

Date: 2024-06-25

CURRICULUM VITAE
Keith Robert Lohse, PhD, PStat®

CONTACT INFORMATION

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PRESENT POSITION

Associate Professor; Program in Physical Therapy and Department of Neurology; Washington University School of Medicine; St. Louis, MO

EDUCATION

Degrees and Post-Doctoral Training

2007	BS	Psychology	Idaho State University, Pocatello, ID; USA
2009	MA	Cognitive Psychology	University of Colorado, Boulder, CO; USA
2012	PhD	Psychology, Neuroscience, and Cognitive Science	University of Colorado, Boulder, CO; USA
2014	Postdoctoral Training	Rehabilitation Science	University of British Columbia, Vancouver, BC; CAN

Professional Licenses and Certifications

2019 **PStat**®, Accredited Professional Statistician, *American Statistical Association*.

ACADEMIC POSITIONS/EMPLOYMENT

2007 – 2012	Teaching assistant for the Department of Psychology and Neuroscience; College of Arts and Sciences. University of Colorado, Boulder, CO; USA
2011	Instructor for the Department of Psychology and Neuroscience; College of Arts and Sciences. University of Colorado, Boulder, CO; USA
2012 – 2014	Postdoctoral Research Associate ; Motor Skills Laboratory; School of Kinesiology. University of British Columbia, Vancouver, BC; CAN
2014 – 2017	Assistant professor ; School of Kinesiology; College of Education. Auburn University, Auburn, AL; USA
2017 – 2021	Assistant professor ; Department of Health and Kinesiology; College of Health. University of Utah, Salt Lake City, UT; USA
2017 – 2021	Adjunct assistant professor ; Department of Physical Therapy and Athletic Training; College of Health. University of Utah, Salt Lake City, UT; USA
2021 – present	Associate professor ; Program in Physical Therapy and Department of Neurology; Washington University School of Medicine, Saint Louis, MO; USA
2021 – present	Affiliate associate professor , Institute for Informatics, Data Science, and Biostatistics (I ² DB); Washington University School of Medicine, Saint Louis, MO; USA

HONORS AND AWARDS

2011	Co-recipient of the Dozier Award for academic excellence among doctoral students from the Department of Psychology and Neuroscience at the University of Colorado, Boulder.
2017	Recipient of the Early Career Distinguished Scholar Award from the <i>North American Society for the Psychology of Sport and Physical Activity</i> (NASPSPA).
2019	Elected to Board of Directors for the <i>American Society for Neurorehabilitation</i> .

TEACHING TITLES AND RESPONSIBILITIES

Year	Term	Course	Role	Description
2007-2012	Fall/Spring	PSYC 3101	Teaching Assistant	Introduction to Statistics Lab
2011	Summer	PSYC 2145	Instructor	Cognitive Psychology
2014	Spring	KIN 371	Instructor	Statistics for Kinesiology
2014	Fall	KINE 3650	Instructor	Motor Learning and Performance
2015	Spring	KINE 7730	Instructor	Neuromotor Control
2015	Spring	KINE 3650	Instructor	Motor Learning and Performance
2015	Summer	KINE 7650	Instructor	Advanced Motor Learning
2015	Fall	KINE 3650	Instructor	Motor Learning and Performance
2016	Spring	KINE 7730	Instructor	Neuromotor Control
2016	Spring	KINE 3650	Instructor	Motor Learning and Performance
2016	Summer	KINE 7650	Instructor	Advanced Motor Learning
2016	Fall	KINE 8970	Instructor	Biostatistics I
2017	Spring	KINE 8970	Instructor	Biostatistics II
2017	Summer	KINE 7650	Instructor	Advanced Motor Learning
2018	Spring	KINES 3551	Instructor	Application of Human Motor Development
2018	Fall	KINES 3550	Instructor	Motor Behavior
2019	Spring	KINES 7103	Instructor	Design and Analysis I
2019	Fall	KINES 6770	Instructor	Instrumentation and Measurement in Movement Science
2020	Spring	KINES 7103	Instructor	Design and Analysis I
2020	Fall	KINES 6885	Instructor	Advanced Motor Learning
2021	Spring	KINES 7103	Instructor	Design and Analysis I
2021	Summer	DPT	Designer, Instructor	Developed synchronous and asynchronous lectures, and assessments for the Evidence thread of the DPT curriculum
2021	Fall	DPT	Designer, Instructor	Developed synchronous and asynchronous lectures and assessments for the Evidence thread of the DPT curriculum
2021	Fall	MSP PhD	Instructor	Provided lectures on data management and data visualization to movement science program students, post-docs, and faculty
2022	Spring	DPT	Designer, Instructor	Developed synchronous and asynchronous lectures and assessments for the Evidence thread of the DPT curriculum
2022	Spring	MSP PhD	Lecturer	Provided lectures and facilitated discussion of career pathways
2022	Fall	DPT	Designer, Instructor	Developed and led synchronous and asynchronous lectures and assessments for the Evidence thread of the DPT curriculum (1 st and 2 nd years).
2022	Fall	DPT	Designer	Researching and outlining a series of asynchronous modules entitled "Measurement in Society" focused on understanding socially constructed variables (e.g., race, gender) in biomedicine.
2022	Fall	MSP PhD	Designer	Working with Dr. Jacob McPherson, creating a syllabus for the "Instrumentation" course for our MSP PhD students.
2023	Spring	DPT	Designer, Instructor	Developed and led synchronous and asynchronous lectures and assessments for the Evidence thread of the DPT curriculum (1 st and 2 nd years). Also contributed to DEA III in the legacy curriculum for 3 rd year students.
2023	Spring	MSP PhD	Designer	Having completed a rough syllabus for the Instrumentation course, we started developing weekly assignments and lectures.
2023	Spring	MSP PhD	Facilitator	Led reading group on machine learning/statistical learning methods with K-awardees, post-doctoral and pre-doctoral trainees.
2023	Spring	DPT	Designer	Created, received feedback, and revised a series of asynchronous modules entitled "Measurement in Society"

focused on understanding socially constructed variables (e.g., race, gender) in biomedicine.

2023	Fall	DPT	Designer, Instructor	Developed and led synchronous and asynchronous lectures and assessments for the Evidence thread of the DPT curriculum (1 st , 2 nd , and 3 rd years).
2023	Fall	DPT	Designer	Solicited peer-review, revised, and scripted “Measurement in Society” modules.
2023	Fall	MSP PhD	Instructor	Co-taught instrumentation in movement science course with Dr. Jacob McPherson.
2024	Spring	DPT	Designer	Solicited peer-review, revised, and scripted “Measurement in Society” modules.
2024	Spring	DPT	Designer, Instructor	Developed and led synchronous and asynchronous lectures and assessments for the Evidence thread of the DPT curriculum (1 st , 2 nd , and 3 rd years).
2024	Spring	MSP PhD	Facilitator	Led reading group on Statistical Parametric Mapping in biomechanics with faculty, post-doctoral, and pre-doctoral trainees.
2024	Summer	DPT	Designer	Recorded “Measurement in Society” modules for DPT students, teaching about the role of social constructs in biomedicine.

