hopkins University & Kennedy Krieger Institute in Baltimore, MD.
- 2018 **Finley JM.** Toward an understanding of optimization principles in post-stroke gait. Penn State University, Interdepartmental Action Club in State College, PA.
- 2018 **Finley JM.** Understanding the neuromechanics of locomotor learning in healthy and pathological gait. Penn State University, Department of Kinesiology in State College, PA.
- 2018 **Finley JM.** Neuromechanical principles of locomotor learning in real and virtual environments. University of Florida, Department of Biomedical Engineering in Gainesville, FL.
- 2018 **Finley JM.** Neuromechanical principles of locomotor learning in real and virtual environments. University of Texas, Austin, Department of Biomedical Engineering in Austin, TX.
- 2017 **Finley JM.** Neuromechanical principles of locomotor learning in real and virtual environments. Arizona State University, School of Biological and Health System Engineering, in Tempe, AZ.

- 2017 **Finley JM.** The cost of asymmetry during healthy and pathological gait. Orange County Stroke Rehabilitation Network Continuing Education Workshop, Chapman University in Orange, CA.
- 2014 **Finley JM.** Energetic consequences of asymmetry: applications to locomotor control post-stroke. Movement and Rehabilitation Sciences Research Symposium, Northwestern University in Chicago, IL.
- 2014 **Finley JM.** Uncovering control principles of human walking using locomotor adaptation. School of Applied Physiology, Georgia Institute of Technology in Atlanta, GA.
- 2014 **Finley JM.** Elucidating principles of sensorimotor learning using locomotor adaptation. Department of Mechanical and Aerospace Engineering, University of California, Irvine in Irvine, CA.

INVITED, LOCAL

- 2024 **Finley JM.** Improving Mobility Using Interactive Virtual Environments. USC Connected Futures Seminar in Los Angeles, CA.
- 2023 **Finley JM.** A Vision for the Future of the USC SMART-VR Center. USC SMART-VR Thinktank in Los Angeles, CA.
- 2023 **Finley JM.** Ready Patient One: Bridging the Gap between Virtual and Real to Improve Motor and Cognitive Function. Anticipating the Metaverse in Marina del Rey, CA.
- 2021 **Finley JM.** Social connection as a foundational principle for a fulfilling career in science. Keynote Lecture at the USC Ostrow School of Dentistry Annual Research Day in Los Angeles, CA.
- 2021 **Finley JM.** Neuromechanics of Human Walking. Nu Rho Psi Guest Lecture Series at USC in Los Angeles, CA.
- 2019 **Finley JM.** Development of Low-Cost VR Tools to Assess Sensorimotor Function and Improve Mobility. USC Neuroplasticity and Brain Repair Retreat at the UCLA Lake Arrowhead Conference Center in Lake Arrowhead, CA.
- 2019 **Finley JM.** Multimodal approaches to enhance mobility in people post-stroke. American Heart Association Executive Leadership Committee Meeting in Los Angeles, CA.
- 2018 **Finley JM.** Design and development of virtual reality interventions for locomotion. USC Virtual Technologies for Health Symposium in Los Angeles, CA.
- 2018 **Finley JM.** Neuromechanical principles of locomotor learning in real and virtual environments. University of Southern California, Neuroscience Graduate Program Annual Retreat in Simi Valley, CA.

- 2017 **Finley JM.** Novel approaches for exploring principles of locomotor skill learning. USC Brain Repair and Neuroplasticity Retreat, in Lake Arrowhead, CA.
- 2016 **Finley JM.** Neuromechanics of skilled locomotion. American Society for Biomedical Engineering Research Symposium, in Los Angeles, CA.
- 2016 **Finley JM.** Neuromechanical principles for improving skilled locomotion. Huntington Medical Research Institutes, in Pasadena, CA.
- 2013 **Finley JM.** Walk this way: adaptive control of walking reveals principles of locomotor learning. Seminar Series on Engineering Neuroscience & Health, University of Southern California in Los Angeles, CA.
- 2013 **Finley JM, Bastian AJ.** Identifying the principles of locomotor learning to advance gait rehabilitation. Department of Neurology, Johns Hopkins University in Baltimore, MD.
- 2013 **Finley JM, Bastian AJ.** Identifying the principles of locomotor learning to advance gait rehabilitation. Adventist Rehabilitation Hospital of Maryland's 3rd Annual Stroke Symposium in Gaithersburg, MD.
- 2012 **Finley JM, Statton MS, Bastian AJ.** Modifying locomotor adaptation with optic flow. University of Maryland in College Park, MD.
- 2012 **Finley JM, Jayaram G.** Motor adaptation: an introduction to the history, concepts, and state of the art in the field. Human Oral Function and Swallowing Laboratory, Johns Hopkins University in Baltimore, MD.

REFEREED, INTERNATIONAL

- 2021 Zamani N, Abass A, Shetkar M, Dureja S, Li M, Culbertson H, and **Finley JM.** Integrating Haptic Feedback into a Virtual Reality Mobility Training Game for People with Parkinson's Disease. *IEEE World Haptics Conference (Virtual)*.
- 2019 Park S*, Liu C*, Sanchez N*, Tilson JK, Mulroy SJ, **Finley JM.** Impact of Modifying Spatiotemporal Asymmetry on Dynamic Balance during Walking Post-Stroke. *ISB/ASB* in Calgary, Canada.
- 2019 Liu C*, Park S*, Sanchez N*, Tilson JK, Mulroy SJ, **Finley JM.** Asymmetries in the Reactive Control of Angular Momentum during Post-stroke Gait. *ISB/ASB* in Calgary, Canada.
- 2019 Sanchez N*, Simha S, Donelan JM, and **Finley JM.** Is more better? Evaluating the role of experience in energy optimization during split-belt adaptation. Dynamic Walking in Canmore, Canada.

- 2018 **Finley JM**, Sanchez N*. Simultaneous dimensionality reduction and regression to draw inference in gait analysis: an application to understanding gait asymmetry post-stroke. World Congress of Biomechanics in Dublin, Ireland.
- 2018 Liu C*, **Finley JM**. Assessing the effects of spatiotemporal asymmetry on intersegmental coordination elicited by slip-like perturbations during walking. World Congress of Biomechanics in Dublin, Ireland.
- 2017 Kim A*, Zhou Z*, Kretch K*, **Finley JM**. Manipulating the fidelity of lower extremity visual feedback to identify obstacle negotiation strategies in immersive virtual reality. Conf Proc IEEE Eng Med Biol Soc 1: 4491-4494.
- 2017 Park S*, **Finley JM**. Characterizing dynamic balance during adaptive locomotor learning. Conf Proc IEEE Eng Med Biol Soc 1: 50-53.
- 2017 **Finley JM**, Liu C*, Sanchez N*. Mapping the Influence of Spatiotemporal Asymmetries on Energetic Cost and Reactive Balance during Walking. Conference on Dynamic Walking in Mariehamm, Finland.

