16th Annual Neuromuscular Plasticity Symposium T32 Trainee Presentations

Sponsored By:

NIH T32 Neuromuscular Plasticity Training Grant, PI Dr. David Fuller NIH T32 BREATHE Training Grant, PI Dr. Gordon Mitchell Department of Physical Therapy

University of Florida College of Public Health and Health Professions

Thursday, March 18, 2021

3:00 p.m. Welcome Remarks

David Fuller, PhD, Professor and Director, Rehabilitation Science PhD Program

Andrew Judge, PhD, Professor, Department of Physical Therapy

Presentations:

3:10 p.m. Sarah Skinner Burke: Mitochondrial permeability transition induces skeletal muscle

atrophy in single living myofibers

NMPT Trainee, Mentor: Dr. Russell Hepple

3:20 p.m. Gerard Robinson: *Is skeletal muscle a pathogen-sensing organ? A murine model of*

polymicrobial sepsis.

BREATHE Trainee, Mentor: Thomas Clanton

3:30 p.m. Michele Singer: Tongue and Hypoglossal Motoneuron Gene Therapy in a Rat Model of

Pompe Disease

NMPT Trainee, Mentor: Dr. David Fuller

3:40 p.m. Chandler Callaway: CXCR2 Signaling Contributes to Muscle Wasting during

Pancreatic Cancer

NMPT Trainee, Mentor: Dr. Andrew Judge

3:50 p.m. Andrew D'Lugos: Tumor-derived CTGF mediates pancreatic cancer cachexia

BREATHE Trainee, Mentor: Dr. Sarah Judge

4:00 p.m. Alessandra Norris: The role of the Hedgehog pathway in restricting fatty fibrosis

NMPT Trainee, Mentor: Dr. Daniel Kopinke

4:10 p.m. Mia Kelly: Long-term facilitation of diaphragm motor output in unanesthetized rats.

BREATHE Trainee, Mentor: Dr. Gordon Mitchell

BREAK

4:20 p.m. Wendy Olsen: Proposed mechanisms of opioid-induced respiratory suppression

mediated by actions at excitatory synapses within the inspiratory network: Results from a

neuromechanical computational model of the respiratory control system

BREATHE Trainee, Mentor: Dr. Donald Bolser

4:30 p.m. Ian Malone: Three days of chronic, closed-loop, cervical epidural stimulation elicits

diaphragm motor plasticity after spinal cord injury

BREATHE Trainee, Mentors: Drs. Erica Dale, Kevin Otto

4:40 p.m. Jamie Murbach: In Situ Electrodeposition of Poly(3,4-ethylenedioxythiophene)

(PEDOT) in Rat Sciatic Nerve for the Improvement of Neural Stimulation

NMPT Trainee, Mentor: Dr. Kevin Otto

4:50 p.m. Nicole Stafford: Proportional Myoelectric Control of a Bionic Lower Limb Prosthesis

with Series Elastic Actuator

NMPT Trainee, Mentor: Dr. Daniel Ferris

5:00 p.m. Stefan Delmas: *Older adults use a motor plan that is detrimental to endpoint control*

NMPT Trainee, Mentor: Dr. Evangelos Christou

5:10 p.m. Emanuel Boutzoukas: Frontal Cerebral Metabolite Change in Older Adults with

Intermittent Hypoxia and Cognitive Training BREATHE Trainee, Mentor: Dr. Adam Woods

5:20 p.m. Michela Mir: Sensorimotor Cough Decline in Parkinson's Disease (PD): Preliminary

Findings

NMPT Trainee, Mentors: Drs. Karen Wheeler-Hegland, Gordon Mitchell

Neuromuscular Plasticity Symposium Speakers

2021

Rachelle Crosbie, PhD Henriette van Praag, MA, PhD Monica Perez, PT, PhD

2019

Rajesh Rao, PhD Susan Harkema, PhD Christopher Adams, MD, PhD

2018

Marcas M. Bamman, PhD, FACSM Phillip Popovich, Ph.D. Paul Hodges, ScD, Ph.D., BPhty

2017

Joseph Jankovic, MD Craig McDonald, MD Chet Moritz, PhD

2016

Carsten G. Bonnemann, MD Gregoire Courtine, PhD Michael P. Kilgard, PhD 2015

William D. Dietrich, III, PhD Kevin M. Flanigan, MD Simon Gandevia, BSc Med, MBBS, PhD, MD

2014

Bas Bloem, PhD Michele Basso, PhD Gordon Lynch, PhD

2013

Daniel M. Corcos, PhD Jerry Silver, PhD James Tidball, PhD

2012

Kathleen A. Sluka, PhD, PT V. Reggie Edgerton, PhD Scott Trappe, PhD

2011

Jens Bo Nielsen, PhD Gordon Mitchell, PhD Charlotte Peterson, PhD 2010

Leonardo G. Cohen, MD David S. K. Magnuson, PhD Rik Gosselink, PhD

2008 (Spring and Fall)

Randolph J. Nudo, PhD Hugues Barbeau, PT, PhD Vincent J. Caiozzo, PhD Amy J. Bastian, PT, PhD Avis H. Cohen, PhD

2006

Steven C. Cramer, MD Jonathan R. Wolpaw, MD Kevin P. Campbell, PhD

2005

Arthur English, PhD Gary Sieck, PhD Paul Zehr, PhD

2004

Reggie Edgerton, PhD