UNIVERSITY, SCHOOL OF MEDICINE, AND HOSPITAL APPOINTMENTS AND COMMITTEES

Departmental Service

2015	Search committee member , motor development search. School of Kinesiology; Auburn University.
2017	Member , graduate curriculum committee (evaluating research-core classes). HKR; University of Utah.
2017	Search committee chair , applied biomechanics search. HKR; University of Utah.
2017 – 2018	Search committee chair , motor behavior/cognitive neuroscience search. HKR; University of Utah.
2017 – 2020	Theme leader , Cognitive and Motor Neuroscience (CMN) research theme. HKR; University of Utah.
2018 – 2019	Search committee chair , motor behavior/cognitive neuroscience search. HKR; University of Utah.
2020 – 2021	Member , Chair’s Advisory Council, representative for pre-tenured faculty. HKR; University of Utah.
2022 – 2023	Search committee member , exercise science/physiology faculty search, PT program, WUSOM.
2024 – present	Search committee member , investigator track faculty search, PT program, WUSOM

University Service

2018	Reviewer , Center for Clinical and Translational Science Pilot Grant program. College of Health; University of Utah.
2018	Member , research space taskforce. Focused on collaborative use of research and teaching spaces. Representative for the Cognitive and Motor Neuroscience research theme. College of Health; University of Utah.
2024-present	Ad-hoc grant reviewer , internal grant applications for the Institute for Clinical and Translational Science.
2024-present	Volunteer with Precision Health Program. Helped to organize precision health community workshops (e.g., helping to promote workshops, find presenters, and answer community questions) and review materials for distribution.

NATIONAL PANELS, COMMITTEES, AND BOARDS

Current Professional Societies and Organizations

2014 – present	Member of the American Society for Neurorehabilitation (ASNR)
2018 – present	Member of the Society for Transparency, Openness, and Replication in Kinesiology (STORK)
2019 – present	Member of the American Statistical Association (ASA)
2021 – present	Academic Affiliate of the American Physical Therapy Association

Other Prior/Intermittent Professional Memberships

- Association for Psychological Science; American Congress for Rehabilitation Medicine; North American Society for the Psychology of Sport and Physical Activity (NASPSA)

Special Roles and Contributions

2018	Member , programming committee for the motor control and learning section of NASPSPA
2019	Member , NASPSPA student research/travel awards committee
2019 – present	Member , Board of Directors for ASNR
2019	Member , programming committee for the motor control and learning section of NASPSPA
2019	Reviewer , Canadian Partnership for Stroke Recovery “Catalyst Grants” program
2019 – 2021	Member , ASNR Education Committee
2020	Member , NASPSPA student research/travel awards committee
2021 – 2022	Member , NASPSPA motor learning, development, and control research seminar series committee
2022 – 2024	Chair , ASNR Education committee
2022	Reviewer , Perception Action & Cognition Program, National Science Foundation (NSF).
2022	Abstract Reviewer for the American Heart Association’s 2023 International Stroke Conference.
2023	Abstract Reviewer for the American Heart Association’s 2024 International Stroke Conference.
2023	Reviewer , Small Business Innovation Research, Small Business Technology Transfer, National Science Foundation (NSF)
2024	Review Panelist , Digital Health - Small Business Innovation Research, Small Business Technology Transfer, National Science Foundation (NSF)

PROFESSIONAL/COMMUNITY SERVICE

Editorial Boards

2015 – 2023	Editorial board member, <i>Journal of Motor Learning and Development</i> .
2018 – 2019	Guest editor for a special issue of the <i>Journal of Motor Learning and Development</i> entitled, “Methodological Advances in Motor Learning and Development”.
2018 – 2021	Associate Editor (measurement and evaluation), <i>Research Quarterly for Exercise and Sport</i> .
2021 – 2023	Editorial board member (statistical consultant), <i>Research Quarterly for Exercise and Sport</i> .
2022 – present	Editorial board member (statistical consultant), <i>Journal of Neurologic Physical Therapy</i> .
2023 – present	Executive Editor (data management, reporting, and transparency), <i>Journal of Motor Learning and Development</i>

Ad-Hoc Reviewer

Below is a list of journals for whom I have provided reviews:

- *American Journal of Preventive Medicine*;
- *Applied Clinical Informatics*;
- *Applied Cognitive Psychology*;
- *Applied Physiology, Nutrition and Metabolism*;
- *Archives of Physical Medicine and Rehabilitation*;
- *Brain*;
- *Brain Communications*;
- *Communications in Kinesiology*;
- *Developmental Neurorehabilitation*;
- *Disability and Rehabilitation*;
- *Games for Health Journal*;
- *Gerontology*;
- *Human Movement Science*.
- *International Journal of Sports Science and Coaching*;
- *Journal of Biomechanics*;
- *Journal of Experimental Psychology: General*;
- *Journal of Experimental Psychology: Human Perception and Performance*;
- *Journal of Mathematical Psychology*;
- *Journal of Motor Learning and Development*;
- *Journal of Neuroengineering and Rehabilitation*;
- *Journal of Neurologic Physical Therapy*;
- *Journal of Neurology, Neurosurgery & Psychiatry*;
- *Journal of Psychophysiology*;
- *Journal of Rehabilitation Research & Development*;
- *Journal of Sport & Exercise Psychology*;

- *Journal of Sport Science*;
- *Motor Control*;
- *Measurement in Physical Education & Exercise Science*;
- *Medicine & Science in Sports & Exercise*;
- *Nature Communications*;
- *Neurorehabilitation & Neural Repair*;
- *NeuroImage*;
- *NeuroImage Clinical*;
- *Neurology*;
- *Physical Therapy*;
- *PLOS ONE*;
- *Psychological Bulletin*;
- *Psychology of Sport and Exercise*;
- *Psychonomic Bulletin & Review*;
- *Scandinavian Journal of Medicine & Science in Sports*;
- *Scientific Reports*;
- *Stroke*;
- *Transactions on Neural Systems & Rehabilitation Engineering*

I also serve as a “recommender” for a Peer Community In (PCI) Health and Movement Sciences. The PCI provides publicly available reviews of pre-prints (<https://healthmovsci.peercommunityin.org/>).