REFEREED, NATIONAL

- 2023 Johnson RT*, Cornwell T*, Novotny R*, **Finley JM**. Positive step length asymmetry during split-belt walking reduces joint work in older adults. American Society of Biomechanics Annual Meeting in Knoxville, TN.
- 2023 **Finley JM**. Adaptation, Compensation, and Restitution in the Context of Gait and Balance Rehabilitation. American College of Sports Medicine Annual Meeting in Denver, CO.
- 2023 Bhatt T, Reisman DS, Lang CE, Foucher K, Kesar TM, Madhavan S, Chou L-S, **Finley JM**, Plow EB. The NIH Scientific Grant Review Process: Experiencing a Mock Study Section. American Physical Therapy Association Combined Sections Meeting in Washington, D.C.
- 2020 Sanchez N*, Simha S, Donelan JM, **Finley JM**. Using visual guidance to acquire work from the treadmill during split-belt walking does not accelerate adaptation. American Society of Biomechanics Annual Meeting.
- 2020 Liu C* and **Finley JM**. Does the reference axis for computing angular momentum affect inferences about dynamic balance? American Society of Biomechanics Annual Meeting.
- 2019 Liew SL, **Finley JM**, Lohse KR. Reliability and reproducibility in neurorehabilitation research. American Society for Neurorehabilitation Research in Chicago, IL.
- 2019 Awad L, **Finley JM**, Kesar T, Lewek M, Thompson LV. Treating gait asymmetry after stroke: basic and clinical research insights. American Physical Therapy Association Combined Sections Meeting in Washington, D.C.

- 2018 Sanchez N*, Simha S, Donelan JM, **Finley JM**. Exploiting asymmetry to gain assistance during split-belt treadmill walking. Advances in Motor Learning & Motor Control Meeting in San Diego, CA.
- 2018 **Finley JM**, Sanchez N*, Simha S, Donelan JM. Experimental analysis and model-based predictions of work minimizing strategies for split-belt walking. Dynamic Walking in Pensacola, FL.
- 2017 **Finley JM**. Energetic consequences of asymmetry in healthy and hemiparetic gait. American Society of Biomechanics, in Boulder, CO.
- 2016 Marjaninejad A*, **Finley JM**. A model-based exploration of the role of pattern generating circuits during locomotor adaptation. IEEE Engineering in Medicine and Biology Conference in Orlando, FL.
- 2016 **Finley JM**. Cortical correlates of adaptive locomotion. Neuromechanics Symposium at the International Society of Electromyography and Kinesiology Meeting, in Chicago, IL.
- 2015 **Finley JM**, Park S*. Temporal interactions between stability and energetics during human locomotor learning. Conference on Dynamic Walking in Columbus, OH.
- 2014 **Finley JM**. Adaptive control of dynamic stability during human locomotion. IEEE Engineering in Medicine and Biology Conference in Chicago, IL.
- 2011 **Finley JM**, Bastian AJ, Gottschall JS. Learning to be efficient: split-belt walking adaptation reduces metabolic cost. Society for the Neural Control of Movement in San Juan, Puerto Rico.
- 2009 **Finley JM**, Dhaher YY, Perreault EJ. Regulation of feed-forward and feedback strategies at the human ankle during balance control. IEEE EMBC in Minneapolis, MN.
- 2008 Trumbower RD, **Finley JM**, Shemmell J, Perreault EJ. Altered reflex modulation to changes in mechanical environment following stroke. American Society for Biomechanics in Ann Arbor, MI.
- 2007 **Finley JM**, Perreault EJ, Dhaher YY. Enhanced inter-joint reflex coupling may contribute to impaired coordination in hemiparetic stroke. American Society of Biomechanics in Palo Alto, CA.

REFEREED, LOCAL

- 2011 **Finley JM**, Bastian AJ, Gottschall JS. Learning to be efficient: split-belt locomotor adaptation reduces metabolic cost. Sensorimotor Research Day at Johns Hopkins University in Baltimore, MD.

- 2007 **Finley JM**, Perreault EJ, Dhaher YY. Enhanced inter-joint reflex coupling in hemiparetic stroke. Northwestern University Black Graduate Student Association Annual Research Conference in Evanston, IL.

PUBLISHED ABSTRACTS:

- 2024 Jain S, Schweighofer N, **Finley JM**. The influence of risk on decision-making during walking. Poster presented at the American Society for Neurorehabilitation Annual Meeting in San Antonio, TX.
- 2024 Kettlety S, **Finley JM**, Leech KA. Within-session changes in propulsion asymmetry have minimal effect on overall gait asymmetry in individuals post-stroke. Poster presented at the American Society for Neurorehabilitation Annual Meeting in San Antonio, TX.
- 2024 Cornwell T, **Finley JM**. Stroke impairs reactive balance control in response to predictable gait perturbations. Poster presented at the American Society for Neurorehabilitation Annual Meeting in San Antonio, TX.
- 2024 Kuch A, McKenzie A, Schweighofer N, **Finley JM**, Wen Y, Sanchez N. Time-series clustering using gait kinematics can distinguish between neurotypical controls and subgroups of gait behaviors post-stroke. Poster presented at the American Society for Neurorehabilitation Annual Meeting in San Antonio, TX.
- 2024 Cain A, Kettlety S, Sanchez N, **Finley JM**, Leech K. Overall gait asymmetry is associated with the metabolic cost of walking in individuals with chronic stroke. Poster presented at the American Society for Neurorehabilitation Annual Meeting in San Antonio, TX.
- 2023 Johnson RT, **Finley JM**. Frontal-plane deviations and spatiotemporal asymmetry are effort-optimal in simulated hemiparetic gait. NSF DARE Conference: Transformative Opportunities for Modeling in Neurorehabilitation in Los Angeles, CA.
- 2023 Nozari Porshokouhi P, **Finley JM**. Utility of a feature-reduced Bayesian inverse optimization to understand human locomotor control. NSF DARE Conference: Transformative Opportunities for Modeling in Neurorehabilitation in Los Angeles, CA.
- 2023 Jain S, **Finley JM**. Decision-Making while Walking in Risky Environments: Using Insights from Behavioral Economics. Poster presented at the NSF DARE Conference: Transformative Opportunities for Modeling in Neurorehabilitation in Los Angeles, CA.
- 2022 Sanchez N, Donelan JM, **Finley JM**. Guided exploration of energetic cost during split-belt walking influences locomotor adaptation. Society for Neuroscience Annual Meeting in San Diego, CA.

- 2022 Johnson R, Darmon Y, Kuan R, Ye D, **Finley JM**, Schweighofer N. Estimating peak isometric force in elbow muscles via hierarchical Bayesian modeling. Society for Neuroscience Annual Meeting in San Diego, CA.
- 2022 Jain S, Schweighofer N, **Finley JM**. Decision-making while walking in risky environments: using insights from behavioral economics. Society for Neuroscience Annual Meeting in San Diego, CA.
- 2022 Cornwell T, Novotny R, **Finley JM**. Gait asymmetry affects reactive control of balance during split-belt walking in neurotypical older adults. Society for Neuroscience Annual Meeting in San Diego, CA.
- 2022 Lachica IJ and **Finley JM**. Effects of scene complexity on visual attention during visual search in naturalistic virtual environments. Society for Neuroscience Annual Meeting in San Diego, CA.
- 2022 Kettlety SA, Kelly ML, Bonilla Yanez M., **Finley JM**, Leech KA. Comparing biofeedback paradigms to reduce kinematic impairment post-stroke. Society for Neuroscience Annual Meeting in San Diego, CA.
- 2022 Phanord CS, Kennedy DN, **Finley JM**, Poline J-B, Lohse KR, Liew S-L. Building data science capacity in rehabilitation research. Society for Neuroscience Annual Meeting in San Diego, CA.
- 2022 Yunis C, Benitez G, **Finley JM**, Culbertson H. Fall-E: A robotic walker for studying balance. Southern California Robotics Symposium in Los Angeles, CA.
- 2022 Lee J, Williams MA, Duman AJ, Huck TG, Nishikawa KC, **Finley JM**, Voloshina AS, Daley MA. Frequency and leg stiffness adaptation in human vertical hopping before, during, and after added load. Society for Integrative and Comparative Biology Annual Meeting (Virtual).
- 2021 Nozari PP* and **Finley JM**. Minimization of mechanical work reveals scaling of optimal gait asymmetry with speed ratio during split-belt walking. Society for the Neural Control of Movement Annual Meeting (Virtual).
- 2021 Novotny R*, Liu C*, **Finley JM**. Motor module generalizability between unperturbed and perturbed walking after stroke. Society for the Neural Control of Movement Annual Meeting (Virtual).
- 2021 Johnson R* and **Finley JM**. Spatiotemporal gait asymmetry is not a driving factor of greater metabolic cost in models with unilateral muscle weakness. Society for the Neural Control of Movement Annual Meeting (Virtual).

