

Meet the T32 Trainees

Walter Sebastian Barrutia
 NMPT Trainee
 Mentor: Dr. Daniel P. Ferris

Vivian Doerr
 NMPT Trainee
 Mentor: Dr. Ashley Smuder

Vinicius Mariani
 NMPT Trainee
 Mentor: Dr. Leonardo Ferreira

Michela Mir
 NMPT Trainee
 Mentor: Dr. Karen W. Hegland

Alessandra Norris
 NMPT Trainee
 Mentor: Dr. Daniel Kopinke

Tinuade Olarewaju
 NMPT Trainee
 Mentor: Dr. Emily Fox

Brandon Parks
 NMPT Trainee
 Mentor: Dr. Aysegul Gunduz

Nicole Stafford
 NMPT Trainee
 Mentor: Dr. Daniel P. Ferris

Emanuel Boutzoukas
 BREATHE Trainee
 Mentor: Dr. Adam Woods

Claire DeLucia
 BREATHE Trainee
 Mentor: Dr. David Fuller

Andrew D'Lugos
 BREATHE Trainee
 Mentor: Dr. Andrew Judge

Cara Donohue
 BREATHE Trainee
 Mentor: Dr. Emily Plowman

Mia Kelly
 BREATHE Trainee
 Mentor: Dr. Gordon Mitchell

Eleana Manousiouthakis
 BREATHE Trainee
 Mentor: Dr. Christine Schmidt

Alexandria Marciante
 BREATHE Trainee
 Mentor: Dr. Gordon Mitchell

Wendy Olsen
 BREATHE Trainee
 Mentor: Dr. Nicholas Napoli

Jeremy Prieto
 BREATHE Trainee
 Mentor: Dr. Nicholas Napoli

2022 Guest Scholars

Zoe Villamar

Doctoral Candidate, Biomedical Engineering
 Northwestern University, Chicago, IL

"Frontal Plane Ankle Stiffness Increases with Load Independent of Muscle Activation"

Jonathan Enders

Doctoral Candidate, Anatomy and Cell Biology
 University of Kansas Medical Center School of Medicine, Kansas City, KS

"A Ketogenic Diet Supports Axon Regeneration and Improves Peripheral Nerve Function in Diabetes"

Jacob Parson

Doctoral Candidate, Movement Science
 Washington University School of Medicine, St. Louis, MO

"UCP-1 Expressing Cells are Not Required for Muscle Regeneration in Mice"

T32 Presentations

F-Club at Ben Hill Griffin Stadium

"Higher White Matter Hyperintensity Load Adversely Affects Pre-Post Proximal Cognitive Training Performance in Healthy Older Adults"
 Emanuel Boutzoukas

"Effects of Hyperbaric Oxygen Therapy on Diaphragm Function Following Doxorubicin Treatment: A Pilot Study"
 Michela Mir

"Trunk and Walking Function in Human Incomplete Spinal Cord Injury"
 Tinuade Olarewaju

"Development and Testing of a 3D-Printed Knee Exoskeleton to Assist Children with Crouch Gait"
 Walter Sebastian Barrutia

"Post Amputation Motor Control and Learning with Lower-limb Myoelectric Control"
 Nicole Stafford

"Fully-embedded Closed-loop Thalamic Deep Brain Stimulation for the Treatment of Essential Tremor"
 Brandon Parks

"Future Patient Biomarkers for Respiratory Compromise Leveraging Naturalistic Non-Sinusoidal Breathing"
 Jeremy Prieto

"Plausible Presynaptic Effects of Opioids on Pontine Inspiratory Circuits: New Insights from a Joint Neural Biomechanical Model"
 Wendy Olsen

BREAK

"Modeling Spatiotemporal Extracellular Matrix Changes Following Human Spinal Cord Injury using 3D Printed Tissue Engineered Constructs in Liquid-Like Solids"
 Eleana Manousiouthakis

"Aging Impairs Phrenic Long-term Facilitation in Rats by an Adenosine-Dependent Mechanism"
 Alexandria Marciante

"REM Sleep Rebound Following Acute Intermittent Hypoxia in Freely Behaving Rats"
 Mia Kelly

"Hyperbaric Oxygen Therapy in a Pompe Disease Mouse Model: A Pilot Study"
 Claire DeLucia

"Uncovering a Novel Mechanism of Intramuscular Fat Formation and Muscle Regeneration"
 Alessandra Norris

"Succinate Impairs Skeletal Muscle Isometric and Isotonic Contractile Function"
 Vinicius Mariani

"Aerobic Exercise Preconditioning Prevents DOX-Induced Diaphragm Dysfunction and Alters Markers of Cellular Senescence"
 Vivian Doerr

"Voluntary Physical Activity Prevents Pancreatic Cancer Cachexia, Immobility, and Dysfunction"
 Andrew D'Lugos