



# LINDSEY K. LEPLEY, PHD, ATC

2016 RESEARCH GRANT RECIPIENT

## “ECCENTRIC EXERCISE TO PROMOTE IMMEDIATE BENEFICIAL ADAPTATIONS TO MUSCLE”

Professional Research Grants Program: New Investigator Grant  
Funding: \$22,998

### CLINICAL TAKE HOME MESSAGE

This work helps to substantiate that mechanically engaging muscle with eccentric exercise is an effective and safe strategy to promote muscle growth.

### IMPACT

This work can reassure clinicians that eccentric exercise is safe and efficacious.

### PUBLICATIONS

Lindsey K. Lepley, Steven M. Davi, Emily R. Hunt, Julie P. Burland, McKenzie S. White, Grace Y. McCormick, Timothy A. Butterfield; Morphology and Anabolic Response of Skeletal Muscles Subjected to Eccentrically or Concentrically Biased Exercise. *J Athl Train* 1 April 2020; 55 (4): 336-342. doi: <https://doi.org/10.4085/1062-6050-174-19>

### SUBSEQUENT GRANTS RELATED TO THE FUNDING PROVIDED BY THE NATA FOUNDATION

*Influence of eccentric exercise on muscle and joint health following ACL injury* (1K01AR071503) Role: Lepley, LK (PI)  
NIH-NIAMS; 04/01/2018-03/31/2023: \$707,260

**"This grant has been instrumental in getting my translational lab up and running. This type of support from your own peers means everything."**

DR. LINDSEY LEPLEY

**Since being awarded the NATA Foundation grant in 2016, Dr. Lepley has received:**

**2019-2021** National Institute of Arthritis and Musculoskeletal and Skin Diseases, Loan Repayment Award

**2020-pres** Elected Member of NATA Foundation Research Committee

**2020-pres** Elected Vice President of Athletic Trainers' Osteoarthritis Consortium

**2018-2023** NIH Grant. See details to the left

**2018** National Institute of Health, Early Career Reviewer Program, Participant

**2017** Training in Grantsmanship for Rehabilitation Research workshop, Participant



**LINDSEY LEPLEY,  
PHD, ATC**

Dr. Lindsey Lepley is an Assistant Professor, and the director of the Comparative Orthopaedic Research Lab in the School of Kinesiology at the University of Michigan. She also co-directs the Orthopedic Rehabilitation Biomechanics Lab. Dr. Lepley received her Bachelor in Sciences from Grand Valley State University, and then a Master in Education degree in Sports Medicine from the University of Virginia. In 2014, Lindsey completed her doctoral studies at the University of Michigan and then subsequently completed a postdoctoral fellowship at the University of Kentucky. From 2015-2019, Dr. Lepley held an Assistant Professor Position at the University of Connecticut. In 2019 Dr Lepley transitioned back to the University of Michigan to establish a research environment with strong backing to investigate evidence-based treatment options for those that suffer from ACL injury.