- 2021 Kettlety S, Broderick C, **Finley JM**, Reisman D, Leech K. Investigating speed-dependent changes in gait kinematics: a comparison between age-matched and post-stroke gait. American Society for Neurorehabilitation Annual Meeting (Virtual).
- 2021 Monaghan A, **Finley JM**, Mehta S, Peterson D. Improvement and retention of dual-task reactive stepping in people with Parkinson's disease and age-matched controls. American Society for Neurorehabilitation Annual Meeting (Virtual).
- 2021 Sanchez N*, Schweighofer NS, **Finley JM**. Between vs. within-subject predictors of step length asymmetry post-stroke: one predictor does not fit all. American Society for Neurorehabilitation Annual Meeting (Virtual).
- 2021 Kim A*, Fisher BE, Petzinger G, Petkus A, **Finley JM**. Clinical assessments of memory explain individual differences in locomotor learning in people with Parkinson disease. American Physical Therapy Association Combined Sections Meeting (Virtual).
- 2021 Kettlety S, Broderick C, **Finley JM**, Reisman D, Leech K. Investigating speed-dependent changes in gait kinematics: a comparison between age-matched and post-stroke gait. American Physical Therapy Association Combined Sections Meeting (Virtual).
- 2020 Liu C* and **Finley, JM**. Does the reference axis for computing angular momentum affect inferences about dynamic balance? Dynamic Walking (Virtual).
- 2020 Johnson RT*, Lakeland D, **Finley JM**. Bayesian estimates of plausible muscle forces in musculoskeletal simulations. Dynamic Walking (Virtual).
- 2020 Nozari PP*, **Finley JM**. A Data-Driven Low-Dimensional Optimization Framework Using Dynamical Movement Primitives Produces Human-Like Relationships between Walking Speed and Energetic Cost. American Society of Biomechanics Annual Meeting (Virtual).
- 2020 Johnson RT*, **Finley JM**. Simulation-based Predictions of Gait Patterns with Muscle Strength Asymmetries. American Society of Biomechanics Annual Meeting (Virtual).
- 2019 Kim A* and **Finley JM**. Influence of environmental context on locomotor skill learning in virtual reality in people with Parkinson's disease. International Society for Posture and Gait Research in Edinburgh, Scotland.
- 2019 Sanchez N*, Simha SN, Donelan JM, **Finley JM**. Prolonged exposure to split-belt walking promotes energetic optimization during locomotor adaptation. Society for Neuroscience Annual Meeting in Chicago, IL.
- 2019 Liu C*, Park S*, Sanchez N*, Tilson JK, Mulroy SJ, **Finley JM**. Altering spatiotemporal asymmetry influences the reactive control of balance during walking in people post-stroke. Society for Neuroscience Annual Meeting in Chicago, IL.

- 2019 Park S*, Liu C*, Sanchez N*, Tilson JK, Mulroy SJ, **Finley JM**. Impact of modifying spatiotemporal asymmetry on frontal plane whole-body angular momentum during walking post-stroke. Society for Neuroscience Annual Meeting in Chicago, IL.
- 2019 Nozari PP*, **Finley JM**. Evaluating optimization principles in bipedal locomotion using dynamical movement primitives. Society for Neuroscience Annual Meeting in Chicago, IL.
- 2019 Gerasimenko Y, Sayenko D, Sanchez N*, **Finley JM**, **Edgerton VR**. Transcutaneous spinal cord stimulation facilitates stepping performance in stroke patients. Society for Neuroscience Annual Meeting in Chicago, IL.
- 2019 **Finley JM**, Sanchez N*, Gerasimenko Y, Sayenko D, Edgerton VR. Transcutaneous spinal stimulation modulates overground walking performance in individuals post-stroke. Society for Neuroscience Annual Meeting in Chicago, IL.
- 2018 Sanchez N*, **Finley JM**. Combined dimensionality reduction and regression to identify correlates of step length asymmetry post-stroke. Neural Control of Movement Annual Meeting in Santa Fe, NM.
- 2017 **Finley JM**, Trejo L*, Sanchez N*. The capacity to voluntarily modify asymmetry and reduce metabolic cost in people post-stroke depends on the direction of baseline asymmetry. Society for Neuroscience Annual Meeting in Washington, D.C.
- 2017 Kim A*, **Finley JM**. Learning and generalization of locomotor skills acquired during a virtual obstacle negotiation task. Society for Neuroscience Annual Meeting in Washington, D.C.
- 2017 Park S*, **Finley JM**. Regulation of whole-body angular momentum during adaptive locomotor learning. Society for Neuroscience Annual Meeting in Washington, D.C.
- 2017 Liu C* **Finley JM**. Modulation of step length asymmetry affects reactive control of balance. American Society of Biomechanics in Boulder, CO.
- 2017 Sanchez N*, **Finley JM**. Explicit Modification of Step Length Asymmetry Transfers to Over-Ground Walking Post-Stroke. American Society of Biomechanics in Boulder, CO.
- 2017 Havens K, Mukherjee T*, **Finley JM**. Errors in margins of stability associated with the use of simplified body models during walking and turning. American Society of Biomechanics in Boulder, CO.
- 2016 Marjaninejad A*, Valero-Cuevas F, **Finley JM**. Abilities and limitations of coupled-oscillator CPG models to adapt to dynamic perturbations during simulated bipedal locomotion. Society for Neuroscience in San Diego, CA.