Workshops and Other Projects

- 2012 – 2016 I used to write a blog called “Compared to What?” where I worked through topics in statistics and research methods. This blog was designed to be pedagogical, providing step-by-step instructions and code working through issues that I encountered (either directly or indirectly) through my research: <http://compare2what.blogspot.com/>...With the benefit of greater expertise and perspective, I would not recommend the blog, but I do think it was useful for improving my writing.
- 2016 I wrote and thoroughly commented R Code to accompany Jeff Long’s 2012 book, *Longitudinal Data Analysis for the Behavioral Sciences*. Code for all chapters is openly available from: https://github.com/keithlohse/LMER_Clinical_Science/tree/master/scripts
- 2017 – 2024 Working with Allan Kozlowski, PhD (Michigan State University; Mary Free Bed Hospital), I helped to develop a two-part instructional workshop on longitudinal data analysis for the *American Congress of Rehabilitation Medicine*. The inaugural session was taught at Progress in Rehabilitation Research, 2017, in Atlanta, GA. https://github.com/keithlohse/LMER_Clinical_Science/
- 2019 Working with Zack Zenko, PhD, Chris Hill, PhD, and John Mills, PhD, I organized a workshop on open-science research practices at the annual meeting of the *North American Society for the Psychology of Sport and Physical Activity* in conjunction with the Society for Transparency, Openness, and Replication in Kinesiology.
- 2019 With Lei-Sook Liew, PhD, and James Finley, PhD, I helped to organize a pre-conference workshop entitled, “Reliability and Reproducibility in Neurorehabilitation Research”. My section of the presentation focused on “Data visualization: From quality assurance to final publication”.
- 2020 I conducted a workshop on mixed-effect regression for experimental sciences at Auburn University in February 2020. This content focused on adapting mixed-effects regression models to many common study designs. I hope to continue working on these materials to develop a book/course on the topic: https://keithlohse.github.io/mixed_effects_models/
- 2021 I conducted a workshop on mixed-effect regression for Centre for Motor Control, which is headquarter at the University of Toronto but the workshop was attended by ~60 researchers and trainees across the USA and Canada. I updated previous materials on this topic here: https://keithlohse.github.io/mixed_effects_models/

INVITED PROFESSORSHIPS AND LECTURESHIPS

Invited Talks

1. April 2013: "Applied motor learning: Recent developments in motor learning and skill acquisition." National Strength and Conditioning Association Provincial Clinic, Richmond, BC.
2. May 2015: “Longitudinal data analysis for the clinical sciences.” This was a workshop on mixed-effect linear models that I developed and led at the Washington University of St. Louis School of Medicine, St. Louis, MO.

3. May 2015: "Predicting change during outpatient stroke rehabilitation: A retrospective regression analysis." Presentation at the Washington University School of Medicine, St. Louis, MO.
4. April 2017: "Streamlining clinical science with structured data archives: Data-driven insights from the stroke rehabilitation literature." Invited presentation as part of the School of Biological and Health Systems Engineering seminar series at Arizona State University, Tempe, AZ.
5. November 2017: "Cognitive and affective determinants of motor skill learning: An applied neuroscientific model." Invited keynote presentation at the Second Scientific Conference on Motor Skill Acquisition, Kisakallio Sports Institute, Jyväskylä, Finland.
6. June 2018: "Exploring measurement and methodology in motor behavior." Invited talk for the early career award I received from the *North American Society for the Psychology of Sport and Physical Activity*.
7. November 2018: "Expanding your toolkit: How can you use data science to streamline your research and tackle bigger questions?" Invited participant for a roundtable discussion on data science in neurorehabilitation at the *American Society for Neurorehabilitation* annual meeting. San Diego, CA.
8. May 2020: "Meta-Analysis for Complex Interventions." Presented as part of the webinar "Research in the Time of COVID" hosted by the *American Society for Neurorehabilitation*.
9. November 2020, with Drs. Ste-Marie, Carter, and Miller: "The Logic and Process and Power Analysis: Assumptions, Guesses, and Estimates." Presented as part of a webinar for the *North American Society for the Psychology of Sport and Physical Activity*.
10. November 2022, with Dr. Kristin Sainani: "Statistical best practices in exercise science: From design to analysis". Invited symposium at the *Canadian Society for Exercise Physiology Conference*.
11. January 2023, invited to moderate the session "Predictive Modelling of Stroke Recovery Outcomes" with Dr. Myzoon Ali, Dr. Marcus Saikaley, and Dr. Anna Bonkhoff at the inaugural meeting of *Advances in Stroke Recovery*.

RESEARCH SUPPORT

*denotes and internal grant/award.

Pending Grants and Research Support

in preparation

Liew, Kennedy, Finley, Lohse (Co-PIs)

2024

NIH/NICHD-NCMRR P50

Working Title: Data Science and Analytics for Precision Rehabilitation (DAPR)

Amount: #,###,### USD (240,000 USD subaward to WUSTL)

Role: Co-Investigator/ Director of Resource Core (2.4 calendar months/year)

Active Grants and Research Support (Oldest to Newest)

1. R01MH123723-01A1

Lang, Limperopoulos, Marrus (Co-PIs)

2021-2026

NIH/NIMH R01

Title: Variation in early motor function in autism, cerebellar injury, and normal twins.

Amount: 857,745 USD

Role: Collaborator (1.2 calendar months/year)

2. R25HD105583-01A1

Liew & Kennedy (Co-PIs)

2022-2027

NIH/NICHD-NCMRR R25

Title: Building a data science workforce to improve the reproducibility of rehabilitation research.

Amount: 811,744 USD

Role: Other (Educational Leadership Team Member)

3. 2R37HD068290-10

Lang (PI)

2022-2027

NIH/NICHD R37

Title: Translation of In-Clinic Gains to Gains in Daily Life.

Amount: 2,125,229 USD

Role: Co-Investigator (1.8 calendar months per year)

4. R01AR081881

Harris (PI)

2023-2028

NIH/NIAMS R01

Title: Longitudinal biomechanics and patient-reported outcomes after periacetabular osteotomy for developmental dysplasia of the hip.

Amount: 2,250,000 USD

Role: Co-Investigator (1.2 calendar months per year over 5 years)

5. 1UF1NS125512-01

Lee, JM (PI)

2023-2024

NIH/NIA U01

Title: Washington University/University of Texas Southwestern VCID Consortium Site.

Amount: 2,535,125 USD

Role: Collaborator (1.2 calendar months per year)

6. 1RF1AG079503-01

Goyal, Bauer, Song, & Lee, JM (Co-PIs)

2022-2025

NIH/NIA R01

Title: Imaging and Reversibility of Cellular and Network Metabolic Dysfunction in Alzheimer's Disease.

Amount: 2,244,795 USD

Role: Collaborator (1.2 calendar months per year)

7. R01HD108240

Van Dillen (PI)

2023-2028

NIH/NICHD

Title: Significance of Spinal Movement Impairments in Acute Low Back Pain.

