Dr. Trudy MacKay  
(Clemson University)  
"The Genetic and Genomic Basis of Variation for Substance Use Disorders: Lessons From Drosophila"

Dr. Reggie Edgerton  
(UCLA)  
"Newly Recognized Strategies to Regain More and Higher Functions After Paralysis"

October 16th, 2020  
Virtual Conference via WebEx Events  
Register at: eccsfn.ecu.edu

Sponsored by:  
ECU  
SfN  
Society for Neuroscience
Officers (2019-2021)
President: Fadi Issa, PhD, Biology
Past-President: Alexander Murashov, MD/PhD, Physiology
Vice-President: Karen Litwa, PhD, Anatomy & Cell Biology
Treasurer: Tuan Tran, PhD, Psychology and Neuroscience
Secretary: Chris Mizelle, PhD, Kinesiology

Faculty Councilors (2019-2021)
Philip Boyer, MD/PhD, Pathology & Laboratory Medicine
Stefan Clemens, PhD, Physiology
Timothy Erickson, PhD, Biology
Srinivas Sriramula, PhD, Pharmacology & Toxicology

Student Councilors (2019-2021)
Faith Heagy
Jessica McDonnell
Invited Speakers

Morning Session: Opioids & Genetic Bases of Substance Abuse

Dr. Scott Parnell (University of North Carolina, Chapel Hill)
“Alcohol and Cannabinoids Interact to Induce Birth Defects through a Mechanistic Pathway Converging on Primary Cilia”

Dr. Zoe McElligott (University of North Carolina, Chapel Hill)
“Investigating Sex Differences in Opioid Withdrawal”

Dr. Alex Murashov (East Carolina University)
“Epigenetics of Preference for Energy Dense Food in Drosophila: Interplay Between Diet and Exercise”

Afternoon Session: Neurodegeneration & Rehabilitation

Dr. Damaris Lorenzo (University of North Carolina, Chapel Hill)
“βII-Spectrin Mutations Cause a Novel Neurodevelopmental Syndrome”

Dr. Rahul Srinivasan (University of Texas, A&M)
TBD

Dr. Jeremy Sullivan (Johns Hopkins University)
“Mechanisms of TRPV4-Mediated Hereditary Neuromuscular Disease”
9:25am-9:30am  
**Dr. Fadi Issa** (East Carolina University)  
President, ECCS/N  
*Welcome and Opening Remarks*

**Morning Session:** 9:30am-12:00pm  
Opioids & Genetic Bases of Substance Abuse

**Break** 12:00PM-1:00PM

**Afternoon Session:** 1:00pm-3:30pm  
Neurodegeneration & Rehabilitation

3:30pm-3:35pm  
**Dr. Karen Litwa** (East Carolina University)  
Vice President, ECCS/N  
*Closing Remarks*
9:30am-10:00am
Dr. Scott Parnell (UNC, Chapel Hill)
“Alcohol and Cannabinoids Interact to Induce Birth Defects through a Mechanistic Pathway Converging on Primary Cilia”

10:00am-10:30am
Dr. Zoe McElligott (UNC, Chapel Hill)
“Investigating Sex Differences in Opioid Withdrawal”

10:30am-11:30am
Keynote Talk
Dr. Trudy MacKay (Clemson University)
“The Genetic and Genomic Basis of Variation for Substance Use Disorders: Lessons From Drosophila”

11:30am-12:00pm
Dr. Alex Murashov (East Carolina University)
“Epigenetics of Preference for Energy Dense Food in Drosophila: Interplay Between Diet and Exercise”
1:00pm-1:30pm
Dr. Damaris Lorenzo (UNC, Chapel Hill)
“βII-Spectrin Mutations Cause a Novel Neurodevelopmental Syndrome”

1:30pm-2:00pm
Dr. Rahul Srinivasan (University of Texas, A&M)
TBD

2:00pm-3:00pm
Keynote Talk
Dr. Reggie Edgerton (UCLA)
“Newly Recognized Strategies to Regain More and Higher Functions After Paralysis”

3:00pm-3:30pm
Dr. Jeremy Sullivan (Johns Hopkins University)
“Mechanisms of TRPV4-Mediated Hereditary Neuromuscular Disease”