- 2016 Sanchez N*, Park S*, **Finley JM**. Perceptual, physiological and neuromechanical correlates of effort associated with step length manipulations during split-belt walking. Society for Neuroscience in San Diego, CA.
- 2016 Sanchez N*, Park S*, **Finley JM**. Symmetry is not always optimal: mapping the metabolic cost landscape of walking on a split-belt treadmill. Neural Control of Movement in Montego Bay, Jamaica.
- 2016 Park S*, Sanchez N*, **Finley JM**. Modifying adaptive locomotor learning using body weight support. Neural Control of Movement in Montego Bay, Jamaica.
- 2016 **Finley JM**, Dorakjian N*, and A. Kim*. (). Assessing the feasibility of using an immersive virtual reality interface for skilled locomotor training in individuals with Parkinson's disease. Rehabilitation Research at NIH: Moving the Field Forward in Bethesda, MD.
- 2016 Kim A*, Dorakjian N*, **Finley JM**. Immersive virtual reality: A feasibility test for individuals with Parkinson's disease. APTA Combined Sections Meeting in Anaheim, CA.
- 2015 **Finley JM**, Valette R, Perrey S. Modulating cortical activity during human locomotion using optic flow. Movement and Rehabilitation Sciences Research Symposium, Northwestern University in Chicago, IL.
- 2015 Nagamori A, **Finley JM**, Valero-Cuevas FJ. The ability to dynamically regulate instabilities with the leg is susceptible to repetitive eccentric contractions. American Society for Biomechanics in Columbus, OH.
- 2015 **Finley JM**, Park S*. Coordinated modulation of dynamic stability and metabolic cost during split-belt adaptation. Neural Control of Movement in Charleston, SC.
- 2015 Mukherjee T* **Finley JM**. A comparison of techniques to quantify dynamic margins of stability during gait. USC School of Dentistry Research Day in Los Angeles, CA.
- 2015 Kim A*, Dorakjian N*, **Finley JM**. Immersive virtual reality: A feasibility test for individuals with Parkinson's disease. USC School of Dentistry Research Day in Los Angeles, CA.
- 2015 Nagamori A, Lawrence EL, **Finley JM**, Valero-Cuevas FJ. Eccentric contractions impede the ability of the leg to regulate dynamic instabilities. Neural Control of Movement in Charleston, SC.
- 2014 Lawrence EL, Nagamori A, Valero-Cuevas FJ, **Finley JM**. Prolonged Immobilization and Unloading Leads to Profound and Long-Lasting Changes in Spinal Excitability. Society for Neuroscience in Washington, D.C.

- 2014 Martinez CA, Bacon H, **Finley JM**, Schweighofer N, Winstein CJ. Can inertial sensors characterize treatment-induced skill acquisition in chronic stroke? Society for Neuroscience in Washington, D.C.
- 2014 **Finley JM**, Long A, Bastian AJ, Torres-Oviedo G. Spatial and Temporal Control Contribute to Step Length Asymmetry during Split-Belt Adaptation and Hemiparetic Gait. World Congress of Biomechanics in Boston, MA.
- 2013 **Finley JM**, Bastian AJ. How dysfunctional is gait asymmetry? Associations between metabolic cost and asymmetries in post-stroke walking. Society for Neuroscience in San Diego, CA.
- 2013 Long A, **Finley JM**, Bastian AJ. A marching-walking hybrid induces adaptation of step symmetry on a treadmill. Society for Neuroscience in San Diego, CA.
- 2013 **Finley JM**, Bastian AJ. Identifying the Principles Underlying the Motor Learning of New Walking Patterns. Summer School on Neurorehabilitation in Elche, Spain.
- 2012 **Finley JM**, Statton MA, Bastian AJ. A Novel Optic Flow Pattern Can Speed Locomotor Learning. Society for Neuroscience in New Orleans, LA.
- 2011 Jayaram G, **Finley JM**, Bastian AJ, Celnik P. Modulating Spinal Excitability with Direct Current Stimulation. Society for Neuroscience in Washington, D.C.
- 2011 Torres-Oviedo G, Bastian AJ, **Finley JM**. Motor Learning of Space and Time to Control Symmetry in Split-Belt Walking. Society for the Neural Control of Movement in San Juan, Puerto Rico.
- 2009 **Finley JM**, Dhaher YY, Perreault EJ. Acceleration Dependence and Task-Specific Modulation of the Soleus Long Latency Stretch Reflex. Society for Neuroscience in Chicago, IL.
- 2008 Trumbower RD, **Finley JM**, Shemmell J, Perreault EJ. Reduced Regulation of Long-Latency Stretch Responses Following Stroke. Society for Neuroscience in Washington, D.C.
- 2006 **Finley JM**, Perreault EJ, Dhaher YY. Heteronymous Reflex Contributions to Circumduction in Stroke. Society for Neuroscience in Atlanta, GA.

GRANTS AND/OR CONTRACTS AWARDED:

EXTERNAL GRANTS (FEDERAL/CORPORATE/FOUNDATION FUNDING):

Principal Investigator:

- 05/2021 – 04/2025 **National Science Foundation
(Division of Behavioral and Cognitive Sciences)**
Award: Standard Grant 2043637
Title: Computational Strategies for Balancing Trade-offs between Risk and Effort during Walking
Role: Principal Investigator
Percentage of Effort: 9%
Funding: Direct Costs: \$317,406 (Total Costs: \$523,720)
Overall Aims: The overall objective of this study is to extend current risk-neutral theories of human locomotor control to a more generalizable, and clinically relevant, risk-sensitive theory of locomotion.
- 12/2022 – 06/2023 **National Science Foundation
(Disability and Rehabilitation Engineering)**
Award: 2240277
Title: DARE Conference: Transformative Opportunities for Modeling in Neurorehabilitation
Role: Co-Principal Investigator
Percentage of Effort: 5%
Funding: \$100,000
Overall Aims: Bring together a select group of engineers, clinicians, computational scientists, rehabilitation researchers, and client advocates to discuss the state of the science and identify transformative opportunities for computational modeling to advance neurorehabilitation.
- 08/2018 – 11/2023 **National Institute of Child Health and Human Development
(NIH/NICHD)**
Award: R01 HD091184
Title: Toward a mechanistic understanding of optimization principles underlying hemiparetic gait
Role: Principal Investigator
Percentage of Effort: 17%
Funding: Direct Costs: \$923,500 (Total Costs: \$1,523,774)
Overall Aims: This project seeks to identify how walking impairments in stroke survivors contribute to mobility deficits through the use of behavioral observations and computational models.
- 09/2016 – 08/2019 **National Institute of Child Health and Human Development
(NIH/NICHD) (No Cost Extension)**
Award: R21 HD088342-01
Title: Design and development of a mixed reality system for skilled locomotor training in individuals with Parkinson's disease
Role: Principal Investigator
Percent of Effort: 17%
Funding: Direct Costs: \$275,000 (Total Costs: \$453,750)

Overall Aims: The primary objective of this project was to develop and test a virtual-reality-based training system that allows individuals with PD to practice all the advanced walking skills necessary for independence in the community.

07/2016 – 06/2018 **American Heart Association Innovative Research Grant** (No Cost Extension)
Award: 17IRG33420045
Title: Transcutaneous electrical stimulation for locomotor ability post-stroke (TESLA-Stroke)
Role: Principal Investigator
Percent of Effort: 10%
Funding: Direct Costs: \$138,645 (Total Costs: \$150,000)
Overall Aims: The goal of this grant was to study the use of non-invasive, transcutaneous electrical spinal stimulation to improve stroke survivors' walking ability.

Project Principal Investigator:

03/2024 – 02/2030 **National Science Foundation**
(Division of Biological Infrastructure)
Award: Grant 2319710
Parent Grant Title: BII: Integrative Movement Sciences Institute (IMSI)
Project Title: Resilience and Versatility During Movement
Role: Project Principle Investigator
Percentage of Effort: 9%
Funding: Direct Costs: \$506,268 (Total Costs: \$835,344)
Overall Aims: IMSI aims to understand how muscular control of movement emerges from the integration of structural, temporal, and control hierarchies in living systems.

