

# EARLY CAREER POSTER SESSION

# Trainee Professional Development Award (TPDA) Posters

Society for Neuroscience
Saturday, October 5
6:30–8:30 p.m. CDT
McCormick Place Convention Center: Hall A

The Early Career Poster Session features recipients of the Trainee Professional Development Award (TPDA), which provides travel awards for neuroscientists from around the world to participate in the SfN annual meeting. The TPDA recognizes undergraduate and graduate students and post baccalaureate and postdoctoral scholars who demonstrate scientific merit and excellence in research.



### Thank You to Our TPDA Program Supporters!

The TPDA program is supported by SfN, donors to the Friends of SfN Fund, and several foundations, corporate supporters, memorial funds, and endowments.







The James L. Roberts Fund



Science Translational Medicine



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The Nancy Rutledge Zahniser Fund

#### **BRIGHTFOCUS FOUNDATION**



#### **Theme A: Development**

#### Nardos Kebede Emory University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Uncovering molecular drivers of astrocyte specification in the developing human cortex

BrightFocus Foundation

#### **A27**

#### **Theme A: Development**

#### Sneha Mohan University of Georgia

Trainee Professional Development Award (TPDA)

#### Graduate Student

Effect of Paxó on corneal nerve fiber growth and patterning BrightFocus Foundation

#### **A38**

### Theme B: Neural Excitability, Synapses, and Glia

#### Nathan Kerr University of Missouri

Trainee Professional
Development Award (TPDA)

#### Postdoctoral Fellow

5HT2C agonism as a treatment for age-related neural hypoexcitability and weakness **BrightFocus Foundation** 

#### **B25**

### Theme B: Neural Excitability, Synapses, and Glia

#### Preeti Vyas Johns Hopkins University

Trainee Professional Development Award (TPDA)

#### Postdoctoral Fellow

Glucose dendrimer-ketamine targets hyperactive neurons and protects against seizures in a rodent model of status epilepticus.

BrightFocus Foundation

#### **B65**

## Theme C: Neurodegenerative Disorders and Injury

#### Temitope Adeoye University of South Florida

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Systematic analysis of biological processes reveals gene coexpression modules driving pathway dysregulation in Alzheimer's Disease **BrightFocus Foundation** 

#### Ahmed Atwa Michigan State University

Trainee Professional Development Award (TPDA)

Graduate Student

Interactome Mapping Reveals Distinct Mitochondrial Proteins With Human 2N4R Tau And Oligomeric Tau BrightFocus Foundation

**B80** 

### Theme C: Neurodegenerative Disorders and Injury

#### Xuan Chen Mayo Clinic

Trainee Professional Development Award (TPDA)

#### Graduate Student

Blood-based co-expression network levels are associated with AD/MCI diagnosis and cognitive phenotypes and preserved in the brain BrightFocus Foundation

**B93** 

### Theme C: Neurodegenerative Disorders and Injury

#### Victor Coelho Université Laval, CERVO Brain Research Centre

Trainee Professional
Development Award (TPDA)

#### Graduate Student

SRSF3 acts as a regulator of innate immune response in a model of Alzheimer's disease **BrightFocus Foundation** 

**B99** 

### Theme C: Neurodegenerative Disorders and Injury

#### **Danielle Cozachenco** Federal University of Rio de Janeiro

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

The ketamine metabolite (2R,6R)-hydroxynorketamine rescues hippocampal mRNA translation, synaptic plasticity and memory in mouse models of Alzheimer's disease **BrightFocus Foundation** 

B104

### Theme C: Neurodegenerative Disorders and Injury

#### Jade Dunot Institut de Pharmacologie Moléculaire et Cellulaire (IPMC)

Trainee Professional Development Award (TPDA)

#### Graduate Student

APP fragment AETA controls both ionotropic and non-ionotropic signaling of NMDA receptors, which impacts Alzheimer's disease pathology **BrightFocus Foundation** 

#### Hawley Helmbrecht Johns Hopkins University School of Medicine

Trainee Professional
Development Award (TPDA)

Postdoctoral Fellow

Posthemorrhagic Hydrocephalus Induces Multifaceted Injury in CSF Dynamics Detectable in Both the Brain and the Eyes BrightFocus Foundation

B134

### Theme C: Neurodegenerative Disorders and Injury

#### Pallavi Joshi University of Wisconsin-Madison

Trainee Professional Development Award (TPDA)

#### Graduate Student

Ascorbate promotes post-TBI neuroprotection by enhancing DNA hydroxymethylation **BrightFocus Foundation** 

**C3** 

### Theme C: Neurodegenerative Disorders and Injury

# Andre Krunic Boston University Chobanian & Avedisian School of Medicine

Trainee Professional
Development Award (TPDA)
Graduate Student

Integrative DNA methylomic and transcriptomic profiling of APPNL-G-F Alzheimer's disease model mice across age and brain region: modulation by perinatal choline diet **BrightFocus Foundation** 

C16

### Theme C: Neurodegenerative Disorders and Injury

# **Bonnie Lee**Centre for Addiction and Mental Health

Trainee Professional Development Award (TPDA)

#### Graduate Student

The influences of previous parity and APOE£4 genotype on functional connectivity in middle-aged rats **BrightFocus Foundation** 

#### Manci Li University of Minnesota

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Multifaceted role of specialized neuropeptide-intensive neurons on the selective vulnerability of Alzheimer's disease in the human brain **BrightFocus Foundation** 

C18

### Theme C: Neurodegenerative Disorders and Injury

# Gabriella Morillo Segovia University of Kentucky

Trainee Professional
Development Award (TPDA)

Graduate Student

Investigation of EEG slow wave recovery following sleep disruption in a mouse model of Alzheimer's disease **BrightFocus Foundation** 

**C36** 

## Theme C: Neurodegenerative Disorders and Injury

#### Maria-Tzousi Papavergi Ann Romney Center for Neurologic Diseases, Brigham and Women's Hospital, Harvard Medical School; School for Mental Health and Neuroscience, Maastricht University

Trainee Professional Development Award (TPDA)

Graduate Student

Deciphering the role of complement C3 in anti-amyloid antibody-induced ARIA

BrightFocus Foundation

C51

### Theme C: Neurodegenerative Disorders and Injury

# Celeste Parra Bravo Weill Cornell Medical College

Neuroscience Scholars Program (NSP); Trainee Professional Development Award (TPDA)

Graduate Student

Human iPSC 4R tauopathy model uncovers modifiers of tau propagation **BrightFocus Foundation** 

C53

### Theme C: Neurodegenerative Disorders and Injury

#### **Derian Pugh** University of Alabama at Birmingham

Neuroscience Scholars Program (NSP); Trainee Professional Development Award (TPDA)

Graduate Student

Neuritin (NRN1) provides synaptic resilience against tau in Alzheimer's Disease BrightFocus Foundation

C57

### Theme C: Neurodegenerative Disorders and Injury

#### Rafaela Ribeiro Columbia University

Trainee Professional
Development Award (TPDA)

MD/PhD student

Social cognition deficits in the J20 mouse model of Alzheimer's disease **BrightFocus Foundation** 

#### Surabhi Sinha Indian Institute of Science Education and Research Pune

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Modified hippocampal synaptic plasticity in Alzheimer's Disease: the role of calcium BrightFocus Foundation

**C75** 

#### **Theme D: Sensory Systems**

# Emily Herrick West Virginia University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Human interlimb speed perception during locomotion peaks in young adulthood and declines with age BrightFocus Foundation

C113

#### Theme D: Sensory Systems

#### Wanyu Lei Yale University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Compartmentalized pooling generates orientation selectivity in wide-field amacrine cells

BrightFocus Foundation

C124

#### **Theme D: Sensory Systems**

#### Yuan Xie Columbia University

Trainee Professional
Development Award (TPDA)

#### Postbaccalaureate

Optogenetic inactivation of macaque cortical area V4 during visual shape discrimination

BrightFocus Foundation

C150

#### **Theme E: Motor Systems**

#### Stefanie Bradley Bloorview Research Institute/ University of Toronto

Trainee Professional Development Award (TPDA)

#### Graduate Student

Functional and neurological outcomes following the application of a motor learning treatment paradigm during exoskeleton-assisted physiotherapy in two children with cerebral palsy **BrightFocus Foundation** 

C156

#### **Theme E: Motor Systems**

#### Ava Burgess University of Florida

Trainee Professional Development Award (TPDA)

#### Graduate Student

Closed-loop deep brain stimulation for essential tremor: evaluation of speech outcomes **BrightFocus Foundation** 

#### **Theme E: Motor Systems**

#### Isabell Pitigoi Queen's University

Trainee Professional Development Award (TPDA)

#### Graduate Student

Blinks as a critical oculomotor effector: comparison of eye blink parameters measured by video-based eye-tracking and electromyography BrightFocus Foundation

#### **D21**

### Theme F: Integrative Physiology and Behavior

# Luis Franco University of Oregon

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Differential Stability of Task Variable Representations in Retrosplenial Cortex **BrightFocus Foundation** 

#### E15

### Theme F: Integrative Physiology and Behavior

#### Paige Hardy University of Alberta

Trainee Professional Development Award (TPDA)

#### Graduate Student

Investigating the mechanism of conditioning electrical stimulation: identifying key parameters and signaling pathways

BrightFocus Foundation

#### **E23**

### Theme F: Integrative Physiology and Behavior

#### Rie Matsuzaki APC Microbiome Ireland & University College Cork

Federation of European Neuroscience Societies (FENS); Trainee Professional Development Award (TPDA)

#### Graduate Student

The Pesticide Glyphosate Induces Sex-Dependent Behavioural Changes in Mice: A Role for the Gut Microbiota BrightFocus Foundation

#### **E39**

### Theme F: Integrative Physiology and Behavior

#### Cassandra McGill University of Southern California

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Protection against APOE4-associated aging phenotypes with a longevity-promoting intervention: impact of sex **BrightFocus Foundation** 

#### **E40**

#### Theme G: Motivation and Emotion

#### Nana Kofi Kusi-Boadum University of North Texas Health Science Center

Trainee Professional Development Award (TPDA)

#### Graduate Student

Insights from behavioral models into the autonomic modulation of nicotine's effects

**BrightFocus Foundation** 

#### **H20**

#### Theme G: Motivation and Emotion

#### Grace Stys Michigan State University

Trainee Professional Development Award (TPDA)

#### Undergraduate Student

Validation of androgen receptor signaling pathway-specific knockout mice in ventral hippocampal projection neurons **BrightFocus Foundation** 

114

#### **Theme H: Cognition**

#### Shail Bhatt King's College London

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Exploring the role of H3K4me3 in age-related cognitive decline. **BrightFocus Foundation** 

135

#### Theme H: Cognition

# Maxime Bleau University of Montreal

Trainee Professional Development Award (TPDA)

#### Graduate Student

Neural patterns during cognitive map formation and virtual navigation in blindness BrightFocus Foundation

137

#### **Theme H: Cognition**

### Yuxi Chen Johns Hopkins University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Lateral entorhinal cortex odor-place representations under context-dependent rule switches in young and aged Long-Evans rats

BrightFocus Foundation

140

#### **Theme H: Cognition**

# Harley Haas University of Pennsylvania

Trainee Professional
Development Award (TPDA)
Graduate Student

In vivo recording of mouse lateral entorhinal cortex fan cells after stress: insight into subanesthetic

ketamine's antidepressant ability

BrightFocus Foundation

J21

#### **Theme H: Cognition**

#### Raphaëlle Petit Jena University Hospital

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Comparing physical activity regimens: impact on cognitive decline in aging mice

BrightFocus Foundation

**K16** 

#### **Theme H: Cognition**

#### Emma Schweitzer Rutgers University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

The neural mechanisms underlying how food craving biases subjective valuation and choice **BrightFocus Foundation** 

**K31** 

#### Theme I: Techniques

# Andrew Wang Carnegie Mellon University

Trainee Professional
Development Award (TPDA)
Undergraduate Student
Machine Learning-Guided
Selection of Evolutionarily
Conserved Cis-Regulatory
Elements in Mammalian Cortex
BrightFocus Foundation

M14

#### Theme I: Techniques

## Gene Yu Duke University

Trainee Professional Development Award (TPDA)

#### Postdoctoral Fellow

Transcranial magnetic stimulation evoked responses in a mesoscale spiking network model of primate motor cortex with patchy connectivity **BrightFocus Foundation** 

**M16** 

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#### **BURROUGHS WELLCOME FUND**