Amount: 630,312 USD

Role: Co-investigator (0.8-1.8 calendar months/year)

Department of Defense - U.S. Army Medical Research and Development Command

Title: Subclinical Pathophysiology of Motor Processing in People with Multiple Sclerosis.

Amount: 250,000 USD

Role: Co-investigator (0.6 calendar months/year)

Previous/Completed Grants and Research Support (Oldest to Newest)

1. FAA 16-C-TTHP-AU	<i>Sefton (PI)</i>	2016-2018
Federal Aviation Administration – Center for Excellence for Technical Training and Human Performance		
Title: Exploring the use of gamification for training.		
Amount: 238,000 USD		
Role: Co-Investigator (0 calendar months).		
2. IGP Project # 170138	<i>Lohse (Co-PI)</i>	2017-2018
†Auburn University Internal Grants Program		
Title: Improving the acquisition of manual-wheelchair skills: An EEG study using motor learning principles.		
Amount: 20,000 USD		
Role: Co-Principle Investigator (with Matt Miller; 0 calendar months).		
3. CoH Seed Grant	<i>Fino (PI)</i>	2019
†University of Utah; College of Health Pilot Grant Program		
Title: Neural activity of balance recovery following concussion.		
Amount: 17,500 USD		
Role: Co-Investigator (0 calendar months/year)		
4. R01-NCE	<i>Van Dillen (PI)</i>	2019
NIH/NICHHD/NCMRR 5 R01 HD047709		
Title: Spinal control during functional activities to improve low back pain outcomes.		
Role: Consultant		
5. University of Utah	<i>Lohse & Weatherwax (Co-PI)</i>	2020-2021
†University of Utah Graduate Teaching Assistantship		
Title: The Development and Implementation of an Online Laboratory for an Undergraduate Hybrid Biomechanics Course.		
Role: Co-Mentor (0 calendar months/year)		
6. CIHR PTJ 153330	<i>Boyd (PI)</i>	2017-2022
Canadian Institutes of Health Research/Instituts de recherche en santé du Canada		
Title: Characterizing Arm Recovery in People with Severe Stroke (CARPSS).		
Amount: 665,000 CAD		
Role: Co-Investigator (0 calendar months/year)		
7. HSF/CPSR	<i>Eng (PI)</i>	09/2021-2/2022
Heart and Stroke Foundation/Canadian Partnership for Stroke Recovery Operating Grant		
Title: Determining Optimal post-Stroke Exercise (DOSE).		
Role: Consultant		
8. #UL1TR002345	<i>Lohse (PI)</i>	2022
†WUSTL ICTS “Just in Time” Grant		
Title: Improving information architecture in neurology: Creating an open-access database of harmonized stroke trials.		
Amount: 4,950 USD		
Role: Principal Investigator (0 calendar months per year)		
9. #202207003	<i>Lang (PI)</i>	2023
†WUSTL ICTS “Just in Time” Grant		
Title: Integrating wearable sensor data in to the rehabilitation clinical environment.		
Amount: 5,000 USD		
Role: Co-Investigator (0 calendar months per year)		

10. R21 AT012088-01	<i>Schaefer (PI)</i>	2023
NIH/NICCIH R21 (sub-award to WUSTL)		
Title: Measuring expectancy effects of transcranial direct current stimulation on motor learning.		
Amount: 200,000 USD (19,268 USD to WUSTL)		
Role: Co-Investigator (0.6 calendar months per year)		
This grant was awarded but I had to withdraw as a co-investigator due to my involvement in other projects.		
11. NCCIH R34 AT011015	<i>Earhart & Rawson (PIs)</i>	2021-2023
NIH/NCCIH		
Title: Moving Mindfully: A MBSR-Centered Approach to Freezing in Parkinson Disease.		
Amount: 708,750 USD		
Role: Co-Investigator (1.2 calendar months/year)		
12. ICTS/WUSTL	<i>McPherson (PI)</i>	2022-2023
†KL2 Career Development Award		
Title: Neural mechanisms of motor heterogeneity in multiple sclerosis		
Amount: 246,976 USD		
Role: Supplemental Mentor (0 calendar months)		
13. ICTS/WUSTL	<i>McPherson (PI)</i>	2024
†WUSTL ICTS – Clinical and Translational Research Funding Program		
Title: Subclinical Pathophysiology of Voluntary Motor Processing in People with Multiple Sclerosis.		
Amount: 50,000 USD		
Role: Co-investigator (0.6 calendar months/year)		

Grant and Research Support Not Funded (Oldest to Newest)

1. Not Funded	<i>Lohse (PI)</i>	2014
NIH / NINDS R03		
Title: Centralized open-access research (COAR): A database for stroke rehabilitation.		
Role: Principal Investigator		
2. Not Funded	<i>Lohse (PI)</i>	2015
NIH / NINDS R03		
Title: Centralized open-access research (COAR): A database for stroke rehabilitation.		
Role: Principal Investigator		
3. Not Funded	<i>Lohse (PI)</i>	2018
†Center on Aging, University of Utah, pilot grant program		
Title: Cortical Noise as a Biomarker for Age-Related Declines in Cognitive and Motor Function.		
Role: Principal Investigator with Kevin Duff (0 calendar months).		
4. Not Funded	<i>Dorval (Co-PI)</i>	2018
NIH / NINDS R01		
Title: The Parkinsonian Relationship between Beta-Activity and Movement Kinetics.		
Role: Co-Principal Investigator (2 calendar months/year for 5 years).		
5. Not funded	<i>Lohse (PI)</i>	2018
NIH KL2		
Title: Getting More Out of Data: Personalized Medicine through Advanced Statistical Modelling in Rehabilitation.		
Role: Principal Investigator (6.72 calendar months/year for 2 years).		
Mentors: Jacob Kean and Tom Greene.		
6. Not Funded	<i>Lohse (PI)</i>	2018
National Science Foundation: Science of Learning Initiative		
Title: Measuring and Modeling Age-Related Changes in Reinforcement Learning.		
Role: Principal Investigator (2 calendar months/year for 3 years).		
(Sub-awards to Matt Miller and Matt Jones as co-investigators).		
7. Not Funded	<i>Lohse (PI)</i>	2018
†University of Utah; College of Health Pilot Grant Program		
Title: Sensorimotor integration and cognitive compensation in walking and turning for older adults.		
Role: Principle Investigator (0 calendar months/year)		
8. Not Funded	<i>Williams (PI)</i>	2019
The PAC-12 Student-Athlete Health and Well-Being Grant Program		
Title: Modeling injury and mental health risk in a sample of collegiate athletes.		
Amount: 675,000 USD		
Role: Co-Investigator (1 calendar month/year for 2 years)		
9. Not Funded	<i>Williams (PI)</i>	2018
NIH / NCI R01		
Title: Developing effective training programs for enhancing perceptual-cognitive expertise in radiographic imaging.		
Role: Co-Investigator (1.2 calendar months/year for 5 years)		
10. Not Funded	<i>Williams (PI)</i>	2018
NIH/ NIA R01		
Title: Multi-sensory processing for real-world spatial navigation in older adults: the influence of mobility-related anxiety.		
Role: Co-Investigator (1.2 calendar months/year for 5 years)		
11. Not Funded	<i>Euler, Lohse, & Davis (Co-PIs)</i>	2018
†University of Utah Neuroscience Initiative Pilot Seed Grant		
Title: EEG Biomarkers of Mental Exertion: Validation and Implications for Personalized Medicine.		
Role: Co-Principle Investigator (0 calendar months/year)		