10/2013 – 09/2015 **National Institute of Child Health and Human Development**
(NIH/NICHD)
Award: K12 HD073945
Parent Grant Title: Engineering Career Development Center in Movement and Rehabilitation Sciences
Project Title: Elucidating interactions between energetics and stability during human locomotor learning
Role: Project PI (Parent Grant PIs: J. Dewald and D. Reinkensmeyer)
Percent of Effort: 75%
Funding: Direct Costs: \$250,000 (Total Costs: \$270,000)
Overall Aims: The goal of this project was to determine how balance and metabolic energy use interact to influence the learning of new walking patterns.

Co-Principal Investigator

12/2020 – 5/2021	Triad Labs, New Concord, OH <i>Award:</i> Contract <i>Project Title:</i> Evaluation of the Reach VR System <i>Role:</i> Co-Principal Investigator with Lori Michener <i>Funding:</i> \$18,750 <u><i>Overall Aims:</i></u> The primary aim of this project is to evaluate the Reach VR system and provide ideas for improvement, movement patterns to consider including and assessing over time, and ideas for additional experiences.
Co-Investigator	
03/22 – 02/27	National Institute of Child Health and Human Development (NIH/NICHD) <i>Award:</i> R25 HD105583 <i>Title:</i> Building a data science workforce to improve the reproducibility of rehabilitation research <i>Role:</i> Co-Investigator (PI: S-L Liew) <i>Percent effort:</i> 6% <i>Funding:</i> \$811,564 <u><i>Overall aims:</i></u> The goal of this project is to develop a research education program that will build a national workforce of rehabilitation researchers equipped with basic data science skills using a train-the-trainer model to increase capacity for data science in the rehabilitation research community.
05/21 – 05/23	National Institute of Child Health and Human Development (NIH/NICHD) <i>Award:</i> R03 HD104217 <i>Title:</i> A Novel, Comprehensive Approach to Gait Rehabilitation Post-Stroke <i>Role:</i> Co-Investigator (PI: K. Leech) <i>Percent of Effort:</i> 5% <i>Funding:</i> \$330,000 <u><i>Overall Aims:</i></u> The overall objective of this proposal is to determine the feasibility and optimal parameters of a combined biofeedback- and intensity-based gait training approach in persons post-stroke.
01/21 – 12/22	Magistro Family Foundation <i>Award:</i> Research Grant <i>Title:</i> A Novel, Comprehensive Approach to Gait Rehabilitation Post-Stroke <i>Role:</i> Co-Investigator (PI: K. Leech) <i>Percent of Effort:</i> 2% <i>Funding:</i> \$100,000

Overall Aims: Determine the feasibility and optimal parameters of a combined biofeedback- and intensity-based gait training approach in persons post-stroke.

Sponsor:

- 01/2023 – 12/2024 **American Heart Association**
Award: Predoctoral Fellowship
Title: The Influence of Trip Regularity and Cueing on Proactive and Reactive Balance Control During Walking Post-Stroke
Role: Sponsor (PI: Tara Cornwell)
Funding: Direct Costs: \$65,106 (Total Costs: \$65,106)
Overall Aims: This work aims to determine how perturbation predictability impacts post-stroke proactive and reactive control during walking.
- 07/2018 – 06/2019 **Link Foundation**
Award: Fellowship in Modeling, Simulation, and Training
Title: Using immersive virtual reality to assess context-dependency of locomotor skill learning in people with Parkinson's disease
Role: Sponsor (PI: A. Kim, MS)
Funding: Direct Costs: \$29,000 (Total Costs: \$29,000)
Overall Aims: The goal of this project was to assess the influence of Parkinson's disease on locomotor skill learning using immersive virtual reality.
- 07/2016 – 06/2018 **American Heart Association**
Award: Postdoctoral Fellowship
Title: Is asymmetry optimal? Characterization of individual differences in the metabolic cost of asymmetry post-stroke
Role: Sponsor (PI: N. Sánchez, PhD)
Funding: Direct Costs: \$98,950 (Total Costs: \$98,950)
Overall Aims: The primary objective of this project was to understand how short-term, biofeedback-based interventions aimed at improving walking symmetry affects the energy cost of walking in people post-stroke.

INTERNAL GRANTS (UNIVERSITY FUNDING):

Principal Investigator:

- 04/2023 – 03/2024 **SC CTSI Pilot Funding Program**
Award: Multidisciplinary Grant
Title: The Neuroscience and Engineering of Ocean Wave Surfing as Therapy for Chronic Pain
Role: Co-Principal Investigator
Funding: \$100,000

Overall Aims: Determine if a 6-week ocean surf therapy program improves chronic pain symptoms, brain network markers, and peripheral biomarkers in patients with Chronic Overlapping Pain Conditions. Determine if the surf therapy experience be appropriately captured in a virtual reality (VR) environment to address the scalability problems inherent in ocean access.

- 07/2020 – 06/2021 **USC Office of Undergraduate Programs**
Award: Undergraduate Research Associates Program
Title: USC SMART-VR Rehabilitation XR - Lab Rotations for Undergraduates
Role: Co-Principal Investigator
Funding: \$2,000
Overall Aims: The purpose of this project is to support undergraduate research assistants who will participate in clinical feasibility assessments of virtual reality applications for rehabilitation.
- 06/2019-05/2020 **Southern California Clinical and Translational Science Institute (SC CTSI)**
Award: SC CTSI Voucher
Title: Pragmatic Usability Evaluation of the iMOVE-PD Training System
Role: Principal Investigator
Funding: Total Costs: \$3,000
Overall Aims: The overall aim of this project was to evaluate the usability of the iMOVE-PD virtual reality mobility training system with physical therapists and their patients with Parkinson's disease.
- 07/2018 – 06/2019 **Southern California Clinical and Translational Science Institute (SC CTSI)**
Award: Clinical and Community Research Pilot Award
Title: Clinical and behavioral assessment of fall risk during walking in people post-stroke
Role: Principal Investigator
Funding: Total Costs: \$40,000
Overall Aims: The aims of this pilot study are to: 1) establish the validity of an objective biomechanical assessment of fall risk that directly measures a patient's ability to recover from a loss of balance; 2) determine which patient-specific physical and psychological factors are associated with measures of fall risk; and 3) determine if shifting a patient's walking pattern toward the typical pattern observed in healthy individuals leads to improvements in balance.
- 11/2017 – 10/2018 **USC Division of Biokinesiology and Physical Therapy**
Award: Faculty Seed Grant

Title: USC SensoriMotor Assessment and Rehabilitation Training in Virtual Reality Center (USC SMART-VR Center)

Role: Principal Investigator

Funding: Total Costs: \$15,000

Overall Aims: The aims during the first year of this Center were to develop an infrastructure to facilitate cross-campus collaborations, speed the development of health-related VR prototypes, and host the first university-wide symposium for Virtual Technologies for Health.

09/2015 – 08/2016

USC James H. Zumberge Faculty Research and Innovation Fund

Award: Individual Research Award

Title: Elucidation of the neuromechanical factors underlying the adaptive control of locomotion

Role: Principal Investigator

Funding: Total Costs: \$30,000

Overall Aims: The primary objective of this project was to combine biomechanical simulations and novel functional neuroimaging approaches to elucidate the mechanisms underlying adaptive locomotor learning.

09/2015 – 08/2016

USC Office of Undergraduate Programs

Award: Undergraduate Research Associates Program

Title: Development of a virtual reality training system to improve skilled walking ability in stroke survivors and individuals with Parkinson's disease

Role: Principal Investigator

Funding: \$3,200

Overall Aims: This project supported two undergraduate researchers who assisted with the development of a virtual reality-based training system to train walking, turning while walking, obstacle avoidance, and dual-tasking ability in individuals with Parkinson's disease.