#### Theme A: Development

# Monica Carbajal University of Memphis

Trainee Professional Development Award (TPDA)

#### Graduate Student

Perinatal Exposure to Delta-9tetrahydrocannabinol (THC) Alters Behavior and Dopamine Functioning in Wistar Rats Burroughs Wellcome Fund

**A5** 

#### Theme A: Development

# Arely Cruz-Sanchez University of Toronto Scarborough

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Septotemporal differences in hippocampal-prefrontal cortex circuit maturation inform a sensitive period for cognitive flexibility Burroughs Wellcome Fund

A12

#### **Theme A: Development**

#### Abi Heller-Wight University of Nebraska Medical Center

Trainee Professional Development Award (TPDA)

Graduate Student

Hippocampal subfield volumes and physical activity in periadolescent children: preliminary findings from the PRANK-Fit study Burroughs Wellcome Fund

**A21** 

#### **Theme A: Development**

#### Jennifer Malin New York University

Trainee Professional
Development Award (TPDA)

Postdoctoral Fellow

Spatial patterning controls neuron numbers in the Drosophila visual system Burroughs Wellcome Fund

**A36** 

### Theme B: Neural Excitability, Synapses, and Glia

#### Irene Fernandez Ugidos Tulane University

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Ketamine-induced structural plasticity in dendritic spines of the dorsomedial prefrontal cortex is hindered in aged mice

Burroughs Wellcome Fund

**B16** 

### Theme B: Neural Excitability, Synapses, and Glia

#### Milana Krush

**Oregon Health & Science University** 

ENDURE; Trainee Professional Development Award (TPDA)

Graduate Student

Tonic Inhibition Mediated by GABAAR-a4 Receptors in Sparse Coding in the Dentate Gyrus Burroughs Wellcome Fund

**B26** 

### Theme B: Neural Excitability, Synapses, and Glia

#### **Giacomo Maddaloni** Harvard Medical School

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Adaptation to photoperiod via dynamic serotonin-glutamate neurotransmitter segregation Burroughs Wellcome Fund

B31

### Theme B: Neural Excitability, Synapses, and Glia

#### Jose A Noriega-Prieto University of Minnesota

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Distinct endocannabinoids specifically signal to astrocytes and neurons

Burroughs Wellcome Fund

# **Andrew Boyce**University of Calgary

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Induction and monitoring of focal stroke in freely behaving mice reveals sex differences in spreading depolarization and associated behavior Burroughs Wellcome Fund

B84

### Theme C: Neurodegenerative Disorders and Injury

#### Hoi Kei (Amy) Choi University of Michigan - Ann Arbor

Trainee Professional
Development Award (TPDA)
Undergraduate Student

Covid-like immune challenge as a risk for Alzheimer's disease Burroughs Wellcome Fund

**B96** 

## Theme C: Neurodegenerative Disorders and Injury

#### Bluye DeMessie Albert Einstein College of Medicine

Neuroscience Scholars Program (NSP); Trainee Professional Development Award (TPDA)

#### Graduate Student

In Vivo Detection of Pathology at the Depths of Cortical Sulci in Sports Repetitive Head Impacts Burroughs Wellcome Fund

**B110** 

### Theme C: Neurodegenerative Disorders and Injury

#### Asma Hassani Mayo Clinic

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

The skull harbors an expanded pool of antigen-specific CD8+ T cells during acute brain viral infection

Burroughs Wellcome Fund

**B132** 

### Theme C: Neurodegenerative Disorders and Injury

#### Jonathan Hulse University of New Mexico School of Medicine

Trainee Professional Development Award (TPDA)

#### Graduate Student

Phospho-thr181 tau vaccine efficacy studies in mouse and non-human primate models demonstrate robust immunogenicity, safety, target engagement, and reduced disease status

Burroughs Wellcome Fund

B136

### Theme C: Neurodegenerative Disorders and Injury

# Theodore Imhoff-Smith University of Wisconsin-Madison

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Whole brain atrophy and amygdala subnuclear enlargement in temporal lobe epilepsy

Burroughs Wellcome Fund

# **David Jaffe**Thomas Jefferson University

Trainee Professional
Development Award (TPDA)

Graduate Student

Neuronal EphB2 signaling drives persistent neuropathic pain following spinal cord injury Burroughs Wellcome Fund

**B140** 

### Theme C: Neurodegenerative Disorders and Injury

### Romeesa Khan UT Health Houston MD Anderson

Trainee Professional Development Award (TPDA)

Graduate Student

Neuropathological changes during the chronic phase of ischemic stroke Burroughs Wellcome Fund

C9

### Theme C: Neurodegenerative Disorders and Injury

# Benjamin Kreitlow University of lowa

Trainee Professional
Development Award (TPDA)

Graduate Student

Nighttime Tendency of Spontaneous Spike-and-Wave Discharges and Seizure-Associated Death in Young APP/PS1 Mice Burroughs Wellcome Fund

C15

### Theme C: Neurodegenerative Disorders and Injury

# Annabel McAtee University of Kentucky

Trainee Professional Development Award (TPDA)

#### Graduate Student

Sex- and age-based differences in skull bone marrow and dura immune cell populations at baseline and after ischemic stroke

Burroughs Wellcome Fund

**C25** 

### Theme C: Neurodegenerative Disorders and Injury

# Afzal Misrani The University of Texas Health Science Center at Houston

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Guardians of the ischemic brain: brain endothelial CD200 signalling Burroughs Wellcome Fund

**C33** 

### Theme C: Neurodegenerative Disorders and Injury

#### Chelsea Reichert Plaska Nathan S. Kline Institute for Psychiatric Research; NYU Grossman School of Medicine

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Effect of Cognitive Reserve on Plasma Biomarkers of Alzheimer's Disease in Non-Demented Elderly Burroughs Wellcome Fund

#### Rahul Singh Yale University

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Geometrical and topological motifs of first-episode psychosis in live dyadic interactions Burroughs Wellcome Fund

**C74** 

### Theme C: Neurodegenerative Disorders and Injury

# **Corey St. Romain**Baylor College of Medicine

Trainee Professional Development Award (TPDA)

Graduate Student

Activity-dependent regulators of paraventricular oxytocin expression in amyloid precursor protein transgenic mice Burroughs Wellcome Fund

**C76** 

## Theme C: Neurodegenerative Disorders and Injury

#### Deekshita Sundararaman University of Texas at Austin

Trainee Professional
Development Award (TPDA)
Undergraduate Student

Forelimb experience-dependent bilateral changes in motor cortical FosB/deltaFosB after motor cortical infarcts in mice Burroughs Wellcome Fund

**C79** 

### Theme C: Neurodegenerative Disorders and Injury

#### Samuel Wachamo University of Virginia

Neuroscience Scholars Program (NSP); Summer Program in Neuroscience, Excellence and Success (SPINES); Trainee Professional Development Award (TPDA)

#### Graduate Student

Bacterial extracellular vesicles contain short chain fatty acids that might play a role in Alzheimer's disease pathogenesis Burroughs Wellcome Fund

C92

#### **Theme D: Sensory Systems**

#### Laura Camila Gomez UC Berkeley

Trainee Professional Development Award (TPDA)

#### Graduate Student

2-photon voltage imaging of sensory and cognitive signal dynamics in sensory cortex Burroughs Wellcome Fund

C110

#### **Theme D: Sensory Systems**

#### Karishma Shah University of Utah

Trainee Professional Development Award (TPDA)

#### Graduate Student

Myoinosital concentration in the anterior cingulate cortex mediates the relationship between chronic pain duration and pain embodiment

Burroughs Wellcome Fund

#### **Theme E: Motor Systems**

#### Hantao Wang University of Washington

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Contributions of basal ganglia and cerebellar circuits in speech auditory-motor adaptation: DBS ON/ OFF comparisons in patients with Parkinson's disease vs essential tremor Burroughs Wellcome Fund

**D38** 

### Theme F: Integrative Physiology and Behavior

# **Erin Bigus**University of Utah

Trainee Professional Development Award (TPDA)

#### Graduate Student

Hippocampal time cells display differential activity across temporal contexts

Burroughs Wellcome Fund

**D55** 

### Theme F: Integrative Physiology and Behavior

## **Leah Conrad**University of Michigan

Trainee Professional Development Award (TPDA)

#### Graduate Student

Oral contraceptive exposure modulates neuroimmune activity Burroughs Wellcome Fund

**D59** 

### Theme F: Integrative Physiology and Behavior

# **Yiyuan Han**University of California San Francisco

Trainee Professional Development Award (TPDA)

#### Postdoctoral Fellow

Anterior Insula-based Network Biomarkers of Experimental Pain in Humans Burroughs Wellcome Fund

**E22** 

### Theme F: Integrative Physiology and Behavior

# **Evan Iliakis**University of Pennsylvania Perelman School of Medicine

Trainee Professional Development Award (TPDA)

#### Graduate Student

Investigating the role of GABAergic interneurons in the dorsomedial striatum in value-based decision-making

Burroughs Wellcome Fund

**E25** 

### Theme F: Integrative Physiology and Behavior

#### Charlotte Piette Harvard medical school

Trainee Professional Development Award (TPDA)

#### Postdoctoral Fellow

Striatal endocannabinoid long-term potentiation mediates one-shot learning Burroughs Wellcome Fund

F21

#### Theme G: Motivation and Emotion

#### Samantha Brown Icahn School of Medicine at Mount Sinai

Trainee Professional Development Award (TPDA)

Graduate Student

Identifying a role of accumbal cholinergic interneurons in modulating feeding behavior in diabetes

Burroughs Wellcome Fund

**G24** 

#### Theme G: Motivation and Emotion

# **Gavin Elias**University of Toronto

Trainee Professional Development Award (TPDA)

#### Graduate Student

Validating cerebral glucose metabolism as a pre-operative predictor of response to subcallosal cingulate deep brain stimulation Burroughs Wellcome Fund

**G37** 

#### Theme G: Motivation and Emotion

#### Hye Ji Kim Princeton University

Trainee Professional Development Award (TPDA)

#### Postdoctoral Fellow

The development of a novel mouse model for gradual re-exposure to traumatic psychosocial defeat stress. **Burroughs Wellcome Fund** 

H18

#### Theme G: Motivation and Emotion

#### Marjorie Levinstein NIH, NIDA IRP

Trainee Professional
Development Award (TPDA)

#### Postdoctoral Fellow

(S)-ketamine decreases heroin seeking in rats Burroughs Wellcome Fund

**H23** 

#### Theme G: Motivation and Emotion

# **Tristan Szapary Princeton Univeristy**

Trainee Professional
Development Award (TPDA)

#### Undergraduate Student

Uncovering the spatiotemporal dynamics of dopamine in mouse dorsal cortex

Burroughs Wellcome Fund

116

#### Theme H: Cognition

# David Horovitz University of South Carolina

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Targeting D-serine metabolism to reverse age-related cognitive and neurobiological deficits Burroughs Wellcome Fund

**J24** 

#### **Theme H: Cognition**

# Emma Huels University of Michigan

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Reversal of propofol or isoflurane anesthesia, with concurrent restoration of functional connectivity, by intravenous administration of the serotonergic psychedelic 2,5-dimethoxy-4-iodoamphetamine Burroughs Wellcome Fund

**J26** 

#### Theme H: Cognition

#### Hannah Lail Georgia State University

Trainee Professional
Development Award (TPDA)

Graduate Student

Uncovering the neurobiological role of endogenous fibroblast growth factor 21 as a high-fat dietstimulated stress-response hormone Burroughs Wellcome Fund

**J33** 

#### **Theme H: Cognition**

#### Karim Mithani University of Toronto

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Connectivity of the centromedian nucleus of the thalamus: Insights from brain stimulation and intracranial electroencephalography Burroughs Wellcome Fund

**K4** 

#### **Theme H: Cognition**

#### **Ugurcan Mugan** University of Minnesota

Trainee Professional
Development Award (TPDA)

#### Postdoctoral Fellow

Examining multiple moments of decision-making through prefrontal, hippocampal, and dorsolateral striatal interactions in a complex spatial task Burroughs Wellcome Fund

**K7** 

#### **Theme H: Cognition**

# Natalie Preveza Virginia Polytechnic Institute and State University

Trainee Professional Development Award (TPDA)

#### Postbaccalaureate

Degradation-independent lysine-63 polyubiquitination negatively regulates memory formation and promotes age-related memory decline in the hippocampus

Burroughs Wellcome Fund

**K18** 

#### **Theme H: Cognition**

#### Siyu Wang National Institute of Mental Health

Trainee Professional
Development Award (TPDA)