12. Not Funded	<i>Lohse (PI)</i>	2019
†University of Utah, Center on Aging Pilot Grants Program		
Title: Cortical Noise as a Biomarker for Age-Related Declines in Cognitive and Motor Function.		
Amount: 15,914 USD		
Role: Principle Investigator (0 calendar months/year)		
13. Not Funded	<i>Lohse (PI)</i>	2019
†University of Utah, Center on Aging Innovations Grants Program		
Title: The role of mobility-related anxiety in anticipatory and reactive balance control in older adults.		
Amount: 39,951 USD		
Role: Principle Investigator (0 calendar months/year)		
14. Not Funded	<i>Williams (PI)</i>	2019
The PAC-12 Student-Athlete Health and Well-Being Grant Program		
Title: Modeling injury and mental health risk in a sample of collegiate athletes.		
Amount: 300,000 USD		
Role: Co-Investigator (1 calendar month/year for 2 years)		
15. Not Funded	<i>Podlog (PI)</i>	2019
AHRQ R03		
Title: Enhancing Adherence to Physical Therapy for Chronic Low Back Pain: The Role of Tripartite Efficacy Beliefs.		
Amount: 99,486 USD		
Role: Co-Investigator (0.15 calendar months/year)		
16. Not Funded	<i>Lohse (PI)</i>	2019
NIH/NIA R21 PAR-19-053		
Title: The neural and cognitive consequences of anxiety in shaping fall risk for older adults.		
Amount: 275,000 USD		
Role: Principal Investigator (2.4 calendar months/year for 2 years)		
17. Not Funded	<i>Boyd (PI)</i>	2019
Canadian Institutes of Health Research/Instituts de recherche en santé du Canada		
Title: Individualized pathways to recovery after stroke.		
Amount: 940,000 CAD		
Role: Co-Investigator (0.5 calendar months/year)		
18. Not Funded	<i>Lohse (PI)</i>	2019
†University of Utah, Center for Clinical and Translational Science Pilot Program		
Title: Neural, affective, and cognitive features of fall risk for older adults.		
Amount: 30,000 USD		
Role: Principal Investigator (0 calendar month/year for 1 year)		
19. Not Funded	<i>French (PI)</i>	2020
†Utah CCTS S.T.A.R.S. TL1 Program		
Title: Leveraging the electronic medical record to understand the relationship between functional mobility recovery and health service outcomes after stroke.		
Role: Mentor (0 calendar months/year)		
20. Not Funded	<i>Rimer (PI)</i>	2020
The PAC-12 Student-Athlete Health and Well-Being Grant Program		
Title: An Applied Epidemiological Approach to Reducing the Incidence of Injury in Collegiate Athletics.		
Amount: 150,000 USD		
Role: Co-Investigator (1 calendar month/year for 2 years)		

21. Not Funded	<i>Lohse/Williams (Co-PI)</i>	2020-2022
Armament Research, Development and Engineering Center (ARDEC)		
Title: The influence of stress on perception and decision-making in combat.		
Amount: 302,002 USD		
Role: Co-Principal Investigator (1 calendar month/year)		
Although awarded, these funds were never released. This grant was competitively awarded through Thor Industries, a sub-contractor working with ARDEC. Funds were redirected following COVID19.		
22. Not Funded	<i>Fritz (PI)</i>	2020
NIH/NCCIH U01 (Clinical Trial Required)		
Title: SMT Therapeutic Alliance.		
Amount: 3,812,500.00 USD		
Role: Co-Investigator (1 calendar months/year)		
23. Not Funded	<i>Kittleson (PI)</i>	2020
AHRQ R21 (sub-award to University of Utah)		
Title: Development of personal prognostic profiles for dynamic and static balance.		
Amount: 250,000 USD (61,000.00 USD)		
Role: Co-Investigator (1 calendar months/year)		
24. Not Funded	<i>Williams (PI)</i>	2020
AHRQ R01		
Title: Testing evidence-based learning principles in radiology training.		
Amount: 1,906,250 USD		
Role: Co-Investigator (1 calendar months/year)		
25. Not Funded	<i>Hayes (PI)</i>	2020
†University of Utah CCTS Pilot Grant		
Title: Cycling intervention with biofeedback of power symmetry for patients with stroke in an inpatient rehabilitation facility: pilot randomized controlled trial.		
Amount: 20,000 USD		
Role: Co-Investigator (0 calendar months per year)		
26. Not Funded	<i>Schaefer & Peterson (co-PIs)</i>	2020
NIH/NIA R01 (sub-award to University of Utah)		
Title: Using cognition to predict individual differences in motor learning for older adults with and without Parkinson disease.		
Amount: 298,649 USD (93,485 USD to Utah)		
Role: Co-Investigator (1.2 calendar months per year)		
27. Not Funded	<i>Liew (PI)</i>	2020
NIH/NICHD-NCMRR R25		
Title: Building a data science workforce to improve the reproducibility of rehabilitation research.		
Amount: 811,744 USD		
Role: Consultant		
28. Not Funded	<i>Harris (PI)</i>	2021
NIH/NIAMS R01		
Title: Multi-Domain Biomechanics after Periacetabular Osteotomy for Developmental Dysplasia of the Hip.		
Amount: ###,### USD		
Role: Co-Investigator (0 to 1.2 calendar months per year over 5 years)		
29. Not Funded	<i>McPherson (PI)</i>	2021
†KL2 at WUSTL		
Title: Characterizing excitatory, inhibitory, and neuromodulatory components of the voluntary motor command in people with multiple sclerosis.		
Amount: ###,### USD		
Role: Co-Investigator (0 calendar months)		