Co-Principal Investigator:

09/2019 – 08/2022

USC Research Collaboration Fund Award

Title: USC SensoriMotor Assessment and Rehabilitation Training in Virtual Reality Center (USC SMART-VR Center)

Role: Co-Principal Investigator

Funding: Total Costs: \$90,000

Overall Aims: The mission of this interdisciplinary center of excellence is to harness cutting-edge advances in virtual reality to improve motor and cognitive function across multiple clinical populations (e.g., stroke, Alzheimer's disease, Parkinson's disease).

09/2019 – 08/2022

USC Research Collaboration Fund Award

Title: Metaplasticity and megaplasticity: Changing the brain from synapse to community

Role: Co-Principal Investigator

Funding: Total Costs: \$90,000

Overall Aims: The objective of this project is to establish collaboration and cross-talk between the fields of science and the arts spanning the Keck School of Medicine and the Dornsife College of Letters Arts and Sciences to gain novel perspectives towards understanding mechanisms of neuroplasticity critical for developing brain resilience in aging and disease.

IV. TEACHING AND MENTORING ACTIVITIES

COURSES DEVELOPED AND/OR PRESENTED:

University Courses Developed:

2015 – present	BKN 553: Experimental Methods for the Analysis of Human Movement University of Southern California, Los Angeles, CA Division of Biokinesiology and Physical Therapy
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University Courses Presented:

2023	Guided Readings on Physical and Cognitive Effort with Jackeline Tafur Oviedo University of Southern California, Los Angeles, CA Division of Biokinesiology and Physical Therapy
2023	CTIN-503 Interactive Entertainment, Science, and Healthcare Lecture on Reimagining the Future of Mobility Training Through Use of Immersive Technologies University of Southern California, Los Angeles, CA USC School of Cinematic Arts Interactive Media and Games Division
2021	Guided Readings on Risk Sensitivity during Gait with Shreya Jain University of Southern California, Los Angeles, CA Division of Biokinesiology and Physical Therapy
2021	Guided Readings on Modeling Musculotendon Function with David Ortiz University of Southern California, Los Angeles, CA Division of Biokinesiology and Physical Therapy
2018 – 2019	USC Neuroscience Graduate Program Programming Boot Camp Co-Director
2018, 2019	CSCI 548: Augmented, Virtual, and Mixed Reality

	Lecture on Virtual Reality for Mobility Rehabilitation in Parkinson's disease USC Viterbi School of Engineering
2018	Guided Readings on Central and Peripheral Sources of Fatigue in People Post-Stroke with Lindsey Trejo University of Southern California, Los Angeles, CA Division of Biokinesiology and Physical Therapy
2017 – 2021	PT 583: Emerging Topics in Physical Therapy Lecture on Technological Advances for Neurological Rehabilitation Division of Biokinesiology and Physical Therapy
2017 – present	NSCI 525: Advanced Overview of Neurosciences II Lecture on the Neural Control of Locomotion USC Neuroscience Graduate Program
2017	Guided Readings on the Role of Supplementary Motor Area in Generating Anticipatory Postural Adjustments with Alaa Albishi University of Southern California, Los Angeles, CA Division of Biokinesiology and Physical Therapy
2016	IML 543: Transdisciplinary Media Design Practicum Lecture on the Neurobehavioral Basis of Locomotion USC School of Cinematic Arts
2015 & 2016	BME 414: Rehabilitation Engineering Lecture on Locomotor Control and Rehabilitation USC Viterbi School of Engineering
2014 – present	BKN 550: Neurobehavioral Basis of Movement University of Southern California, Los Angeles, CA Division of Biokinesiology and Physical Therapy
2014	Guided Readings on Computational Principles of Motor Control with Michael Rowley University of Southern California, Los Angeles, CA Division of Biokinesiology and Physical Therapy
2014	Guided Readings on Principles of Motor Learning with Ming-Shen Chan University of Southern California, Los Angeles, CA Division of Biokinesiology and Physical Therapy
2014	Guided Readings on Applications of Virtual Reality for Gait Rehabilitation with Tatri Mukerjee

University of Southern California, Los Angeles, CA
Division of Biokinesiology and Physical Therapy

- 2009 **Teaching Assistant, Quantitative Experimentation and Design**
Northwestern University, Evanston, IL
Department of Biomedical Engineering
- 2008 **Instructor, Calculus II**
Northwestern University EXCEL Program, Evanston, IL

Workshops and Tutorials:

- 2019 BKN Survival Series Seminar on Scientific Communication
Division of Biokinesiology and Physical Therapy
- 2017 BKN Survival Series Seminar on Promoting Research Online
Division of Biokinesiology and Physical Therapy
- 2016 Workshop on Social Media for Scientists
Neural Control of Movement Conference in Montego Bay, Jamaica.
- 2016 Tutorial on Computational Models of Locomotion
European Computational Motor Control Summer School, Montpellier,
France
- 2014 & 2015 Tutorial on Neuromechanics
European Computational Motor Control Summer School, Montpellier,
France
- 2014 BKN Survival Series Seminar on Strategies for Searching the Scientific
Literature
University of Southern California, Los Angeles, CA
Division of Biokinesiology and Physical Therapy

FACULTY MENTORED:

- 2024 – present **Kari Kretch, Ph.D., DPT** (USC Division of Biokinesiology and Physical
Therapy)
USC Division of Biokinesiology and Physical Therapy Mentoring
Program
- 2021 – present **Kristan Leech, DPT, Ph.D.** (USC Division of Biokinesiology and
Physical Therapy)
USC Division of Biokinesiology and Physical Therapy Mentoring
Program

Awards:

- NIH/NICHD Early Career R03 (2021 - 2023)

- Magistro Family Foundation Research Grant (2021 – 2022)
- 2023 – 2024 **Patrick Slade, Ph.D.** (Assistant Professor at Harvard University, Bioengineering Program)
Training in Grantsmanship for Rehabilitation Research Program
- 2023 – 2024 **Kim Ingraham, Ph.D.** (Assistant Professor at University of Washington, Department of Electrical and Computer Engineering)
Training in Grantsmanship for Rehabilitation Research Program
- 2023 – 2024 **Charalambos Charalambous, Ph.D.** (Medical Instructor at Duke University, Department of Neurology)
Training in Grantsmanship for Rehabilitation Research Program
- 2022 – 2023 **Katherine Hsieh, Ph.D.** (Assistant Professor at Georgia State University, Department of Physical Therapy)
Training in Grantsmanship for Rehabilitation Research Program
- 2022 – 2023 **James Cotton, MD, Ph.D.** (Assistant Professor at Northwestern University, Department of Physical Medicine and Rehabilitation)
Training in Grantsmanship for Rehabilitation Research Program
Awards:
 - NSF DARE Conference Fellow (2023)
- 2022 – 2023 **Alexis Sidiropoulos, Ph.D.** (Health Science Specialist at VISN 2 BRAVO Lab, Department of Veterans Affairs)
Training in Grantsmanship for Rehabilitation Research Program
- 2022 – 2023 **Paul Kline, DPT, Ph.D.** (Assistant Professor at High Point University, Department of Physical Therapy)
Training in Grantsmanship for Rehabilitation Research Program
- 2021 – 2022 **Benjamin Binder-Markey, DPT, Ph.D.** (Assistant Professor at Drexel University, Department of Physical Therapy and Rehabilitation Sciences)
Training in Grantsmanship for Rehabilitation Research Program
Awards:
 - ASB Early Career Achievement Award (2023)
- 2021 – 2022 **Christopher Hasson, Ph.D.** (Associate Professor at Northeastern University, Department of Physical Therapy)
Training in Grantsmanship for Rehabilitation Research Program
- 2021 – 2022 **Chun-Kai Huang, Ph.D.** (Assistant Professor at University of Kansas Medical Center, Department of Physical Therapy and Rehabilitation Science)
Training in Grantsmanship for Rehabilitation Research Program