#### Postdoctoral Fellow

Reconfiguration of population dynamics in macaque prefrontal cortex during reinforcement learning Burroughs Wellcome Fund

L9

#### **Theme H: Cognition**

#### Chenyi Yang University of California, Irvine

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Depression-like Behavior is Associated with Defects in the Primary Hippocampal Circuit Burroughs Wellcome Fund

**L13** 

#### Theme I: Techniques

#### Landon Bayless-Edwards Oregon Health and Sciences University

Trainee Professional Development Award (TPDA)

#### Graduate Student

Genetically-encoded fluorescence lifetime sensors for imaging of neuromodulation in vivo Burroughs Wellcome Fund

**L22** 

#### Theme I: Techniques

#### Gianna Paier University of Michigan

Trainee Professional Development Award (TPDA)

#### Graduate Student

Novel approach for enhancing signal recovery during stimulation **Burroughs Wellcome Fund** 

**M4** 

#### Theme I: Techniques

#### Maria Pope Indiana University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Time-varying synergy and redundancy dominance in the human cerebral cortex

Burroughs Wellcome Fund

**M5** 

#### Theme I: Techniques

#### Mingzheng Wu Northwestern University

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Synthesizing artificial perception with wireless transcranial optogenetic arrays

Burroughs Wellcome Fund

M15

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### Theme C: Neurodegenerative Disorders and Injury

#### Cameron Choo NANYANG TECHNOLOGICAL UNIVERSITY

Trainee Professional
Development Award (TPDA)

Graduate Student

Independent effects of regional white matter hyperintensities and amyloid on domain-specific cognition and progression to dementia

Tianqiao and Chrissy Chen Institute

**B97** 

### Theme C: Neurodegenerative Disorders and Injury

#### Zobayda Farzana Haque Texas Tech university

Trainee Professional Development Award (TPDA)

Graduate Student

Circulating Branched Chain Amino Acids (BCAAs) are Linked to Alzheimer's Disease Related Cognitive Deficits Tiangiao and Chrissy Chen Institute

**B130** 

### Theme C: Neurodegenerative Disorders and Injury

#### Mia Kantorovich Brown University

Trainee Professional
Development Award (TPDA)
Undergraduate Student
The Effect of a Pathogen-rich
environment on the development
of Tauopathy in PS 19 mice
Tiangiao and Chrissy Chen Institute

**C**5

### Theme F: Integrative Physiology and Behavior

#### Ian Manuel Espinosa Méndez Instituto de Neurobiología, Universidad Nacional Autónoma de México

Trainee Professional Development Award (TPDA)

Undergraduate Student

Genetic Contributions to the Functional Connectome Topology in the Mexican Population Tiangiao and Chrissy Chen Institute

E10

#### SPONSORED BY **DEVELOPMENTAL STUDIES HYBRIDOMA BANK**



#### Theme A: Development

#### Josephine Liwang Penn State College of Medicine

Trainee Professional **Development Award (TPDA)** 

Graduate Student

epDevAtlas: Early postnatal growth charts of GABAergic cells and microglia unveil distinct spatiotemporal patterns in the developing mouse brain **Developmental Studies Hybridoma Bank** 

**A32** 

#### Theme E: Motor Systems

#### **Emily Sperry University of Washington**

**Trainee Professional Development Award (TPDA)** Undergraduate Student Simultaneous Targeting of Cortical Depths in Premotor and Primary Motor Cortices Developmental Studies Hybridoma Bank

**D31** 

#### Theme H: Cognition

#### Xitong Chen The University of Iowa

Trainee Professional **Development Award (TPDA)** 

#### Graduate Student

Working memory constructs joint probabilistic task representations for decision-making **Developmental Studies Hybridoma Bank** 

J1

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### Friends of SfN Fund

#### Theme A: Development

#### Angarika Balakrishnan Northeastern University

Trainee Professional
Development Award (TPDA)
Graduate Student

Modulating CRHR1 activity: a strategy to mitigate early-onset puberty and anxiety in rodent models of early life adversity

Friends of SfN Fund

#### **A2**

#### **Theme A: Development**

#### Luca Costea Bates College

Trainee Professional
Development Award (TPDA)
Undergraduate Student
Verification of Axon Guidance in a
Novel Murine Model of NF1 Gliomas
Friends of SfN Fund

#### A10

#### **Theme A: Development**

## Lauren English University of Wisconsin - Madison

Neuroscience Scholars Program (NSP); Trainee Professional Development Award (TPDA)

#### Graduate Student

The F-BAR proteins CIP4 and FBP17 regulate neurite dynamics during cortical neuronal migration

Friends of SfN Fund

#### A13

#### **Theme A: Development**

#### Anna Farmer University of Florida

Trainee Professional Development Award (TPDA)

#### Postdoctoral Fellow

Widespread alterations of functional brain networks in children with autism: An MVPA analysis

Friends of SfN Fund

#### Δ14

#### Theme A: Development

# Sarah Giang University of North Carolina at Chapel Hill

Trainee Professional
Development Award (TPDA)
Undergraduate Student
Impact of Adolescent Alcohol
Exposure on Functional Connectivity
and Choline Expression in
the Basal Forebrain
Friends of SfN Fund

#### **A17**

#### **Theme A: Development**

# **Devon Grey**The University of Alabama at Birmingham

Trainee Professional Development Award (TPDA)

Graduate Student

Adolescent Neural Reactivity to Stress Varies with Dietary Nutrients Friends of SfN Fund

**A18** 

#### **Theme A: Development**

# Robert Hickson Palo Alto University

Trainee Professional Development Award (TPDA)

Graduate Student

Functional connectivity of the salience network is related to symptoms of social anxiety in preadolescence Friends of SfN Fund

**A22** 

#### Theme A: Development

#### Prithika Ravi University of Illinois at Urbana-Champaign

Trainee Professional Development Award (TPDA)

Undergraduate Student

Effects of Exercise-Induced
Plasma-Derived Extracellular
Vesicles on Adult Neurogenesis,
Astrogliogenesis, and Microvascular
Density in the Hippocampus
Friends of SfN Fund

**A46** 

#### **Theme A: Development**

### Di Zhang

Yale University

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Spatial dynamics of mammalian brain development and neuroinflammation by multimodal tri-omics mapping

Friends of SfN Fund

**A66** 

### Theme B: Neural Excitability, Synapses, and Glia

#### Savannah Brannan Southern Illinois University School of Medicine

Trainee Professional
Development Award (TPDA)

Graduate Student

Early life stress results in female specific cognitive impairments and reduced LC neuron excitability

Friends of SfN Fund

**B1** 

### Theme B: Neural Excitability, Synapses, and Glia

# Darrien Coates National Institute of Environment and Health Sciences (NIEHS)

Trainee Professional Development Award (TPDA)

Postbaccalaureate

The Effects of Cortisol on Glutamatergic Transmission in Caenorhabditis elegans Friends of SfN Fund

В6

### Theme B: Neural Excitability, Synapses, and Glia

#### Camila Garcia Padilla University of Pittsburgh

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Conditional Knock-Out of Fus Protein in Oligodendrocytes of Aged Mice Decreases Evoked Firing Rate Activity in the Visual Cortex Friends of SfN Fund

#### **B20**

### Theme B: Neural Excitability, Synapses, and Glia

#### Christa Hercher McGill University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Examining cerebellar astrocytes and Purkinje cells in depression and suicide **Friends of SfN Fund** 

#### **B22**

### Theme B: Neural Excitability, Synapses, and Glia

#### Karoline Martins dos Santos Federal University of Sao Paulo

- Paulista School of Medicine

Trainee Professional Development Award (TPDA)

#### Postdoctoral Fellow

Astrocytic activation modulates neuronal activity in the Supraoptic Nucleus of the hypothalamus Friends of SfN Fund

#### **B34**

### Theme B: Neural Excitability, Synapses, and Glia

#### Carina Meinke Florida Atlantic University

Trainee Professional Development Award (TPDA)

#### Graduate Student

Capacity for protein kinase G dependent SERT phosphorylation supports sex dependent serotonin release in the nucleus accumbens following social interactions and MDMA administration Friends of SfN Fund

#### **B37**

### Theme B: Neural Excitability, Synapses, and Glia

### Samantha Merrow

Massachusetts Institute of Technology Trainee Professional

**Development Award (TPDA)** 

#### Postbaccalaureate

Ablation of Mical 3 Disrupts
Oligodendrocyte Development in Mice
Friends of SfN Fund

#### **B38**

### Theme B: Neural Excitability, Synapses, and Glia

#### Nathalie Nieto-Torres University of Puerto Rico at Aguadilla

Trainee Professional Development Award (TPDA)

#### Undergraduate Student

Effects of Hyperglycemia on Aquaporin-4 Channels Expression and the Modulatory Role of Metformin in Rat Astrocytes Friends of SfN Fund

### Theme B: Neural Excitability, Synapses, and Glia

#### Michael O'Dea NYU Grossman School of Medicine

Trainee Professional
Development Award (TPDA)
Graduate Student

A multi-omic single-cell atlas of astrocyte diversity in the healthy and inflamed brain Friends of SfN Fund

**B44** 

### Theme B: Neural Excitability, Synapses, and Glia

# **Showmick Paul**University of Rochester

Trainee Professional Development Award (TPDA)

Undergraduate Student

Towards Deciphering the Mechanism of Microglia-Driven Remodeling in Brain Extracellular Space Using 2P-SFA-FRAP Friends of SfN Fund

**B46** 

### Theme B: Neural Excitability, Synapses, and Glia

#### **Sridevi Venkatesan** University of Toronto

Trainee Professional
Development Award (TPDA)

#### Postdoctoral Fellow

Functional context is critical: Impaired patient-variant GluN1 NMDA receptors prolong dendritic excitation to increase seizure vulnerability

Friends of SfN Fund

**B63** 

### Theme B: Neural Excitability, Synapses, and Glia

# Alicia Wells University of California, Irvine SOM

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Hypersensitivity of The Nicotinic Acetylcholine Receptor Subunit (CHRNA2L9S/L9S) In Female Adolescent Mice Mediates Sexually Dimorphic Nicotine-Induced Facilitation of Hippocampal-Dependent Learning and Memory Friends of SfN Fund

**B67** 

### Theme B: Neural Excitability, Synapses, and Glia

#### Kirill Zavalin Vanderbilt University Medical Center

Trainee Professional
Development Award (TPDA)

#### Postdoctoral Fellow

Altered GABAergic Neurotransmission in Mouse Model of Slc6a1(S295L) Developmental and Epileptic Encephalopathy Friends of SfN Fund

# Anjali Bisht Indian Institute of Science Education and Research, Bhopal

Trainee Professional
Development Award (TPDA)

Graduate Student

Prefoldin 5 is a Microtubuleassociated Protein that Suppresses Tau-aggregation Friends of SfN Fund

**B82** 

### Theme C: Neurodegenerative Disorders and Injury

#### Monserrat Casado Sanchez McGill Unviersity

Trainee Professional
Development Award (TPDA)

Graduate Student

Unraveling Altered Brain Function in Post COVID-19 Condition Through Electroencephalography Friends of SfN Fund

**B89** 

### Theme C: Neurodegenerative Disorders and Injury

#### Joseph Choi University of Michigan

Trainee Professional
Development Award (TPDA)
Undergraduate Student

The effects of levodopa on skilled reaching in the rat 6-OHDA model of Parkinson Disease

Friends of SfN Fund

B95

### Theme C: Neurodegenerative Disorders and Injury

#### Laurel Dieckhaus University of Arizona

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Using Bias-free Classification of Multi-parametric MRI to Identify Age-related Changes in the Ex-Vivo Female Bonnet Macaque Brain Friends of SfN Fund

B112

### Theme C: Neurodegenerative Disorders and Injury

#### Luis Daniel Estrella University of Nebraska Medical Center

Trainee Professional Development Award (TPDA)

#### Graduate Student

Increased Diapedesis Across the Blood-Brain-Barrier and Impaired T-Cell Populations in a Pink 1/ Parkin Dual Knockout Rat Model of Parkinson's Disease Friends of SfN Fund

#### Indra Gendenpeljee Daegu Gyeongbuk Institute of Science and Technology

Trainee Professional
Development Award (TPDA)

Graduate Student

The progenitor cells local activation in the penumbral area after neonatal stroke

Friends of SfN Fund

**B124** 

### Theme C: Neurodegenerative Disorders and Injury

#### Mònica Girona del Pozo Institute of Neurosciences -Autonomous University of Barcelona

Trainee Professional Development Award (TPDA)