30. Not Funded	<i>McPherson (PI)</i>	2021
NIH/NCMRR R03		
Title: Characterizing excitatory, inhibitory, and neuromodulatory components of the voluntary motor command in people with multiple sclerosis.		
Amount: 100,000 USD		
Role: Co-Investigator (0.6 calendar months)		
31. Not Funded	<i>Kittleson (PI)</i>	2021
AHRQ R21 (sub-award to WUSTL)		
Title: Development of personal prognostic profiles for dynamic and static balance.		
Amount: 250,000 USD (61,000 USD to WUSTL)		
Role: Co-Investigator (1 calendar months/year)		
32. Not Funded	<i>Schaefer & Peterson (co-PIs)</i>	2021
NIH/NIA R01 (sub-award to WUSTL)		
Title: Using cognition to predict individual differences in motor learning for older adults with and without Parkinson disease.		
Amount: 298,649 USD (93,485 USD to WUSTL)		
Role: Co-Investigator (1.2 calendar months per year)		
33. Not Funded	<i>Schaefer (PI)</i>	2021
NIH/NICCIH R21 (sub-award to WUSTL)		
Title: Measuring expectancy effects of transcranial direct current stimulation on motor learning.		
Amount: 200,000 USD (19,268 USD to WUSTL)		
Role: Co-Investigator (0.6 calendar months per year)		
34. Not Funded	<i>Zellers (PI)</i>	2022
NIH/NIAMSD K01		
Title: Human Achilles tendon structural biomarkers in diabetic and non-diabetic tendinopathy.		
Amount: 630,747 USD		
Role: Collaborator (0.0 calendar months per year)		
35. Not Funded	<i>McPherson (PI)</i>	2021
NIH/NCMRR K01		
Title: Characterizing excitatory, inhibitory, and neuromodulatory components of the voluntary motor command in people with multiple sclerosis.		
Amount: 475,000 USD		
Role: Co-Mentor (0.0 calendar months per year)		
36. Not Funded	<i>Peterson (PI)</i>	2022
VA Merit Award (sub-award to WUSTL)		
Title: Using cognition to predict individual differences in motor learning for older adults with Parkinson's disease.		
Amount: 1,194,387 USD (100,000 USD to WUSTL)		
Role: Collaborator (2 calendar months per year)		
37. Not Funded	<i>Lohse (PI)</i>	2023
NIH/NINDS R61/33		
Title: Improving information architecture in neurology: Making stroke trial data FAIR.		
Amount: 1,164,261 USD		
Role: Principal Investigator		
38. Not Funded	<i>Zellers (PI)</i>	2023
NIH/NIAMSD R21		
Title: Applying photoacoustic imaging to quantify human tendon vasculature.		
Amount: 274,999 USD		
Role: Collaborator (2.4 calendar months in year 1, 1.2 in year 2)		

39. *Not Funded*

Schaefer (PI)

2023

NIH R03 (sub-award to WUSTL)

Title: Visuospatial training for boosting functional upper-extremity motor training in older adults.

Amount: ##### USD (##### USD to WUSTL)

Role: Co-Investigator (0.3 calendar months per year)

40. *Not Funded*

Peterson (PI)

2023

VA Merit Award (sub-award to WUSTL)

Title: Using cognition to predict individual differences in motor learning for older adults with Parkinson's disease.

Amount: 1,194,387 USD (100,000 USD to WUSTL)

Role: Collaborator (2 calendar months per year)

TRAINEE/MENTEE/SPONSORSHIP RECORD

Professional Mentees

2022 – 2024	Laura McPherson, PhD	Provided supervision for multivariate statistics, unsupervised learning algorithms, and dimension reduction techniques. (KL2)
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Post-Doctoral Trainees

2017 – 2020	Bradley Fawver, PhD	(researcher at US Army Medical Research Directorate-West)
2018 – 2021	Tiphonie Raffegeau, PhD	(faculty at George Mason University)
2022 – present	Allison Miller, PhD, DPT	(currently at WUSTL)
2024 – present	Chelsea MacPherson, PhD, DPT	(starting September 2024)

Doctoral Trainees

2014 – 2017	Amber Leiker	(faculty at LaGrange College)
2016 – 2021	Anupriya Pathania	(graduated 2021)
2018 – 2023	Mindie Clark	(faculty at Rocky Mountain College)

Masters Trainees

2019 – 2021	Jason Dude	(bioinformaticist at Washington University in Saint Louis)
2020 – 2022	Sarah Taylor	(clinical research coordinator at University of Utah)

Undergraduate Trainees

(Below I call attention to only those trainees who have won awards or specific recognition.)

2019	Cammy Stukel	Undergraduate Research Opportunities Program Grant recipient (1200 USD; summer semester).
2019	Sarah Taylor	Undergraduate Research Opportunities Program Grant recipient (1200 USD; summer semester).
2019	Sarah Taylor	HKR Distinguished Undergraduate Student Award winner.
2019	Cammy Stukel	Undergraduate Research Opportunities Program Grant recipient (1200 USD; fall semester).
2020	Ashlee McBride	Undergraduate Research Opportunities Program Grant recipient (1200 USD; spring semester).
2020	Sarah Taylor	Undergraduate Research Opportunities Program Grant recipient (1200 USD; spring semester).
2020	Ellen Williams	Undergraduate Research Opportunities Program Grant recipient (1200 USD; spring semester).
2020	Ellen Williams	HKR Distinguished Undergraduate Student Award winner.

Doctoral Student Committees

Student	Advisor	University	Quals/Comps	Proposal	Defense
<i>Adam Jagodinsky</i>	W. Weimar	Auburn University	2014	2015	2016
<i>Taylor Holt</i>	G. Oliver	Auburn University	2014	2015	2015
<i>Lisa Henning</i>	G. Oliver	Auburn University	2015	2016	2016
<i>Kirk Grand</i>	M. Miller	Auburn University	2015	2016	2016
<i>Maurice Godwin</i>	M. Miller	Auburn University	2015	2016	<i>na</i>
<i>Andrew Thompson</i>	M. Miller	Auburn University	2015	2016	2016
<i>Adam Benz</i>	J. Porter	Edith Cowan	<i>na</i>	<i>na</i>	2016
<i>Leslie Niedert</i>	H. Kluess	Auburn University	2015	2016	2017
<i>Jacqueline Irwin</i>	M. Pangelinan	Auburn University	2016	2016	2017
<i>Christopher Wilburn</i>	W. Weimar	Auburn University	2016	2017	2017
<i>Lorraine Smallwood</i>	W. Weimar	Auburn University	2016	2017	2018
<i>Jeremy McAdam</i>	J. Sefton	Auburn University	2016	2016	2018
<i>Justin Moody</i>	M. Pangelinan	Auburn University	2016	<i>na</i>	<i>na</i>
<i>Marcos Daou</i>	M. Miller	Auburn University	2016	2016	2018
<i>Brendan Ostlund</i>	E. Conradt	University of Utah	<i>na</i>	2018	2019
<i>Masahiro Yamada</i>	L. Raisbeck	UNCG	2019	2020	2020
<i>Joseph Thomas</i>	A.M. Williams	University of Utah	2019	2020	2021
<i>Rhiannon Cowan</i>	A.M. Williams	University of Utah	2019	2020	2021
<i>Melinda Schreiber</i>	A. Merryweather	University of Utah	<i>na</i>	2019	2021
<i>Peiyuan Wang</i>	S. Schaefer	ASU	2019	2020	2021
<i>Mariane Bacelar</i>	M. Miller	Auburn University	2020	2021	2022
<i>Laura St. Germain</i>	M. Carter	McMaster University	2019	2020	2023
<i>Brady DeCouto</i>	A.M. Williams	University of Utah	2020	2021	2022
<i>Angela Weston</i>	L. Dibble	University of Utah	2020	2021	2023
<i>Danica Dummer</i>	R. Marcus	University of Utah	2020	2021	2022
<i>Sara Lotempio</i>	D. Strayer	University of Utah	<i>na</i>	2021	2022
<i>Juliana Parma</i>	M. Miller	Auburn University	2021	2023	2023
<i>Jessica Barth</i>	C. Lang	WUSTL	<i>na</i>	2021	2022
<i>Jeffrey Konrad</i>	C. Lang	WUSTL	<i>na</i>	2021	2024
<i>Cielita Lopez-Lennon</i>	L. Dibble	University of Utah	2022	--	--
<i>Lauren Tueth</i>	G. Earhart	WUSTL	<i>na</i>	2022	2024
<i>Kayla Krueger</i>	L. Van Dillen	WUSTL	<i>na</i>	2023	--
<i>Mohammad Tollabi</i>	S. T. Boroujeni	University of Tehran	<i>na</i>	<i>na</i>	2024
<i>Samah Gassass</i>	B. Phillip	WUSTL	2024	--	--
<i>Madison Wissman</i>	M. Harris	WUSTL	--	--	--