GRADUATE STUDENTS AND POST-DOCTORAL SCHOLARS MENTORED:

Post-doctoral Scholars

- 2019 – 2023 **Russell Johnson, Ph.D.**
Current Position: Assistant Professor, Physical Medicine and Rehabilitation, Northwestern University
- 2015 – 2019 **Natalia Sanchez, Ph.D.**
Current Position: Assistant Professor, Department of Physical Therapy, Chapman University
Awards:
- SC CTSI Mentored Career Development in Clinical and Translational Science Award (2019 – 2022)
 - Neural Control of Movement Diversity Travel Award (2018)
 - American Heart Association Postdoctoral Fellowship (2016 – 2018)

Doctoral Students

- 2022 – present **Jackeline Tafur Oviedo** (Division of Biokinesiology and Physical Therapy, USC)
- 2021 – present **Tara Cornwell** (Department of Biomedical Engineering, USC)
- 2020 – present **Isaiah Lachica** (Division of Biokinesiology and Physical Therapy, USC)
- 2020 – present **Catherine Yunis*** (Department of Biomedical Engineering, USC)
*Co-advised by Dr. Heather Culbertson (Department of Computer Science, USC)
- 2020 – present **Ryan Novotny** (Neuroscience Graduate Program, USC)
- 2019 – 2024 **Shreya Jain** (Division of Biokinesiology and Physical Therapy, USC)
Dissertation Title: “The Influence of Risk on Decision-Making during Walking”
- 2017 – 2023 **Pouria Nozari Porshokouhi** (Department of Biomedical Engineering, USC)
Dissertation Title: “Model-based Approaches to Objective Inference during Steady-State and Adaptive Locomotor Control”

Current Position: Analyst, Goldman Sachs
- 2016 – 2021 **Chang Liu** (Department of Biomedical Engineering, USC)

Dissertation Title: “Understanding Reactive Balance Control Strategies during Non-disabled and Post-Stroke Gait”

Current Position: Post-doctoral Fellow, Biomedical Engineering, University of Florida, Gainesville, FL

Awards:

- Runner-up for the ASME Bioengineering Division PhD Level Student Paper Competition for the World Congress of Biomechanics (2018)
- Winner of the De Luca Foundation Student Travel Award for the World Congress of Biomechanics (2018)

2016 – 2021

Aram Kim (Division of Biokinesiology and Physical Therapy, USC)

Dissertation Title: “Locomotor Skill Learning in Virtual Reality in Healthy Adults and People with Parkinson Disease”

Current Position: Post-doctoral Fellow, Biomedical Engineering, Johns Hopkins University, Baltimore, MD

Awards

- Link Foundation Modeling, Simulation, and Training Fellowship (2018-2019)
- USC Division of Biokinesiology and Physical Therapy Travel Award (2018)
- Progress in Clinical Motor Control Conference Travel Award (2018)
- 1st place in the Biokinesiology Poster Competition during the School of Dentistry Research Day (2018)
- 2nd place in the VRSC Student Festival Hackathon (2018)

2014 – 2019

Sungwoo Park (Division of Biokinesiology and Physical Therapy, USC)

Dissertation Title: “Understanding associations between whole-body dynamic balance and spatiotemporal asymmetry during healthy and pathological gait”

Current Position: Senior Research Engineer, Articulated Robotics Team @ Robotics LAB, Hyundai Motor Group, Seoul, South Korea

Neurologic Physical Therapy Residents

2014 – 2015

Nora Darakjian, DPT (Division of Biokinesiology and Physical Therapy, USC)

Subsequent Position: Instructor of Clinical Physical Therapy, University of Southern California, Los Angeles, CA

Visiting Scholars

2019 **Tom Buurke** (Human Movement Sciences, University of Groningen)
Current Position: Assistant Professor, Human Movement Sciences,
University of Groningen, Groningen, The Netherlands

DPT Student Researchers

2016 – 2017 **Kari Kretch, Ph.D.** (Division of Biokinesiology and Physical Therapy, USC)
Awards

- Helen Hislop Scholarship in Support of Vision & Excellence in Physical Therapy (2017)

Current Position: Assistant Professor, Division of Biokinesiology and Physical Therapy, University of Southern California, Los Angeles, CA

Master's Students

2023 – present **Betul Dincer** (Fulbright Scholar in the Thomas Lord Department of Computer Science, USC)

2021 – 2021 **Alexis Medrano** (Division of Biokinesiology and Physical Therapy, USC)
Subsequent Position: Partner Relations and Program Manager, Women in Sports Tech, Inc., Los Angeles, CA

2017 – 2018 **Lindsey Trejo** (Division of Biokinesiology and Physical Therapy, USC)
Subsequent Position: Ph.D. Student, Bioengineering Program, Georgia Institute of Technology, Atlanta, GA

2014 – 2016 **Aram Kim** (Division of Biokinesiology and Physical Therapy, USC)
Subsequent Position: Ph.D. Student, Division of Biokinesiology and Physical Therapy, University of Southern California, Los Angeles, CA

2014 – 2015 **Tatri Mukherjee** (Division of Biokinesiology and Physical Therapy, USC)
Subsequent Position: Physical Therapist, Health South Rehabilitation Hospital, Midland, TX

Undergraduate Researchers

2023 – 2024 **Eimon Amjadi** (Department of Neuroscience, USC)
Awards

- Recipient of USC Provost Fellowship (2024)

2023 – 2023 **Lily Williams** (USC Viterbi School of Engineering Summer Undergraduate Research Experience)

2023 – 2023	Christian Lainez-Artiga (USC DIA Jumpstart Summer Program)
2021 – 2021	Alejandra Castillo (USC DIA Jumpstart Summer Program)
2018 – 2019	Camille Grandjean (Department of Biomedical Engineering, USC)
2018 – 2019	Noah Tristan (Department of Biomedical Engineering, USC)
2018	Sam Kushell (Department of Computer Science, USC) <u>Subsequent Position:</u> Undergraduate Student in Game Design, University of Southern California, Los Angeles, CA
2017 – 2018	Nathan Lim (Department of Computer Science, USC) <u>Subsequent Position:</u> Game Developer, Niantic, Inc., Los Angeles, CA
2015 – 2017	Zixuan Zhou (Department of Aerospace and Mechanical Engineering) <u>Subsequent Position:</u> Master of Science in Mechanical Engineering at Stanford University, Palo Alto, CA <i>Awards</i> • Recipient of Interdisciplinary Award at USC's Undergraduate Research Symposium (2016)
2016	Lucas de Macêdo Pinheiro (Control & Automation Engineering, Universidade de Brasilia) <u>Subsequent Position:</u> Bachelor of Science in Control & Automation Engineering, Universidade de Brasilia, Brasília, Brazil
2014	Marco Lopez (Division of Biokinesiology and Physical Therapy, USC) <u>Subsequent Position:</u> Doctor of Physical Therapy Student, Division of Biokinesiology and Physical Therapy, University of Southern California, Los Angeles, CA <i>Awards</i> • USC Physical Therapy Multicultural Leadership Alliance Scholarship (2014)

