Meet the T32 Trainees

- **Walter Sebastian Barrutia**
  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 Marcia Neto**
  BREATHE Trainee
  Mentor: Dr. Gordon Mitchell

- **Wendy Olsen**
  BREATHE Trainee
  Mentor: Dr. Nicholas Napoli

- **Jeremy Prieto**
  BREATHE Trainee
  Mentor: Dr. Nicholas Napoli

- **Vinicius Mariani**
  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
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  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

"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 Marcia Neto

"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