Graduate Student

Assessing the role of mitochondrial dsRNA as a trigger for neuroinflammation in a mouse model of Leigh syndrome Friends of SfN Fund

**B125** 

### Theme C: Neurodegenerative Disorders and Injury

# Julieth Gomez University of Florida

Trainee Professional
Development Award (TPDA)

Graduate Student

Advancements in Closed-Loop Deep Brain Stimulation for Tourette Syndrome: A Multi-Nuclei Approach Friends of SfN Fund

**B126** 

### Theme C: Neurodegenerative Disorders and Injury

# **Shruti Gupta**The George Washington University

Trainee Professional
Development Award (TPDA)

Graduate Student

Antagonistic role of male sexhormone and male sex-chromosome complement on the therapeutic efficacy of TNFR2 activation in a model of Multiple Sclerosis Friends of SfN Fund

**B129** 

### Theme C: Neurodegenerative Disorders and Injury

#### Leah Harmon Yale University

Trainee Professional
Development Award (TPDA)

Graduate Student

Methods to image the dopamine transporter (DAT) in vitro and its applications in Parkinson's disease research

**B131** 

### Theme C: Neurodegenerative Disorders and Injury

#### Berfug Karaharman Bogazici University, Institute of Biomedical Engineering

Trainee Professional
Development Award (TPDA)

Graduate Student

Effect of transcutaneous electrival nerve stimulation on rats with spinal cord injury

Friends of SfN Fund

# Mahir Khan University of Southern California

Trainee Professional
Development Award (TPDA)

Graduate Student

Association of brain aging and focal brain damage in the subacute phase of stroke recovery

Friends of SfN Fund

C10

### Theme C: Neurodegenerative Disorders and Injury

# Jackson Mace Johns Hopkins University

Trainee Professional
Development Award (TPDA)

Graduate Student

Inhibition of MIF nucleasemediated parthanatos mitigates neurodegenerative pathology in a mouse model of multiple sclerosis Friends of SfN Fund

C21

## Theme C: Neurodegenerative Disorders and Injury

# Sean McCracken Washington University in St. Louis

Trainee Professional
Development Award (TPDA)

Graduate Student

Mitochondrial calcium homeostasis influences retinal ganglion cell survival in neurodegeneration following optic nerve axon injury Friends of SfN Fund

**C27** 

### Theme C: Neurodegenerative Disorders and Injury

# Eleni Moschonas The University of Pittsburgh

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Examining cholinergic neurotransmission and chronic galantamine efficacy in sustained attention after preclinical traumatic brain injury Friends of SfN Fund

C37

### Theme C: Neurodegenerative Disorders and Injury

#### Christopher Saunders University of Kentucky

Trainee Professional Development Award (TPDA)

Graduate Student

TDP-43 citrullination: a novel post-translational modification for distinct neuropathological inclusions in Alzheimer's disease and related dementias

Friends of SfN Fund

# **Ashley Scheinfeld**University of Texas at Austin

Trainee Professional
Development Award (TPDA)

Graduate Student

MerTK Promotes Inflammatory Resolution to Facilitate Neuroprotection and Repair After Spinal Cord Injury (SCI) Friends of SfN Fund

C71

## Theme C: Neurodegenerative Disorders and Injury

### Olivia Tong Western University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Effects of selective brain cooling on blood flow and glucose metabolism in acute cerebral ischemia Friends of SfN Fund

**C86** 

#### **Theme D: Sensory Systems**

#### Matteo Ciferri University of Rome "Tor Vergata"

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Decoding music from brain activity: exploring the neural correlates of music perception Friends of SfN Fund

C103

#### **Theme D: Sensory Systems**

#### Kaley Graves University of Illinois Urbana Champaign

Trainee Professional Development Award (TPDA)

#### Graduate Student

Mechanisms of Hearing Loss in a Newly Generated Mouse Model Friends of SfN Fund

C111

#### **Theme D: Sensory Systems**

#### Keith Kaufman University of Pittsburgh

Trainee Professional Development Award (TPDA)

Graduate Student

Arousal-dependent modulation of distinct excitatory cell-types within the auditory cortex

Friends of SfN Fund

C119

#### **Theme D: Sensory Systems**

#### Amit Khandhadia University College London

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow
Mapping auditory space

Mapping auditory space in freely moving ferrets Friends of SfN Fund

#### **Theme D: Sensory Systems**

#### Kobi Kobi CUNY Brooklyn College

Faculty for Undergraduate Neuroscience (FUN); Trainee Professional Development Award (TPDA)

#### Undergraduate Student

Localization of dopamine D2a and D1Aa receptor expression in the central auditory system of a vocal fish Friends of SfN Fund

C122

#### **Theme D: Sensory Systems**

# Victoria Lang University of Gothenburg

Trainee Professional Development Award (TPDA)

#### Graduate Student

Real-time encoding of stimulus factors in single tactile afferents in the human hand during passive touch Friends of SfN Fund

C123

#### **Theme D: Sensory Systems**

#### Abraham Nofal University of Texas at Dallas

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Characterizing PKC-8 Neurons in the Central Amygdala: Pro vs. Anti-Nociceptive Roles in a Virtual Pain Model Friends of SfN Fund

C131

#### **Theme D: Sensory Systems**

#### Adrian Pena University of Arizona

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Exploring the Role of GPR63 and GPR153 as Novel Modulators of Opioid-Induced Antinociception via Glial Cell Modulation in a Mouse Model of Neuropathic Pain Friends of SfN Fund

C133

#### **Theme D: Sensory Systems**

# Marina Saito The University of Texas Medical Branch

Trainee Professional Development Award (TPDA)

#### Postdoctoral Fellow

Three-dimensional inner ear pathology in mice with audiovestibular dysfunction caused by Lassa virus infection Friends of SfN Fund

C138

#### **Theme D: Sensory Systems**

# PERMINDER SINGH AII INDIA INSTITUTE OF MEDICAL SCIENCES NEW DELHI

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Chronic intrathecal co-administration of Neuropeptide Y and morphine in rats attenuate morphine-induced anti-nociceptive tolerance

Friends of SfN Fund

#### **Theme D: Sensory Systems**

#### Samira SOUFFI

**Hebrew University of Jerusalem** 

Trainee Professional
Development Award (TPDA)

Postdoctoral Fellow

Early music exposure affects neural activity in the ventral tegmental area (VTA) Friends of SfN Fund

C145

#### **Theme D: Sensory Systems**

#### Tomas Suarez Omedas Carnegie Mellon University

Trainee Professional
Development Award (TPDA)

Graduate Student

Auditory cortex constructs noiseinvariant representations of sounds in background noise Friends of SfN Fund

C147

#### **Theme D: Sensory Systems**

#### **Jie Wan** University of California, Irvine

Trainee Professional Development Award (TPDA)

Graduate Student

A comparative analysis of vocal vs manual synchronization to auditory rhythm

Friends of SfN Fund

C149

#### **Theme E: Motor Systems**

#### **Daniel Armstrong** Queen's University

Trainee Professional
Development Award (TPDA)

#### Postdoctoral Fellow

Muscular co-contraction improves rapid upper limb corrective responses to mechanical perturbations during postural control

Friends of SfN Fund

C153

#### **Theme E: Motor Systems**

# **Ryan Canfield**University of Washington

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Spatially distributed sampling of motor cortex during reaching

Friends of SfN Fund

C160

#### Theme E: Motor Systems

#### **Erianna De la Rosa** University of Utah

Trainee Professional Development Award (TPDA)

#### Graduate Student

Control of Pain Defense by Cotransmission of Oxytocin & Glutamate in a Zebrafish Premotor Network Friends of SfN Fund

**D2** 

#### **Theme E: Motor Systems**

#### Keqin Ding Johns Hopkins University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Quantifying the spatial stability of sensory stimulation projected fields for neuroprostheses Friends of SfN Fund

D<sub>5</sub>

#### **Theme E: Motor Systems**

#### Shalini Guha SIU Carbondale

Trainee Professional Development Award (TPDA)

#### Graduate Student

ERG1A Potassium Channel Modulates Calcium Signaling In Skeletal Muscle Atrophy Friends of SfN Fund

**D9** 

#### Theme E: Motor Systems

#### Miranda Hulsey-Vincent University of Oregon

Trainee Professional
Development Award (TPDA)
Graduate Student

Basal ganglia lesions induce stuttering in canaries.

Friends of SfN Fund

**D10** 

#### **Theme E: Motor Systems**

# Rachel Mazorow Marquette University & Medical College of Wisconsin

Trainee Professional Development Award (TPDA)

#### Graduate Student

Three-dimensional vibrotactile feedback training promotes reachto-grasp improvement after stroke: a proof-of-concept case series

Friends of SfN Fund

**D16** 

#### **Theme E: Motor Systems**

# Arianna Ortega Sanabria University of Arkansas The Institute for Integrative & Innovative Research - I<sup>3</sup>R

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Neuromodulation of Nerve Fiber Activation via Intrafascicular Stimulation: Effects of Non-Rectangular Waveform Shapes Friends of SfN Fund

**D20** 

#### **Theme E: Motor Systems**

#### Ashwini Sansare Texas A&M University

Trainee Professional Development Award (TPDA)

#### Postdoctoral Fellow

Cerebellar neuromodulation led to improved standing balance in older adults Friends of SfN Fund

**D28** 

#### **Theme E: Motor Systems**

# Hannah Stealey The University of Texas at Austin

Trainee Professional Development Award (TPDA)

#### Graduate Student

Neural variability during neurofeedback adaptation Friends of SfN Fund

**D32** 

#### Theme E: Motor Systems

#### Joohwan Sung University of Illinois Urbana Champaign

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

The Expression of Flexion Synergy Enhances Spasticity in Stroke Friends of SfN Fund

**D34** 

### Theme F: Integrative Physiology and Behavior

## Christopher Cook University of California, Berkeley

Trainee Professional
Development Award (TPDA)

Graduate Student

Neuroimmune mechanisms of coronavirus disease pathology Friends of SfN Fund

E1

### Theme F: Integrative Physiology and Behavior

#### **Gretel Kamm** European Molecular Biology Laboratory

Trainee Professional
Development Award (TPDA)

#### Postdoctoral Fellow

The representation of PGE2-triggered sickness in the mouse insular cortex

Friends of SfN Fund

**E26** 

### Theme F: Integrative Physiology and Behavior

# **Hyejoo Kang**University of Massachusetts Amherst

Trainee Professional Development Award (TPDA)

Graduate Student

Influence of Neuroestrogens on Auditory Circuit Dynamics in Zebra Finches Friends of SfN Fund

**E27** 

### Theme F: Integrative Physiology and Behavior

# **Rixing Lin Princeton University**

Trainee Professional Development Award (TPDA)

#### Postdoctoral Fellow

Uncovering the impact of early life stress on genomic organization across development with single cell resolution Friends of SfN Fund

E33

### Theme F: Integrative Physiology and Behavior

#### Yihe Ma Stanford University

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Sex differences in the neural circuit organization, physiological connectivity, and reward activity dynamics of cholecystokinin (CCK) neurons in the extended amygdala

Friends of SfN Fund

E36

### Theme F: Integrative Physiology and Behavior

# **Sara Mederos**Sainsbury Wellcome Centre, UCL

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Visual cortex instructs learnt suppression of fear responses Friends of SfN Fund

F5

### Theme F: Integrative Physiology and Behavior

# Sabrina Mederos University of California, Davis

Trainee Professional
Development Award (TPDA)

Graduate Student

Exploring the seahorse brain: differential gene expression and neuroanatomical mapping Friends of SfN Fund

F6

### Theme F: Integrative Physiology and Behavior

# Ana Mendes Champalimaud Foundation

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Spinal control of copulatory behavior and sexual excitation Friends of SfN Fund

F8

### Theme F: Integrative Physiology and Behavior

#### Patrick Monari University of Auckland

Trainee Professional Development Award (TPDA)

#### Postdoctoral Fellow

Chronic oxytocin signaling enduringly impairs communication and coordination in a monogamous rodent Friends of SfN Fund

F9

### Theme F: Integrative Physiology and Behavior

#### Ryan Neff University of Michigan

Trainee Professional Development Award (TPDA)

#### Graduate Student

DSCAM Heterozygosity Recapitulates Cognitive and Sensorimotor Phenotypes Observed in Autism Spectrum Disorder Friends of SfN Fund

F13

### Theme F: Integrative Physiology and Behavior

#### Chayarndorn Phumsatitpong University of California, Berkeley

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Temporal coordination of female reproductive axis activity by vasoactive intestinal polypeptide (VIP) expressing cells in the suprachiasmatic nucleus in mice Friends of SfN Fund

#### F20

### Theme F: Integrative Physiology and Behavior

# **Kelley Power** UC Berkeley

Trainee Professional Development Award (TPDA)

#### Graduate Student

Single-nuclei RNA sequencing reveals housing and photoperiod-dependent changes in hippocampal gene expression in seasonally social voles Friends of SfN Fund

#### **F22**

### Theme F: Integrative Physiology and Behavior

#### Elora Reilly Seattle Children's Research Institute

Trainee Professional Development Award (TPDA)

#### Postbaccalaureate

Modulating breathing: mapping inhibitory and excitatory projections to the preBotzinger complex

Friends of SfN Fund

#### **F25**

### Theme F: Integrative Physiology and Behavior

# Ishnoor Singh University of Toronto

Trainee Professional Development Award (TPDA)

#### Graduate Student

Connecting specific central GLP-1 receptors functionally with glucose homeostasis and energy balance Friends of SfN Fund

#### F35

### Theme F: Integrative Physiology and Behavior

# Catherine Stapf University of Maryland School of Medicine

Trainee Professional Development Award (TPDA)

#### Graduate Student

Dorsomedial Striatum CB1R signaling is required for Pavlovian outcome devaluation in male Long Evans rats and reduces inhibitory synaptic transmission in both sexes.

