Eastern Carolina Chapter of the Society for Neuroscience

22nd Annual Neuroscience Symposium
Catalyst for Collaboration

Keynote Speakers

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:
Organizing Committee

Council of Eastern Carolina Chapter of the 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)
“Sex Differences in the Neuroprotective Effect of Cytisine in Parkinson’s Disease”

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)
“Sex Differences in the Neuroprotective Effect of Cytisine in Parkinson’s Disease”

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”