Note: "--" denotes a committee not yet transpired. "na" denotes a position I did not fill or not applicable.

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* indicates a paper on which I was a senior author providing mentorship, guidance, and/or oversight.

Manuscripts in Preparation

1. **Lohse, K.R.**, Kliethermes, S., & Fulk, G. (in preparation). $P < 0.05$? Statistical guidance for authors and reviewers on p-values, confidence intervals, and Bayesian statistics. To be submitted to *Journal of Neurologic Physical Therapy*.
2. *Miller, A.E., **Lohse, K.R.**, Bland, M.D., Konrad, J.D., Hoyt, C.R., & Lang, C.E. (in preparation). A large, accessible, harmonized upper and lower limb accelerometry dataset. To be submitted to *Scientific Data*.
3. **Lohse, K.R.**, & Vickers, A.J. (in preparation). "60% of the time, it works every time.": Four reasons to avoid responder analysis in medical research. To be submitted to *Journal of Orthopedic and Sports Physical Therapy*.

Manuscripts Under Peer-Review

1. *Konrad, J.D., **Lohse, K.R.**, Marrus, N., & Lang, C.E. (under revision). Trial-to-trial motor behavior during a reinforcement learning task in children ages 6 to 12. *Human Movement Science*.
2. *Vehar, J., Duff, K., **Lohse, K.R.**, & Euler, M.J. (under review). Examining the clinical potential of the concurrent EEG aperiodic slope in cognitive testing. *Journal of Clinical and Experimental Neuropsychology*.
3. Dummer, D.R., Young, D., **Lohse, K.R.**, Thackeray, A., Humphreys, J., & Marcus, R. (under review). Predicting post-hospital health care utilization with machine learning using patient specific home environment, social support, and physical function factors. *Physical Therapy*.

Peer-Reviewed Articles

1. **Lohse, K.R.**, Sherwood, D.E., & Healy, A.F. (2010). How changing the focus of attention affects performance, kinematics, and electromyography in dart throwing. *Human Movement Science*, 29, 542-555. doi:10.1016/j.humov.2010.05.001.
2. **Lohse, K.R.**, Healy, A.F., & Sherwood, D.E. (2010). Mental practice in the intermanual transfer of motor skills. *Journal of Imagery Research in Sport and Physical Activity*, 5, A1. doi: 10.2202/1932-0191.1052.
3. **Lohse, K.R.**, Sherwood, D.E., & Healy, A.F. (2011). Neuromuscular effects of shifting the focus of attention in a simple force production task. *Journal of Motor Behavior*, 43, 174-184. doi: 10.1080/00222895.2011.555436.
4. **Lohse, K.R.** & Sherwood, D.E. (2011). Defining the focus of attention: Effects of attention on perceived exertion and fatigue. *Frontiers in Psychology*, 2, 332. doi: 10.3389/fpsyg.2011.00332.
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8. Carpenter, S.K., **Lohse, K.R.**, Healy, A.F., Bourne, L.E., & Clegg, B. (2013). External focus of attention improves retention and transfer in a speeded aiming task. *Journal of Applied Research in Memory and Cognition*, 2, 14-19. doi:10.1016/j.jarmac.2012.11.002
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Book Chapters

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Pre-Prints (Not Peer-Reviewed)

1. Caldwell, A. R., et al. (including **Lohse, K. R.**) (2019). Moving sport and exercise science forward: A call for the adoption of more transparent research practices. *SportRxiv*. doi: 10.31236/osf.io/fxe7a
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 13. Konrad, J.D., Marrus, N., Lohse, K.R., Thuet, K.M., & Lang, C.E. (2024). Motor competence is related to acquisition of error-based but not reinforcement learning. *SSRN*. <https://dx.doi.org/10.2139/ssrn.4687606>

Conference Presentations

(This is an abbreviated list showing what I consider my most substantive presentations.)