Friends of SfN Fund

#### **F37**

### Theme F: Integrative Physiology and Behavior

#### **Pedro Trevizan-Baú** University of Florida

Trainee Professional
Development Award (TPDA)

#### Postdoctoral Fellow

Effects of local sympathetic nerve depletion on airway function in an experimental model of allergic asthma **Friends of SfN Fund** 

#### G5

### Theme F: Integrative Physiology and Behavior

#### Jacob White

#### Massachusetts Institute of Technology

Trainee Professional Development Award (TPDA)

Graduate Student

Closed loop neurofeedback for studying motor memory consolidation in the songbird Friends of SfN Fund

G12

#### Theme G: Motivation and Emotion

#### Yurim Chae National Institute on Drug Abuse

Trainee Professional
Development Award (TPDA)

#### Postbaccalaureate

Effects of methylphenidate and R-modafinil on impulsive choice decision making in rats

Friends of SfN Fund

**G27** 

#### **Theme G: Motivation and Emotion**

# **Seth David**University of New Mexico

Trainee Professional
Development Award (TPDA)

#### Postbaccalaureate

Investigating Anticipation for Alcohol Elicited by Cues Predicting its Availability and Associated Neural Circuitry in Mice.

Friends of SfN Fund

G30

#### Theme G: Motivation and Emotion

# Ivette Gonzalez University of Michigan

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Sex differences in the effects of social housing on stimulated dopamine release after methamphetamine exposure Friends of SfN Fund

**H6** 

#### Theme G: Motivation and Emotion

# Cassandra Hartsgrove University of Massachusetts Boston

Trainee Professional Development Award (TPDA)

#### Graduate Student

Estradiol effects on gut microbiome and ERK signaling mechanisms during fear extinction memory consolidation Friends of SfN Fund

H10

#### **Theme G: Motivation and Emotion**

#### Nina Hedayati Wilfrid Laurier University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Scoping review on the neural markers of resilience to trauma and adversity

Friends of SfN Fund

H11

#### Theme G: Motivation and Emotion

# Montana Lara University of California San Diego

Trainee Professional
Development Award (TPDA)

#### Postdoctoral Fellow

Genome-wide association study of cocaine use in Heterogeneous Stock rats Friends of SfN Fund

H21

#### Theme G: Motivation and Emotion

#### Karina Marquez California State University San Marcos

Trainee Professional Development Award (TPDA)

#### Graduate Student

The Role of NACHO in Learning and Memory Friends of SfN Fund

**H30** 

#### Theme G: Motivation and Emotion

# Persephone Miller Carleton University

Trainee Professional Development Award (TPDA)

#### Graduate Student

Zona incerta neurons release GABA and dopamine in the superior colliculus to mediate fear responses during hunger Friends of SfN Fund

**H34** 

#### **Theme G: Motivation and Emotion**

#### Madaline Mocchi Baylor College of Medicine

Neuroscience Scholars Program (NSP); Trainee Professional Development Award (TPDA)

#### Graduate Student

Blunted auditory and salience network responses to non-emotional salient stimuli in the depressed brain.

Friends of SfN Fund

H35

#### Theme G: Motivation and Emotion

# **Alexandra Ng**Boston College

Trainee Professional Development Award (TPDA)

#### Graduate Student

Periaqueductal gray contributes to social approach and avoidance behaviors in rat Friends of SfN Fund

**H38** 

#### Theme G: Motivation and Emotion

#### Tanya Pareek University of Mississippi Medical Center

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Increased expression of the L-type voltage-gated calcium channel CACNA1C in the hippocampus of subjects with alcohol use disorder and rhesus monkeys with chronic alcohol use

Friends of SfN Fund

**H40** 

#### Theme G: Motivation and Emotion

# Emily Prantzalos University of Kentucky

Trainee Professional
Development Award (TPDA)

### Graduate Student

Repurposing aripiprazole for anxiety reduction during nicotine withdrawal: Insights on transcription and affective behavior

Friends of SFN Fund

Ι4

### Theme G: Motivation and Emotion

### Marissa Raskin University of Texas at Austin

Trainee Professional Development Award (TPDA)

### Graduate Student

Carbon dioxide reactivity predicts extinction memory to fear, food, and alcohol cues in rats

Friends of SfN Fund

18

#### Theme G: Motivation and Emotion

### Cristina Marie Rivera Quiles Michigan State University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Determination of the role of ventral tegmental area Neuromedin-s expression and cellular activity in morphine behavior Friends of SfN Fund

110

#### Theme G: Motivation and Emotion

### Rosa Serrano

**Yale University** 

Trainee Professional Development Award (TPDA)

### Graduate Student

Cortical brain areas involved in contextual tolerance to fentanyl in male C57BL/6 mice

Friends of SfN Fund

112

### Theme G: Motivation and Emotion

### Anna Tischer

The Pennsylvania State University

Trainee Professional Development Award (TPDA)

Postbaccalaureate

Adolescent nicotine exposure alters adult dendritic complexity and spine density of prefrontal cortex subregions based on genetic background

Friends of SfN Fund

120

### Theme G: Motivation and Emotion

### Maria Sofia Villalba Austral University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Serotonin receptor 2A deficiency alters thalamic gene expression induced by a single administration of the atypical psychedelic noribogaine in mice: evaluation of gender differences.

Friends of SfN Fund

124

### Theme G: Motivation and Emotion

### **Jie Zhang** University of California, San Diego

Trainee Professional
Development Award (TPDA)

### Graduate Student

Oxytocin Modulation of the Social Transfer of Pain Friends of SfN Fund

128

#### Theme G: Motivation and Emotion

### Alexa Zimbelman University of Iowa

Trainee Professional
Development Award (TPDA)

### Graduate Student

Optogenetic and chemogenetic inhibition of basolateral amygdala projections to medial prefrontal cortex subregions during cocaine extinction learning and reinstatement Friends of SfN Fund

129

### **Theme H: Cognition**

### **Dennis Arruda** Roger Williams University

Trainee Professional Development Award (TPDA)

### Undergraduate Student

Clock∆19 reversal learning deficits translate to humans bipolar disorder Friends of SfN Fund

132

### **Theme H: Cognition**

# **Assia Chericoni**Baylor College of Medicine

Trainee Professional
Development Award (TPDA)

### Graduate Student

Neurons in the Hippocampus and Anterior Cingulate Cortex map the virtual space Friends of SfN Fund

J2

### **Theme H: Cognition**

### Nithik Chintalacheruvu Rutgers University

Trainee Professional
Development Award (TPDA)
Undergraduate Student
A cortical locus for modulation
of arousal states

J3

### **Theme H: Cognition**

Friends of SfN Fund

### Katherine Cotter University Of Kentucky

Trainee Professional Development Award (TPDA)

### Graduate Student

Establishing salient rewards for operant touchscreen tasks in aged female mice

Friends of SfN Fund

J5

### **Theme H: Cognition**

# Melisa Gumus University of Toronto

Trainee Professional
Development Award (TPDA)

### Graduate Student

Category learning builds behaviourally relevant attentional templates

Friends of SfN Fund

J20

### **Theme H: Cognition**

### Stas Kozak Tel Aviv University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Uncovering the dynamics of human visual memory representations over time through convolutional neural networks

Friends of SfN Fund

**J32** 

### Theme H: Cognition

### Saima Malik-Moraleda Harvard University

Trainee Professional Development Award (TPDA)

### Graduate Student

Proficiency, not age of acquisition, drives response in the language network: the case of heritage speakers.

Friends of SFN Fund

J37

### **Theme H: Cognition**

# Frieda Nemon Cornell University

Trainee Professional
Development Award (TPDA)

### Undergraduate Student

Examining the effect of audience on budgerigar social communication Friends of SfN Fund

**K8** 

### **Theme H: Cognition**

### Eunseo Oh Ulsan National Institute of Science and Technology (UNIST)

Trainee Professional Development Award (TPDA)

### Graduate Student

Investigating beta-burst rate dynamics in motor Imagery: A comparative study with motor execution in a stop-signal task Friends of SfN Fund

**K10** 

### **Theme H: Cognition**

### Maxine Annel Pacheco-Ramírez

University of Houston, IUCRC BRAIN center

Trainee Professional Development Award (TPDA)

#### Graduate Student

Neural dynamics of social interaction during creative movements from a state of discord to "Meeting of Minds": A longitudinal art-science performance. Friends of SfN Fund

K13

### **Theme H: Cognition**

### Keanna Rowchan Queen's University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Visual statistical learning is associated with changes in low-dimensional cortical and subcortical architecture

Friends of SfN Fund

**K29** 

### **Theme H: Cognition**

### Hayoung Song University of Chicago

Trainee Professional
Development Award (TPDA)

### Graduate Student

Comprehension of causal structure in narratives

Friends of SfN Fund

L2

### Theme H: Cognition

# Catherine Wang Duke University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Tracking the emergence and robustness of persistent activity in the premotor cortex across learning

Friends of SfN Fund

L10

### **Theme H: Cognition**

### Yuhua Yu University of Arizona

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Temporal dynamics of EEG oscillation as measured by spectral power volatility: rest-task stability and cognitive relevance

Friends of SfN Fund

L15

### Theme I: Techniques

# Amanda Buch Weill Cornell Medicine, Cornell University

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

Cluster-aware machine learning of multiomics and neuroimaging for precision neuroscience and psychiatry Friends of SfN Fund

**L23** 

### Theme I: Techniques

# **Shan Jiang**University of Virginia

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

Multimodal Multidimensional Neural Interfaces

Friends of SfN Fund

**L30** 

### Theme I: Techniques

# Noa Nuzov Case Western Reserve University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Statistical variation of the branching pattern of the human cervical vagus nerve using 3D tracing Friends of SfN Fund

M1

### Theme I: Techniques

### **Skylar Suarez** University of Colorado -Anschutz Medical Campus

Trainee Professional
Development Award (TPDA)

### Graduate Student

Label-free Two Photon Autofluorescence Imaging of Amyloid-Beta Plaques Friends of SfN Fund

M11

GATSBY CHARITABLE FOUNDATION TRAINEE PROFESSIONAL DEVELOPMENT AWARDS

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### **Theme A: Development**

# Ivan Alex Lazarte University of Oxford

Trainee Professional
Development Award (TPDA)
Graduate Student

Differential circuit and molecular profile of somatostatin interneurons in postnatal mouse neocortex across development

Gatsby Charitable Foundation **A29** 

### Theme A: Development

### Amar Ojha University of Pittsburgh

Trainee Professional Development Award (TPDA)

### Graduate Student

Nuclei-specific functional maturation of fronto-amygdala circuitry through adolescence: longitudinal insights from 7 Tesla fMRI

Gatsby Charitable Foundation

**A42** 

### **Theme A: Development**

# Reem Swaidan American University of Beirut

Trainee Professional
Development Award (TPDA)

### Graduate Student

Rb Predominately Compensates for the Double Loss of p130 and p107 in Adult and Embryonic Neural Stem Cell Lineages Gatsby Charitable Foundation

**A53** 

### **Theme A: Development**

# Branden Verosky The Ohio State University College of Medicine

Trainee Professional
Development Award (TPDA)