High School Researchers

2023 – 2024	Jason Valdes (Bravo Medical Magnet High School) <i>Awards</i> • Recipient of Mayfield Fund Fellowship (2024)
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Committee Member

Current

2022 – present	Daniel Aslan (Department of Biological Sciences) Advisor: David Raichlen Member of Qualifying Exam Committee (2023)
2022 – present	Nora Almoadi (Division of Biokinesiology and Physical Therapy) Advisor: Barbara Sergeant Member of Qualifying Exam Committee (2024)
2022 – present	Jenny Leestma (Department of Mechanical Engineering, Georgia Tech) Advisors: Greg Sawicki and Aaron Young Member of Qualifying Exam Committee (2022)
2022 – present	Angelo Bartsch (Division of Biokinesiology and Physical Therapy) Advisor: Francisco Valero-Cuevas Member of Qualifying Exam Committee (2023)
2019 – present	David Ortiz (Division of Biokinesiology and Physical Therapy) Advisor: Kornelia Kulig Member of Qualifying Exam Committee (2022)
<i>Past</i>	
2021 – present	Harper Stewart (Department of Biomedical Engineering) Advisor: Jill McNitt-Gray Member of Qualifying Exam Committee (2023) Member of Dissertation Committee (2024)
2021 – 2023	Sarah Kettlety (Division of Biokinesiology and Physical Therapy) Advisor: Kristan Leech Member of Qualifying Exam Committee (2022) Member of Dissertation Committee (2023)
2021 – 2023	Yannick Darmon (Division of Biokinesiology and Physical Therapy) Advisor: Nicolas Schweighofer Member of Qualifying Exam Committee (2022) Member of Dissertation Committee (2023)
2020 – 2023	Malcolm Jones (Division of Biokinesiology and Physical Therapy) Advisor: Todd Schroeder Member of Qualifying Exam Committee (2022) Member of Dissertation Committee (2023)
2021 – 2023	Darío Urbina Melindez (Department of Biomedical Engineering) Advisor: Francisco Valero-Cuevas Member of Qualifying Exam Committee (2021) Member of Dissertation Committee (2023)

2021 – 2023	Octavio Marin Pardo (Department of Biomedical Engineering) Advisor: Sook-Lei Liew Member of Qualifying Exam Committee (2021) Member of Dissertation Committee (2023)
2019 – 2022	Julia Juliano (Neuroscience Graduate Program) Advisor: Sook-Lei Liew Guidance Committee Chair Member of Comprehensive Exam Committee (2019) Member of Dissertation Committee (2022)
2021 – 2021	Nadir Nibras (Department of Biomedical Engineering) Advisor: Nicolas Schweighofer Member of Qualifying Exam Committee (2021)
2019 – 2021	Ali Marjaninejad (Department of Biomedical Engineering) Advisor: Francisco Valero-Cuevas Member of Qualifying Exam Committee (2019) Member of Dissertation Committee (2021)
2019 – 2021	Sara Almansouri (Division of Biokinesiology and Physical Therapy) Advisor: Susan Sigward Member of Qualifying Exam Committee (2019) Member of Dissertation Committee (2021)
2017 – 2021	Jonathan Lee (Division of Biokinesiology and Physical Therapy) Advisor: Christopher Powers Member of Qualifying Exam Committee (2017-2018) Member of Dissertation Committee (2021)
2017 – 2020	Giovanni Sutanto (Department of Computer Science) Advisor: Gaurav Sukhatme Member of Qualifying Exam Committee (2018) Member of Dissertation Committee (2020)
2017 – 2020	Akira Nagamori (Division of Biokinesiology and Physical Therapy) Advisor: Francisco Valero-Cuevas Member of Qualifying Exam Committee (2018) Member of Dissertation Committee (2020)
2018 – 2019	Ilse Flores (Neuroscience Graduate Program) Advisor: Michael Jakowec Guidance Committee Chair Member of Comprehensive Exam Committee (2019)
2017 – 2019	Alaa Albishi (Division of Biokinesiology and Physical Therapy) Advisor: Beth Fisher Member of Qualifying Exam Committee (2017)

	Member of Dissertation Committee (2019)
2018	Victor Barradas (Department of Biomedical Engineering) Advisor: Nicolas Schweighofer Member of Qualifying Exam Committee (2018) PhD granted in 2019
2018	Harry Su (Department of Computer Science) Advisor: Stefan Schaal Member of Qualifying Exam Committee (2018) Member of Dissertation Committee (2018)
2017 – 2018	Sean Mason (Department of Computer Science) Advisor: Stefan Schaal Member of Qualifying Exam Committee (2017) Member of Dissertation Committee (2018)
2017	Nick Rotella (Department of Computer Science) Advisor: Stefan Schaal Member of Dissertation Committee (2017)
2016 – 2018	Michael Rowley (Division of Biokinesiology and Physical Therapy) Advisor: Kornelia Kulig Member of Qualifying Exam Committee (2016) Member of Dissertation Committee (2018)
2016 – 2018	Ming-Shen Chan (Division of Biokinesiology and Physical Therapy) Advisor: Susan Sigward Member of Qualifying Exam Committee (2016) Member of Dissertation Committee (2018)
2016	Sujin Kim (Division of Biokinesiology and Physical Therapy) Advisor: Nicolas Schweighofer Member of Dissertation Committee (2016)
2016	Franziska Meier (Department of Computer Science) Advisor: Stefan Schaal Member of Dissertation Committee (2016)
2015 – 2016	Emily Lawrence (Department of Biomedical Engineering) Advisor: Francisco Valero-Cuevas Member of Qualifying Exam Committee (2015) Member of Dissertation Committee (2016)
2014 – 2017	Yu-Chen Chung (Division of Biokinesiology and Physical Therapy) Advisor: Beth Fisher Member of Qualifying Exam Committee (2014) Member of Dissertation Committee (2017)
2014 – 2016	Nahyeon Ko (Division of Biokinesiology and Physical Therapy) Advisor: Francisco Valero-Cuevas Member of Qualifying Exam Committee (2014) Member of Dissertation Committee (2016)

DPT Students Mentored

2023 – present	Kaylyn Ruiz DPT Faculty Mentorship Program
2022 – present	Jason Ezzy, Angel Firmalan DPT Faculty Mentorship Program
2021 – 2024	Tania Funes, Lauren Garcia DPT Faculty Mentorship Program
2020 – 2023	Savanna Duenas, Ciara Duggan DPT Faculty Mentorship Program
2019 – 2022	Keairez Coleman, Michael Chung DPT Faculty Mentorship Program
2018 – 2021	Emily Coleman, Shannon Colleton DPT Faculty Mentorship Program
2017 – 2020	Christopher Floyd, Daniel Fox DPT Faculty Mentorship Program
2016 – 2019	Katia Correa, Andrew Cole DPT Faculty Mentorship Program
2015 – 2018	Kaylie Deng, Hieu Do DPT Faculty Mentorship Program
2014 – 2017	Abbie Bell DPT Faculty Mentorship Program