

SHAWN M. REESE

Curriculum Vitae

(304)-333-3720; shawn.reese@fairmontstate.edu

Education

<i>July 2024</i>	Ph.D.	Health, Leisure, and Human Performance Oklahoma State University
<i>May 2023</i>		Graduate Certificate in Neuroscience Oklahoma State University
<i>August 2020</i>	M.S.	Exercise Science Bloomsburg University of Pennsylvania
<i>May 2017</i>	B.S.	Health Science Lock Haven University of Pennsylvania Concentration: <i>Pre-Physician's Assistant</i>

Professional Experience

Fairmont State University – Department of Health and Human Performance

- 2024 – *present* Assistant Professor of Exercise Science

Oklahoma State University – Department of Kinesiology, and Applied Health and Recreation

- 2020 – 2024 Graduate Teaching/ Research Assistant
Advisor: Dr. Jason M. DeFreitas

Bloomsburg University of Pennsylvania – Department of Health and Exercise Science

- 2018– 2020 Graduate Teaching Assistant
Advisor: Dr. Kyle S. Beyer

Professional Memberships

- Society for Neuroscience (SfN)
- American College of Sports Medicine (ACSM)

RESEARCH / SCHOLARSHIP

External Funding

Summary of External Funding

<i>Total Grants/Contracts Requested:</i>	<i>2</i>
<i>Funded:</i>	<i>1</i>
<i>Not Funded:</i>	<i>1</i>

Principal Investigators: J.M. DeFreitas and **S.M. Reese**

Project Title: “Effects of Age on Cortical Sensorimotor Processing”

Funding Program: Doctoral Student Research Grant

Funding Agency: American College of Sports Medicine Foundation (ACSMF)

Amount: \$5,000 direct cost requested, *not funded*

Duration: 1 year

Principal Investigators: D.R. Dewig and **S.M. Reese**

Funding Program: Science, Technology, and Research Instrumentation (STaR) Grant

Funding Agency: West Virginia Higher Education Policy Commission

Amount: \$19,742 direct cost requested, *funded*

Peer-Reviewed Journal Publications

In Press:

1. MacLennan RJ, Renshaw DW, Danielson TL, Gruber AD, Harper L, **Reese SM**, Mattern K, Steven WP. Applications of cortico-cortical paired associative stimulation for age-related declines of hand function. Accepted to *Physiol J.* on Nov. 1, 2023
2. MacLennan RJ, Hernandez-Sarabia JA, **Reese SM**, Shields JE, Smith CM, Stute K, Collyar J, Olmos AA, Danielson TL, MacLennan DL, Pagan JI, Girts RM, Harmon KK, Coker NA, Carr JC, Ye X, Perry JW, Stock MS, and J.M. DeFreitas. fNIRS is capable of distinguishing laterality of lower body contractions. Submitted to *Experimental Brain Research* on May., 2024

In Preparation:

1. **Reese, SM**, Smith, CM, Danielson TL, Parodi M, DeFreitas JM. Does the Somatosensory Cortex Modulate Ia Afferent Spinal Circuitry In Young And Older Adults.
2. **Reese, SM**, Smith, CM, Shields, JE, Olmos, AA, Voskuil, CC, Ye, X, Stock, MS, Carr, JC, DeFreitas, JM. The Effects of Mirror Illusion and Contraction Types on Interhemispheric Inhibition.
3. MacLennan RJ, **Reese SM**, Olmos AA, Swanson CW, DeFreitas JM. The effects of the corticospinal tract’s contribution to gross vs. fine motor control.

4. Renshaw DW, DeFreitas JM, **Reese SM**, MacLennan RJ, Farthing JP. Inability to suppress physiological mirror activity during sustained and discrete maximal unilateral handgrip contractions.
5. Shields JE, Dos Santos ML, Smith CM, **Reese SM**, DeFreitas JM. Four weeks of resistance training may improve peripheral nerve function in both young and older adults.