### Graduate Student

Deciphering the Impact of Maternal Stress on Fetal Brain Development and Placental Function in Mice Through Single-Cell RNA Sequencing Gatsby Charitable Foundation

**A58** 

# Theme B: Neural Excitability, Synapses, and Glia

### Pawan Thapaliya University of South Florida

Trainee Professional
Development Award (TPDA)

### Graduate Student

Investigating the Reversal of GLT1 Glutamate Transporter during Metabolic Stress Gatsby Charitable Foundation

B61

### Theme C: Neurodegenerative Disorders and Injury

# April Fineberg University of Colorado Anschutz Medical Campus

Trainee Professional Development Award (TPDA)

### Post-baccalaureate

Delayed fluoxetine administration restores hippocampal function in a juvenile global cerebral ischemia mouse model in a sex specific manner Gatsby Charitable Foundation

B120

# Theme C: Neurodegenerative Disorders and Injury

# Victor Omoniyi Johns Hopkins University School of Medicine

Neuroscience Scholars Program (NSP); Trainee Professional Development Award (TPDA)

### Graduate Student

Non-surgical therapy suppresses gliopathy and white matter injury after post-traumatic hydrocephalus Gatsby Charitable Foundation

**C48** 

### **Theme D: Sensory Systems**

# **Lucy Dowdall**University of Cambridge

Trainee Professional
Development Award (TPDA)

### Graduate Student

Integration of Sensory Feedback for Wearable Devices Gatsby Charitable Foundation

### **Theme D: Sensory Systems**

### Kotaro Yamashiro The University of Tokyo

Trainee Professional
Development Award (TPDA)

### Graduate Student

Brief light deprivation modulates rat somatosensory cortical activity of sole tactile sensation during natural walking Gatsby Charitable Foundation

### C151

### Theme E: Motor Systems

### Leonardo Pollina EPFL

Trainee Professional
Development Award (TPDA)

### Graduate Student

Distinct yet overlapping neural spaces explain local field potential activity in motor execution and imagination Gatsby Charitable Foundation

### **D22**

### Theme E: Motor Systems

### Federico Tessari MIT

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

The Synergy Expansion Hypothesis

Gatsby Charitable Foundation

#### **D35**

### Theme F: Integrative Physiology and Behavior

# Hazal Arpaci University of Iowa

Trainee Professional Development Award (TPDA)

### Graduate Student

Non-rapid eye movement sleep oscillations, resting-state functional connectivity and mood symptoms in children with anxiety disorders **Gatsby Charitable Foundation** 

#### **D44**

### Theme F: Integrative Physiology and Behavior

# Asaf Benjamin Weizmann Institute of Science

Trainee Professional Development Award (TPDA)

### Graduate Student

Prefrontal representations of social information and complex group dynamics Gatsby Charitable Foundation

#### **D52**

### Theme F: Integrative Physiology and Behavior

### Gabriel Tofani University College Cork

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

Gut Microbiota Regulates Stress Responsivity via the Circadian System Gatsby Charitable Foundation

### G3

### Theme G: Motivation and Emotion

### Veronika Kondev Icahn School of Medicine

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Role of dopaminoceptive cells in ventral hippocampus in cocaine action Gatsby Charitable Foundation

H19

### Theme G: Motivation and Emotion

# **Sophia Liang**University of New South Wales

Trainee Professional
Development Award (TPDA)

### Graduate Student

Plasticity in Intratelencephalic Neurons in the Dorsomedial Prefrontal Cortex is Necessary for Goal-Directed Learning Gatsby Charitable Foundation

**H24** 

#### Theme G: Motivation and Emotion

### Nuria Nadal-Gratacos Universitat de Barcelona

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

The psychedelic 25C-NBF promotes neural plasticity and has fast-acting antidepressant properties

Gatsby Charitable Foundation

**H37** 

### **Theme H: Cognition**

# Nina Dolfen Ghent University

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Differentiation of object and movement representations in the hippocampus and in domain-specific regions after sequence learning Gatsby Charitable Foundation

**J9** 

### **Theme H: Cognition**

### Blair Jovellar University of Tübingen

Trainee Professional Development Award (TPDA)

### Graduate Student

Real-time brain state-coupled network-targeted dual-site TMS enhances working memory Gatsby Charitable Foundation

**J29** 

### **Theme H: Cognition**

### Robert Kim Cedars-Sinai Medical Center

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Elucidating the role of sensory cortical areas in short-term memory Gatsby Charitable Foundation

J31

### **Theme H: Cognition**

### **Jan Martini** Hertie-Institute for Clinical Brain Research University of Tuebingen

Trainee Professional
Development Award (TPDA)

Graduate Student

Neural variability as an organizing principle of the cortical hierarchy that enables cognitive flexibility

Gatsby Charitable Foundation

**K2** 

### **Theme H: Cognition**

# Gabriel Ocana Santero University of Oxford

Trainee Professional Development Award (TPDA)

### Graduate Student

Understanding serotonin: gated Deep Neural Networks reveal a unified model across its role in learning, neurodevelopment and psychedelics Gatsby Charitable Foundation

Κ9

### **Theme H: Cognition**

### Alma Rahimi Western University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Passive exercise provides a simultaneous and postexercise executive function benefit Gatsby Charitable Foundation

**K19** 

### **Theme H: Cognition**

# **Changmin Yu**University of Cambridge

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

Goal-anticipatory firing and phase precession in place cells during rotational scanning on the honeycomb maze.

Gatsby Charitable Foundation

L14

### Theme I: Techniques

### Noemi Gozzi ETH Zurich

Trainee Professional Development Award (TPDA)

### Graduate Student

Al closed loop optimization for vagus nerve stimulation Gatsby Charitable Foundation

**L27** 

### Theme I: Techniques

### Jihye Shin Yonsei University

Trainee Professional Development Award (TPDA)

### Graduate Student

Magnetic nanoparticle characterization for wireless and remote neuromodulation by magnetomechanical-genetics (MMG)

Gatsby Charitable Foundation

**M9** 

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# Theme B: Neural Excitability, Synapses, and Glia

### Hannah Lichtenstein Georgia State University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Early-life adversity alters microgliamediated synaptic refinement of corticotropin-releasing hormoneexpressing neurons in the central nucleus of the amygdala Rainwater Charitable Foundation

**B29** 

# Theme B: Neural Excitability, Synapses, and Glia

### **Ryo Nakatani** Okinawa Institute of Science and Technology Graduate School

Japan Neuroscience Society (JNS); Trainee Professional Development Award (TPDA)

### Graduate Student

Elucidating mechanisms of astrocytic depolarization

Rainwater Charitable Foundation

**B40** 

### Theme C: Neurodegenerative Disorders and Injury

### **Behnaz Akbarian** Vanderbilt University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Microstructural but not macrostructural damage is associated with antisocial behavior in bvFTD patients

Rainwater Charitable Foundation

**B**75

## Theme C: Neurodegenerative Disorders and Injury

### Mikaley Bolden Georgetown University Medical Center

Trainee Professional Development Award (TPDA)

### Postbaccalaureate

Lower gray matter volume and worse white matter hyperintensity burden are associated with faster cognitive decline in adults living with HIV

Rainwater Charitable Foundation

**B83** 

# Theme C: Neurodegenerative Disorders and Injury

### Alyssa Janes Memorial University of Newfoundland

Trainee Professional Development Award (TPDA)

### Graduate Student

Lipidomic analyses in a pre-tangle rat model to develop a peripheral blood biomarker of disease progression Rainwater Charitable Foundation

### Fabio Ribeiro Rodrigues University College London

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Age-dependent changes in brain rhythms and visual responses in a humanised mouse model of tauopathy Rainwater Charitable Foundation

**C60** 

# Theme C: Neurodegenerative Disorders and Injury

# Said Salehe Florida International University

Trainee Professional Development Award (TPDA)

Graduate Student

Impact of Long-Term Partial Drp 1 Knockout in Aging Brain Rainwater Charitable Foundation

**C65** 

### **Theme E: Motor Systems**

# Rachel Mendelsohn Salk Institute for Biological Studies

Trainee Professional Development Award (TPDA)

Postbaccalaureate

Towards a theoretical understanding of the control systems in speech perception and articulation

Rainwater Charitable Foundation

**D17** 

### **Theme G: Motivation and Emotion**

### Benjamin Filio NINDS/Brown University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Investigating Cerebellar
Representations of Reward Signals
Rainwater Charitable Foundation

**H4** 

### **Theme H: Cognition**

### Jafar Bhatti University of Pennsylvania

Trainee Professional
Development Award (TPDA)

### Graduate Student

Perceptual decision-related single-unit activity in the monkey substantia nigra pars reticulata.

Rainwater Charitable Foundation

136

### Theme H: Cognition

# Steven Lamontagne National Institutes of Health

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

Cortisol and emotional face processing in differing levels of suicide risk

Rainwater Charitable Foundation

J34

### Theme I: Techniques

### Hakki Orhun Akengin Stanford University

Trainee Professional Development Award (TPDA)

Undergraduate Student

Zoo of RNNs: A comprehensive analysis of recurrent neural networks trained on synthetic behavioral tasks

Rainwater Charitable Foundation

L21

### Theme I: Techniques

### Simran Singh University of Illinois, Urbana-Champaign

Trainee Professional Development Award (TPDA)

### Graduate Student

Establishing multiscale measures of myelin in the mouse auditory cortex Rainwater Charitable Foundation

M10

JAMES L. ROBERTS TRAINEE
PROFESSIONAL DEVELOPMENT AWARDS

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# The James L. Roberts Fund

### **Theme A: Development**

# Katrina Lin The Ohio State University

Trainee Professional Development Award (TPDA)

### Graduate Student

Role of prefrontal parvalbumin cells on the development of social behaviors during adolescence The James L. Roberts Fund

A31

# Theme B: Neural Excitability, Synapses, and Glia

### Arnab Biswas University of Nevada, Reno

Trainee Professional Development Award (TPDA)

### Graduate Student

Mooshik: A python package for visualizing rodent behavior

The James L. Roberts Fund

**A78** 

### Juan Taborda-Bejarano Medical College Of wisconsin

Trainee Professional
Development Award (TPDA)

Graduate Student

Identifying the role of microglia on matrix metalloproteinase activity during acute stress The James L. Roberts Fund

**B60** 

# Theme C: Neurodegenerative Disorders and Injury

### Haley Capeci University of Pittsburgh

Faculty for Undergraduate Neuroscience (FUN); Trainee Professional Development Award (TPDA)

### Undergraduate Student

Enriching rats prior to traumatic brain injury does not protect against subsequent neurobehavioral deficits The James L. Roberts Fund

**B88** 

# Theme C: Neurodegenerative Disorders and Injury

### Te-Hsuan Tung University of Pittsburgh

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Characterization of myelin and AD disease markers in a novel hypermyelinating App knock-in mouse The James L. Roberts Fund

**C91** 

### **Theme D: Sensory Systems**

### Christian Arntsen University of Vermont

Trainee Professional
Development Award (TPDA)

### Graduate Student

Insulin and dopamine receptors modulate sweet sensitivity in drosophila melanogaster The James L. Roberts Fund

C100

### **Theme E: Motor Systems**

### Hannah Goldbach Brown University & National Institutes of Health

Trainee Professional
Development Award (TPDA)

### Graduate Student

Spatial and temporal changes in mouse striatal dopamine signals during visual learning The James L. Roberts Fund

**D6** 

### Theme F: Integrative Physiology and Behavior

### Xing Fang Baylor College of Medicine

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

Perifornical area of the anterior hypothalamus regulates metabolic balance

The James L. Roberts Fund

E11

### Theme F: Integrative Physiology and Behavior

### Jessica Maltman

Virginia Commonwealth University

Trainee Professional
Development Award (TPDA)

Graduate Student

Characterization of the psychedelic quipazine analog VCU-1012 in mice The James L. Roberts Fund

E38

### Theme F: Integrative Physiology and Behavior

### **Devashish Pande** University of Delaware

Trainee Professional
Development Award (TPDA)

Graduate Student

Investigating the activity of CA2 hippocampal neurons in freely interacting mice

The James L. Roberts Fund

F19

### **Theme H: Cognition**

### Jonathan Indajang Cornell University

Trainee Professional Development Award (TPDA)

Undergraduate Student

Adaptation of counter-strategies by mice in matching pennies task

The James L. Roberts Fund

The James L. Roberts Fund J28

### **Theme H: Cognition**

### **Asako Mitsuto** Rutgers University

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Mental Effort Learning, unlike Reward Learning, Requires Direct Experience The James L. Roberts Fund