1. **Lohse, K. R.** (2014, November). How much is more? Meta-analytic approaches to studying dose in rehabilitation. *American Society for Neurorehabilitation*. Part of a symposium with Lara Boyd and Catherine Lang. Washington DC, US.
2. **Lohse, K.R.**, Boyd, L.A., & Hodges, N.J. (2015). Engaging environments enhance motor learning in a computer gaming task. *North American Society for the Psychology of Sport and Physical Activity*. Portland, OR.
3. **Lohse, K.R.**, Buchanan, T.L., & Miller, M.W. (2015). Under-powered and over-worked: Problems with data analysis in motor learning studies. *North American Society for the Psychology of Sport and Physical Activity*. Portland, OR.
4. **Lohse, K.R.**, Boyd, L.A., & Lang, C.E. (2015, October). Centralized Open-Access Research (COAR): A database for stroke rehabilitation. *American Society of Neurorehabilitation*. Chicago, IL.
5. Bland, M.D., **Lohse, K.R.**, & Lang, C.E. (2016, May). Quantifying change during outpatient stroke rehabilitation: A retrospective regression analysis. *9th World Congress for Neurorehabilitation*. Philadelphia, PA.
6. Hayward, K.S., Schmidt, J.Y., **Lohse, K.R.**, et al. (2016, May). Severe upper limb impairment after neurological injury: A systematic review of individual data or brain-derived biomarkers. *9th World Congress for Neurorehabilitation*. Philadelphia, PA.
7. Leiker, A., Bruzi, A., Nelson, M., Wegman, R., Miller, M.W., & **Lohse, K.R.** (2016, June). The effects of self-controlled difficulty progression on engagement and learning in a computer gaming task. *North American Society for the Psychology of Sport and Physical Activity*. Montreal, QC.
8. **Lohse, K.R.** (2016, November). How do game mechanics in virtual environments impact motivation, engagement and motor learning in healthy young adults? In D. Levac (Chair), "Maximizing motivation and engagement during motor learning: insights from practice in a virtual environment" symposium at the 93rd *Annual Meeting of the American Congress of Rehabilitation Medicine*. Chicago, IL.
9. **Lohse, K.R.** (2016, November). Information architecture in rehabilitation trials: The Centralized Open-Access Rehabilitation Database for Stroke (SCOAR). In L. Sook-Liew and S. Cramer (Chairs), "'Big Data' for Rehabilitation: Promises, Pitfalls, and Future Potential" symposium at the *Annual Meeting of the American Society of Neurorehabilitation*. San Diego, CA.
10. **Lohse, K.R.**, Pathania, A., Wegman, R., Boyd, L.A., & Lang, C.E. (2017, June). Insufficient reporting of control therapies in stroke rehabilitation trials: A systematic review and meta-analysis. *North American Society for the Psychology of Sport and Physical Activity*, San Diego, CA.
11. Hayward, K.S., Ferris, J.K., **Lohse, K.R.**, Cramer, S.C., Borich, M.R., Stewart, J.C., Borstad, A., Dukelow, S., Cassidy, J., Findlater, S., Neva, J.L., Liew, S.L., & Boyd, L.A. (2017, November). Regional diffusion differences in people with severe upper limb impairment post-stroke: A preliminary neuroimaging mega-analysis. Poster

- presentation at the *Annual Meeting of the American Society of Neurorehabilitation*. Washington DC.
12. **Lohse, K.R.**, (2018, June). Longitudinal data-analysis techniques in motor learning and development: A focus on time-varying covariates. Symposium presentation at the annual meeting of the *North American Society for the Psychology of Sport and Physical Activity*. Denver, CO.
 13. **Lohse, K.R.**, (2018, June). Exploring Measurement and Methodology in Motor Behavior. Presentation at the *North American Society for the Psychology of Sport and Physical Activity*. Denver, CO. (*I gave this talk upon receipt of my Early Career Distinguished Scholar Award from NASPSPA.*)
 14. **Lohse, K.R.**, Zheng, T., Greene, T., Kean, J., Presson, A., Shen, J.C. (2018, November). Inpatient Cognitive Rehabilitation following Traumatic Brain Injury: Main Effects and Patient by Therapy Interactions using Causal Inference Models. Poster presentation at the annual meeting of the *American Society for Neurorehabilitation*. San Diego, CA.
 15. Hayward, K.S., Ferris, J.K., **Lohse, K.R.**, Borich, M.R., Cramer S.C., Borstad, A., Stewart, J.C., Cassidy, J., Neva, J.L., & Boyd, L.A. (2018, November). Severity of Impairment is Important when Exploring Biomarkers of Upper Limb Outcome Post-Stroke. Poster presentation at the annual meeting of the *American Society for Neurorehabilitation*. San Diego, CA. (*Won the 2018 Fletcher H. McDowell Award for the best clinical science abstract.*)
 16. **Lohse, K.R.** (2019, October). Data visualization: From quality assurance to final publication. Part of “Reliability and Reproducibility in Neurorehabilitation Research” with Liew, S-L. and Finley, J.M. at the annual meeting of the *American Society for Neurorehabilitation*. Chicago, IL.
 17. Pathania, A., Clark, M., Cowan, R., Williams, E., Raffegeau, T.E., Euler, M., Duff, K. & **Lohse, K.R.** (2020, June). Explaining age-related declines in cognitive and motor function with EEG power spectra: A cross-sectional feasibility study. Oral presentation at the annual meeting of the *North American Society for the Psychology of Sport and Physical Activity*.
 18. McPherson LM, Negro F, Thompson CK, **Lohse K**, Powers RK, Farina D, Heckman CJ, Dewald JP. (2021) Pathological inhibition limits motor unit rate modulation during voluntary contractions in a muscle-dependent manner post-stroke. At the annual meeting of the *American Society for Neurorehabilitation*. Virtual.
 19. Taylor, S., Fawver, B., Thomas, J., Williams, A.M., & **Lohse, K.R.** (2022, June). Chaotic practice schedules create more orderly responses: A paradoxical secondary analysis. Oral presentation at the annual meeting of the *North American Society for the Psychology of Sport and Physical Activity*
 20. **Lohse, K.R.**, Bacelar, M.F.B., Parma, J., Cabral, D., St. Germain, L., McKay, B., Carter, M.J., & Miller, M.W. (2022, June). Making Strong Predictions: Testing Causal Hypotheses in Motor Behavior Studies. Oral presentation at the annual meeting of the *North American Society for the Psychology of Sport and Physical Activity*.
 21. Aldridge, C., Krishnagopal, S., **Lohse, K.R.**, Hsu, F-C., Keene, K., Worrall, B., & Braun, R. (February, 2023). Genome Wide Association Study Of Stroke Recovery Phenotypes Defined By Serial NIH Stroke Scale Scores. Oral presentation at the *AHA International Stroke Conference*.
 22. de Havenon, A., Skolarus, L.E., Aldridge, C.M., Braun, R.G., Cole, J.W., Cramer, S.C., Lindgren, A.G., Sunmonu, N.A., Worrall, B.B., & **Lohse, K.R.** (February, 2023). Understanding patterns of missingness in acute ischemic stroke trials: A secondary analysis of pooled patient-level follow-up data. Oral presentation at the *AHA International Stroke Conference*.
 23. Marrus, N., **Lohse, K.R.**, Konrad, J., Bland, M., Campbell, M., Davis, S., Mei, P., Hines-Wilson, M., Balser, D., Adebogun, R., Pileggi, M., Klin, A., Jones, W., Lieber, H., Iverson, J., White, S., Constantino, J., & Lang, C. (May, 2024). Heritability of accelerometry metrics in infancy and implications for early ASD screening. Oral presentation at the *International Society for Autism Research Annual Meeting*.
 24. **Lohse, K.R.**, Fulk, G.D., Finley, J., Kliethermes, S., Boyne, P.E., Reisman, D.S., & Stewart, J.C. (March, 2024). Demystifying statistical inference: Hypothesis tests, confidence intervals, effect size, and writing a discussion. Symposium presentation at the *American Physical Therapy Association Combined Sections Meeting*.