Refereed Conference Presentations

Total Presentations: 14

Past: 14

Upcoming: 0

1. **Reese, SM**, Smith, CM, Shields, JE, Olmos, AA, Voskuil, CC, Ye, X, Stock, MS, Carr, JC, DeFreitas, JM. The Effects of Mirror Illusion and Contraction Types on Interhemispheric Inhibition. Neuroscience – 2023, Washington D.C.
2. Smith, CM, **Reese, SM**, Shields, JE, Olmos, AA, Voskuil, CC, Ye, X, Stock, MS, Carr, JC, DeFreitas, JM. The Prevalence of an Ipsilateral Silent Period as a Measure of Interhemispheric Inhibition During Mirror Illusions. Neuroscience- 2023, Washington D.C.
3. Smith CM, Shields JE, **Reese SM**, Dos Santos ML, and DeFreitas JM, Is Nerve Size Sensitive to Potential Changes in Neuron Size? A Preliminary Study. American College of Sports Medicine Annual Meeting - 2023, Denver, CO
4. Shields JE, Smith CM, **Reese SM**, Dos Santos ML and DeFreitas JM, Quantifying the Trainability of Peripheral Nerve Function in Young and Older Adults. American College of Sports Medicine Annual Meeting - 2023, Denver, CO
5. **Reese SM**, Smith CM, Olmos AA, Shields JE, Voskuil C, Ye X, Stock MS, Carr JC, and DeFreitas JM, Does the Type of Contraction Performed During Mirror Illusion Alter Hemispheric Communication? A Preliminary Study. CSACSM – 2023, Tulsa, OK
6. Smith CM, Shields JE, **Reese SM**, Dos Santos ML, and DeFreitas JM, Do Nerves Grow in Response to Resistance Training? A Preliminary Study. CSACSM – 2023, Tulsa, OK
7. MacLennan RJ, Hernandez-Sarabia J, **Reese SM**, Shields JE, Smith CM, Stute K, Collyar J, Olmos AA, Danielson TJ, MacLennan DL, Pagan JJ, Cirits RM, Harmon KK, Coker N, Carr JC, Ye X, Perry JW, Stock MS, DeFreitas JM. fNIRS brain imaging is capable of discerning hemispheric laterality during lower-body contractions. CSACSM- 2023, Tulsa, OK
8. Renshaw, D.W., DeFreitas J.M., **Reese S.M.**, MacLennan, R., Farthing, J.P. Physiological mirror activity during sustained and discrete maximal unilateral handgrip contractions. International Society of Electrophysiology and Kinesiology Congress – 2022, Quebec City, Quebec
9. **Reese, SM**, Shields JE, MacLennan RJ, Smith CM, Olmos AA., DeFreitas JM. Does the magnitude of muscle atrophy from limb immobilization depend on how much muscle there was to start? American College of Sports Medicine Annual Meeting - March 2022, Fayetteville, AK
10. Danielson TL, **Reese SM**, Smith CM, and J.M. DeFreitas. The reproducibility and variability of a novel TMS measure: Transcallosal conduction time. Central States ACSM Annual Meeting – 2022 Fayetteville, AR

11. Shields JE, MacLennan RJ, Smith CM, **Reese SM**, Olmos AA, and J.M. DeFreitas. Examining the enigmatic relationship between muscle size and strength: A disuse study. Central States ACSM – 2022, Annual Meeting, Fayetteville, AR
12. Smith CM, Shields JE, MacLennan RJ, **Reese SM**, Olmos AA, and J.M. DeFreitas. The effects of disuse from lower limb immobilization on proprioception: a preliminary study. Central States ACSM – 2022, Annual Meeting, Fayetteville, AR
13. **Reese SM**, Andreacci JL, Haile L, Beyer KS. The acute effects of a multi-ingredient pre-workout supplement on high intensity resistance exercise. Presented at National Strength and Conditioning Association National Conference - July 2020, Virtual: Las Vegas, NV
14. **Reese, SM**, Kyle S. Beyer, KS, Redd, MJ, Baker, KM, Arroyo, E, Church, DD, Bergstrom, HC, Hoffman, JR, Fukuda, DH, Stout, JR. Relative Fatigue, But Not Muscle Swelling Is affected By Maturity Status In Youth Male Athletes. Presented at National Strength and Conditioning Association National Conference - July 2019, Washington D.C