**K**5

### Theme I: Techniques

### **Hyeonjeong Jeong** University of Minnesota

Trainee Professional
Development Award (TPDA)

### Graduate Student

Visual detection of misfolded alpha-synuclein and prions via capillary-based quaking-induced conversion assay (Cap-QuIC) The James L. Roberts Fund

L29

# Theme J: History, Education, and Society

# Claire Robey Uniformed Services University

Early Career Policy Ambassadors (ECPA); Trainee Professional Development Award (TPDA)

### Graduate Student

Advocating for Neuroscience: My Experience as an Early Career Policy Ambassador The James L. Roberts Fund

**M28** 

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# Theme C: Neurodegenerative Disorders and Injury

Jamie Henry University of Colorado School of Medicine

Trainee Professional Development Award (TPDA)

Undergraduate Student

Exploring AMPAkines in Pediatric Brain Recovery: Harnessing BDNF Signaling to Restore Synaptic and Cognitive Function Following Juvenile Global Cerebral Ischemia Science Translational Medicine/AAAS

**B135** 

# Theme F: Integrative Physiology and Behavior

# Alexia Crockett University of South Carolina

Trainee Professional Development Award (TPDA)

Graduate Student

Sex-dependent effects of chronic stress on HPA axis mitochondrial function Science Translational Medicine/AAAS

**E4** 

### Theme I: Techniques

# Ibrahim Oladepo University of Minnesota Twin Cities

Trainee Professional Development Award (TPDA)

### Graduate Student

Computer vision guided open source active commutator for neural imaging in freely behaving animals Science Translational Medicine/AAAS

**M2** 

JOHN I. SIMPSON TRAINEE PROFESSIONAL DEVELOPMENT AWARDS

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# The John I. Simpson Fund

### **Theme A: Development**

### **Soraya Cortes Coria** Arizona State University

Faculty for Undergraduate Neuroscience (FUN); Trainee Professional Development Award (TPDA)

### Undergraduate Student

Age-related decline in expressive language and related brain structures among autistic adults

The John I. Simpson Fund

Α9

### **Theme A: Development**

### **Yiding Gui** University of North Carolina at Chapel hill

Trainee Professional Development Award (TPDA)

### Graduate Student

Associations between sleep and brain development in infants aged 0-27 months The John I. Simpson Fund

**A19** 

### **Theme A: Development**

# Kaeli Vandemark University of California Berkeley

Trainee Professional Development Award (TPDA)

### Graduate Student

Rescue of degraded tactile coding in the Scn2a+/- mouse model of ASD The John I. Simpson Fund

**A56** 

### **Theme A: Development**

### Sara Westbrook Washington State University

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Adolescent vaporized cannabisinduced medial prefrontal cortex dysfunction in adult rats: Cognitive flexibility, parvalbumin interneurons, and perineuronal nets

The John I. Simpson Fund

**A59** 

### **Theme A: Development**

### Miray Youssef University of Western Ontario

Trainee Professional
Development Award (TPDA)

### Graduate Student

The Impact of Adolescent Nicotine Vapour Exposure on Cognition in Mood and Anxiety Disorders The John I. Simpson Fund

**A62** 

### Naga Nitin Sai Chandra Anisetty Indian Institute of Technology

Trainee Professional Development Award (TPDA)

### Graduate Student

(IIT), Bombay

Computational exploration leading to incremental calcium currents across up-states in dendritic spines of biophysically detailed striatal neurons The John I. Simpson Fund

**A72** 

# Theme B: Neural Excitability, Synapses, and Glia

### Meghan Connolly University of Illinois Urbana-Champaign

Trainee Professional
Development Award (TPDA)

### Graduate Student

Single-nucleus RNA sequencing of striatal microglia reveals distinct transcriptomic signatures of acute stress and chronic exercise

The John I. Simpson Fund

**B8** 

## Theme B: Neural Excitability, Synapses, and Glia

### Jordyn Czarny Washington University in St. Louis

Trainee Professional Development Award (TPDA)

### Graduate Student

Glp-1 receptor agonist exendin-4 reduces optogenetically evoked dopamine in the nucleus accumbens The John 1. Simpson Fund

**B12** 

## Theme B: Neural Excitability, Synapses, and Glia

### Paul Derr Harvard Medical School

Trainee Professional Development Award (TPDA)

### Graduate Student

Distinct molecular subtypes and anatomical projections of rhombomere 4-derived Pet 1 neurons in the mouse brain The John I. Simpson Fund

**B13** 

# Theme B: Neural Excitability, Synapses, and Glia

### Giuseppina Di Salvo Icahn School of Medicine At Mount Sinai Maastricht University

Trainee Professional Development Award (TPDA)

### Graduate Student

Dissecting regional and cell-type specific roles for Histone H3 serotonylation in stress-mediated dysregulation of neural transcription The John 1. Simpson Fund

**B14** 

## Theme B: Neural Excitability, Synapses, and Glia

### Marla Frick University of South Carolina

Trainee Professional
Development Award (TPDA)

### Graduate Student

Neuroinflammatory measures following orexin/hypocretin expression manipulation in young and aged rats
The John I. Simpson Fund

### Emily Hurley Memorial University of Newfoundland

Trainee Professional
Development Award (TPDA)

### Graduate Student

Excitatory glycine receptors and synaptic dysfunction in neurodegenerative disease The John I. Simpson Fund

**B23** 

# Theme B: Neural Excitability, Synapses, and Glia

### Renato Willian Martins Sá University of São Paulo

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Astrocytes of the lateral parafacial region are sensitive to high CO2 but play no major role in controlling pulmonary ventilation in mice

The John I. Simpson Fund

**B35** 

## Theme B: Neural Excitability, Synapses, and Glia

### Andrea (Jihee) Nam University of Texas at Austin

Trainee Professional
Development Award (TPDA)

### Graduate Student

Astrocytic processes remain closely associated with >80% of excitatory synapses during synaptic plasticity in the hippocampal dentate gyrus The John I. Simpson Fund

**B41** 

### Theme B: Neural Excitability, Synapses, and Glia

### Maria Roznovcova University of Reading

Trainee Professional
Development Award (TPDA)

### Graduate Student

The MIDAS motif of CACHD1 is important for CACHD1 expression and function as a CaV3.1 voltagegated calcium channel modulator.

The John 1. Simpson Fund

**B52** 

# Theme B: Neural Excitability, Synapses, and Glia

### Tarek Shaker University of Alberta

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Investigating claustrum processing of anterior cingulate inputs

The John I. Simpson Fund

**B56** 

## Theme B: Neural Excitability, Synapses, and Glia

### Gaokhia Yang University of New Mexico

Trainee Professional Development Award (TPDA)

#### Graduate Student

Plasticity in feedback inhibition affects CA1 assembly membership The John I. Simpson Fund

### Nelufar Yasmen University of Tennessee Health Science Center

Trainee Professional
Development Award (TPDA)

Graduate Student

Siglec-E is required for the generation of seizures
The John I. Simpson Fund

**B71** 

# Theme C: Neurodegenerative Disorders and Injury

### Eric Brengel Northeastern University Center for Translational Neuroimaging

Trainee Professional
Development Award (TPDA)

Graduate Student

Psilocybin as a treatment for microstructural and functional alterations following repetitive mild head injury: A preclinical MRI study The John I. Simpson Fund

**B86** 

# Theme C: Neurodegenerative Disorders and Injury

### Jack Browning Virginia Tech

Trainee Professional
Development Award (TPDA)

Graduate Student

Utilizing voluntary wheel running to attenuate cerebral blood flow in the J20 mouse model

The John I. Simpson Fund

**B87** 

### Theme C: Neurodegenerative Disorders and Injury

### Saumya Digraskar University of Alabama at Birmingham

Trainee Professional
Development Award (TPDA)

Graduate Student

Deciphering the role of heparan sulfate in the progression of a-synuclein pathology The John I. Simpson Fund

**B113** 

# Theme C: Neurodegenerative Disorders and Injury

### Veronica Domyslawski University of Pittsburgh

Trainee Professional Development Award (TPDA)

Undergraduate Student
Effects of a non-amphetamine central nervous system stimulant on sustained attention after controlled cortical

impact injury in males and females
The John I. Simpson Fund

**B114** 

# Theme C: Neurodegenerative Disorders and Injury

# Emely Gazarov University of Florida

Trainee Professional Development Award (TPDA)

Graduate Student

Effects of chronic cannabis smoke exposure on peripheral and brain inflammatory markers and tau pathology in mice

The John I. Simpson Fund

### Melania González Torres Institut de Neurociècies, Universitat Autònoma de Barcelona (UAB)

Trainee Professional Development Award (TPDA)

Graduate Student

Dissecting the role of an antiviral immune response in a mouse model of Mitochondrial Disease The John I. Simpson Fund

**B127** 

# Theme C: Neurodegenerative Disorders and Injury

### Hugo Kim University of California, San Diego

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Understanding spinal cord injury site dynamics with spatial transcriptomics The John I. Simpson Fund

C12

# Theme C: Neurodegenerative Disorders and Injury

### Allison Martinez Mejia Washington University in St. Louis

Trainee Professional
Development Award (TPDA)

Graduate Student

Intravital imaging of neuronal energy metabolism in APP/ PS1 at single cell resolution The John I. Simpson Fund

C23

### Theme C: Neurodegenerative Disorders and Injury

# Jenna McCloskey The Ohio State University

Trainee Professional Development Award (TPDA)

### Postbaccalaureate

Frontal traumatic brain injury drives unique decision-making deficits in gambling-related behaviors.

The John I. Simpson Fund

**C26** 

# Theme C: Neurodegenerative Disorders and Injury

### Shatha Mufti Purdue University

Trainee Professional Development Award (TPDA)

### Graduate Student

Alterations in Neuronal Network Dynamics, Astrocyte Reactivity, and Oxidative Stress Post-Traumatic Brain Injury The John I. Simpson Fund

**C39** 

# Theme C: Neurodegenerative Disorders and Injury

### Shahriar Nasiri University of Ottawa

Trainee Professional Development Award (TPDA)

Undergraduate Student

Electrophysiological and optogenetic mapping of connectivity patterns and locomotor function of dl3 interneurons in the lumbar spinal cord The John I. Simpson Fund

# Tyra Nguyen NYU Grossman of Medicine

Faculty for Undergraduate Neuroscience (FUN); Trainee Professional Development Award (TPDA)

Undergraduate Student

Acute  $A\beta 12-28P$  administration targeting the apoE4/A $\beta$  interaction rescues advanced-stage Alzheimer's disease

The John I. Simpson Fund

C42

# Theme C: Neurodegenerative Disorders and Injury

### Aleandra Ortiz Santiago University of Puerto Rico-Medical Sciences Campus

Trainee Professional Development Award (TPDA)

Graduate Student

Characterization of Monocyte-Derived Microglia from HIV-Seropositive Patients to Assess Alpha 7-nAChR Activation Against HIV-induced Neuroinflammation The John I. Simpson Fund

**C49** 

## Theme C: Neurodegenerative Disorders and Injury

### Tae-Yoon Park Harvard Medical School / McLean Hospital

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Exploring the functional roles of host immune responses in cell replacement therapy for Parkinson's disease

The John I. Simpson Fund

C52

# Theme C: Neurodegenerative Disorders and Injury

### Emma Pineau University of Toronto

Trainee Professional Development Award (TPDA)

### Graduate Student

Deep brain phenotyping of time-dependent response variability in BOLD fMRI The John I. Simpson Fund

C55

# Theme C: Neurodegenerative Disorders and Injury

# Tabitha Rodriguez Thomas Jefferson University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Alterations in the microvascular environment of the SNpc in response to voluntary exercise in a mouse model of Parkinson's Disease The John I. Simpson Fund

### Juao-Guilherme Rosa Boston University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Disruption of astrocyte lysosome function and lipid metabolism by Alzheimer's disease risk variant APOE E4 The John I. Simpson Fund

#### **C63**

# Theme C: Neurodegenerative Disorders and Injury

# Matthew Rozak University of Toronto

Trainee Professional
Development Award (TPDA)

### Graduate Student

Cerebrovascular Networks Coordination Following Traumatic Brain Injury (TBI) The John I. Simpson Fund

#### **C64**

# Theme C: Neurodegenerative Disorders and Injury

### Lianne Sánchez-Rodríguez University of Houston

Trainee Professional
Development Award (TPDA)

### Graduate Student

At-home Stroke NeuroRehabilitation with the NeuroEXO Brain-Machine Interface System
The John I. Simpson Fund

### **C66**

### Theme C: Neurodegenerative Disorders and Injury

### Savannah Tallino Arizona State University

Trainee Professional Development Award (TPDA)

### Graduate Student

Adulthood dietary choline supplementation modestly lowers metabolic symptoms related to Alzheimer's disease risk in the Ts65Dn model of Down syndrome The John I. Simpson Fund

### **C83**

## Theme C: Neurodegenerative Disorders and Injury

### **Brooke Yeager** University of Iowa

Trainee Professional Development Award (TPDA)

### Graduate Student

Sex differences in the neural dynamics underlying cognitive impairments in Parkinson's disease The John I. Simpson Fund

#### **C97**

# Theme C: Neurodegenerative Disorders and Injury

### Zhengrong Zhang Mayo Clinic Florida

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Microglial-specific Tsg 101 deletion restricts microglia activation and ameliorates extracellular vesicle -mediated tau propagation in Alzheimer's disease The John I. Simpson Fund

### **Theme D: Sensory Systems**

### Natalie Choi University of Hawaii at Manoa

Trainee Professional
Development Award (TPDA)

### Graduate Student

Hyper-olfactory sensing, compensating for vision loss, may evolve through fluid-flow dynamics at the olfactory pit but not the expansion of olfactory receptor gene families.

The John I. Simpson Fund

### C102

### **Theme D: Sensory Systems**

### Debarghya Dutta Banik Stark Neurosciences Research Institute, Indiana University School of Medicine

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Identification of putative oral mechanosensory end-organs The John I. Simpson Fund

### C106

### Theme D: Sensory Systems

### Mathilda Froesel KU Leuven

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

High-resolution fmri reveals a large cortical network responding to conspecific emotional vocalization in macaques The John I. Simpson Fund

#### C108

### **Theme D: Sensory Systems**

# Veronica Hong University of Texas at Dallas

Trainee Professional Development Award (TPDA)

### Graduate Student

Loss of Sigma-2/TMEM97 is associated with increased mechanical hypersensitivity during the inflammatory pain resolution in both germline and nociceptor specific knockout mice

The John I. Simpson Fund

#### C115

### **Theme D: Sensory Systems**

### Rebecca Hornung University of Utah

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

Sex differences in development of persistent post-surgical pain in consomic SS-BN13 rats The John I. Simpson Fund

#### C116

### **Theme D: Sensory Systems**

### Franklin Leong Neuro-X, EPFL

Trainee Professional
Development Award (TPDA)

### Graduate Student

Self-optimizing framework for natural sensory feedback through transcutaneous electrical nerve stimulation The John L. Simpson Fund

### **Theme D: Sensory Systems**

# Jonathan Muheim EPFL

Trainee Professional Development Award (TPDA)

### Graduate Student

Investigation of individual differences explaining the presence/absence of thermal phantom maps in upper-limb amputees
The John I. Simpson Fund

C128

### **Theme D: Sensory Systems**

# Anuththara Rupasinghe Princeton Neuroscience Institute

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow
Continuous partitioning of

Continuous partitioning of neuronal variability

The John I. Simpson Fund

C137

### **Theme D: Sensory Systems**

# Christina Schmitter Philipps-University of Marburg

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

How do we adapt to sensorimotor and inter-sensory delays? Findings from fMRI and tDCS suggest critical roles of the hippocampus and the cerebellum The John I. Simpson Fund

C139

### **Theme E: Motor Systems**

### Anwesha Das Leibniz Institute for Neurobiology / Otto-von-Guericke University Magdeburg

Trainee Professional Development Award (TPDA)

### Graduate Student

Can we learn while doing nothing? -A probe into 'micro-offline gains' in early motor skill acquisition in humans The John I. Simpson Fund

D1

### **Theme E: Motor Systems**

### Perla González-Pereyra Instituto de Neurobiología, UNAM

Trainee Professional Development Award (TPDA)

### Graduate Student

Preconfigured cortico-thalamic neural dynamics constrain movementassociated thalamic activity.

The John I. Simpson Fund

**D7** 

### **Theme E: Motor Systems**

### Sina Javadzadeh No University of California Irvine

Trainee Professional
Development Award (TPDA)
Graduate Student

Go/nogo experiment reveals involvement of basal ganglia regions in initiation and canceling hand reach in human subjects

The John I. Simpson Fund

**D11** 

### **Theme E: Motor Systems**

### Megan Nelson Arizona State University

Trainee Professional Development Award (TPDA)

Undergraduate Student

Social memory and interactive behaviors are sex-dependent and modulated by the cerebellum in mice The John I. Simpson Fund

D19

### **Theme E: Motor Systems**

### PRARTHANA SAIKIA UNIVERSITY COLLEGE DUBLIN, IRELAND

Trainee Professional
Development Award (TPDA)

Graduate Student

Simulation of extracellular action potentials detected by an intracortical NeuroNexus neurotrophic electrode (NXNE). The John 1. Simpson Fund

**D27** 

### Theme E: Motor Systems

# Sumire Sato University of Florida

Trainee Professional
Development Award (TPDA)

Postdoctoral Fellow

Differential association of cerebrospinal fluid-interstitial fluid exchange and walking speed in young and older adults The John I. Simpson Fund

**D30** 

### Theme F: Integrative Physiology and Behavior

# Abneil Alicea Pauneto The Sidney Kimmel Medical College at Thomas Jefferson University

Trainee Professional Development Award (TPDA)

### Graduate Student

Long-term effects of adolescent risperidone treatment on behavior and pre-frontal cortex activity in mice The John I. Simpson Fund

**D41** 

### Theme F: Integrative Physiology and Behavior

### Amelia Cuarenta Georgia State University

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Resource scarcity-induced genomic alterations in the basolateral amygdala: a focus on retrotransposons
The John I. Simpson Fund

**E**5

## Theme F: Integrative Physiology and Behavior

# Sixtine Fleury Dartmouth College

Trainee Professional Development Award (TPDA)

Graduate Student

The non-hallucinogenic serotonin 1B receptor is necessary for some of the persisting behavioral effects and neural mechanisms of psilocybin in mice The John I. Simpson Fund

E14

### Theme F: Integrative Physiology and Behavior

# Grace Lowor University of Florida

Trainee Professional Development Award (TPDA)

#### Graduate Student

Investigating the neurophysiological connectivity basis of tic generation The John I. Simpson Fund

#### **E34**

### Theme F: Integrative Physiology and Behavior

### Laiklyn Luther West Virginia University

Trainee Professional
Development Award (TPDA)

### Undergraduate Student

Lasting epigenetic programming in the hypothalamus due to stress during puberty The John I. Simpson Fund

#### E35

### Theme F: Integrative Physiology and Behavior

# Samantha Malmberg Boston University

Trainee Professional
Development Award (TPDA)

### Graduate Student

A subset of egocentric boundary cells in the retrosplenial cortex show preferential tuning to circumventable barriers in an environment.

The John I. Simpson Fund

### **E37**

### Theme F: Integrative Physiology and Behavior

### Simone Mellert University of Colorado Denver

Trainee Professional
Development Award (TPDA)

#### Graduate Student

A Nucleus Accumbens-to-Dorsal Raphe Pathway Mediates Exercise-Induced Stress Resistance in Female Rats The John I. Simpson Fund

#### **F7**

### Theme F: Integrative Physiology and Behavior

### Chloe Orsini Stanford University

Trainee Professional Development Award (TPDA)

### Graduate Student

Insights Into Depression in Chronic Pain: An Exploration of EEG-Based Biomarkers The John I. Simpson Fund

### F16

### Theme F: Integrative Physiology and Behavior

# **Beatriz Rocha**Ariel University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Enriched maternal care combined with Sodium Propionate supplementation reverses outcome of inherited stress vulnerability in mice The John I. Simpson Fund

### **F29**

### Theme F: Integrative Physiology and Behavior

### Katy Celina Sandoval McMaster University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Sex differences in calcium activity of oxytocin neurons and neighboring astrocytes in the hypothalamic paraventricular nucleus during social and stress stimuli

The John I. Simpson Fund

F32

### Theme F: Integrative Physiology and Behavior

### Navid Tavakoli University of Kentucky

Trainee Professional Development Award (TPDA)

### Graduate Student

Astrocyte Ca2+ in the dorsal striatum suppresses neuronal activity to oppose cue-induced reinstatement of cocaine seek
The John 1. Simpson Fund

G2

## Theme F: Integrative Physiology and Behavior

# Julia Tom University of Toronto

Trainee Professional
Development Award (TPDA)

### Graduate Student

What's touch got to do with musicians' motor performance: the interaction between tactile suppression, expertise and difficulty in piano key presses

The John I. Simpson Fund

G4

### Theme F: Integrative Physiology and Behavior

### Mengjie (Emma) Wang Baylor College of Medicine

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow
apMPOA neurons regulate
male sexual behavior
The John I. Simpson Fund

G11

### Theme F: Integrative Physiology and Behavior

### Takashi Yamaguchi New York University Neuroscience Institute

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

Plasticity in a limbic-hypothalamic circuit for the periodic expression of aggressive behaviors in lactating female mice.

The John I. Simpson Fund

**G15** 

### Theme G: Motivation and Emotion

# **Alev Ecevitoglu**University of Connecticut

Trainee Professional
Development Award (TPDA)

### Graduate Student

Investigating the neural mechanisms of effort-based behaviors: Effects of local response rate and tetrabenazine on theta local field potential recordings in prefrontal cortex, nucleus accumbens, and dorsal hippocampus.

The John I. Simpson Fund

G35

#### Theme G: Motivation and Emotion

### Marle Jahnke Institute of Neurophysiology, Goethe University Frankfurt

Trainee Professional
Development Award (TPDA)

Graduate Student

Differential Kv4 channel function in projection-defined dopamine VTA neurons
The John I. Simpson Fund

H14

### Theme G: Motivation and Emotion

### Tammy Nguyen California State University, Long Beach

Trainee Professional Development Award (TPDA)

Graduate Student

Exendin-4, a glucagon-like peptide-1 receptor agonist, attenuates the acquisition of oxycodone preference in male and female Sprague-Dawley rats The John I. Simpson Fund

**H39** 

### Theme G: Motivation and Emotion

# **Brandon Richardson**McGill University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Psilocybin vs. lisuride: similarities and differences in their serotonergic, dopaminergic, sedative-, anxiogenic-, and antidepressant-like effects

The John I. Simpson Fund

19

#### Theme G: Motivation and Emotion

# Adrienne Santiago Columbia University

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Dentate gyrus granule neuron plasticity evoked by electroconvulsive shock: functional and transcriptomic effects The John I. Simpson Fund

111

### Theme G: Motivation and Emotion

### Bryan Uceda-Alvarez Columbia University

Trainee Professional
Development Award (TPDA)

### Post-baccalaureate

Oxytocin-mediated circuit connectivity and its role in social motivation

The John I. Simpson Fund

122

### Theme H: Cognition

### Yasmine Bassil Emory University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Investigating aging-related deficits in human spatial navigation through naturalistic navigation ability and reference frame utilization

The John I. Simpson Fund

133

### Theme H: Cognition

### Jhilik Das Indian Institute of Science

Trainee Professional
Development Award (TPDA)

### Graduate Student

Familiarity or recognition: what makes readers discriminate upright letters better?

The John I. Simpson Fund

**J6** 

### **Theme H: Cognition**

### Ana Belen de Landeta Kavli Institute for Systems Neuroscience. Norwegian University of Science and Technology (NTNU).

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Relevance of entorhinal cortex input to CA1 neuronal activity and behavioral performance in olfactory and visuospatial associative memory

The John I. Simpson Fund

**J7** 

### **Theme H: Cognition**

### Sungje Kim Seoul National University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Sensory and working memory representations are separated in low-dimensional state space of the human early visual cortex The John I. Simpson Fund

**J30** 

### **Theme H: Cognition**

# Charles Micou Department of Engineering, University of Cambridge

Trainee Professional
Development Award (TPDA)

### Graduate Student

Control of spatial navigation by an optical hippocampal brainmachine interface induces rapid reconfiguration of cognitive maps The John I. Simpson Fund

**K3** 

### **Theme H: Cognition**

### Fernanda Morales-Calva Rice University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Cross-Cultural Differences in Emotion Perception and Memory Specificity The John I. Simpson Fund

**K6** 

### **Theme H: Cognition**

### Zuzanna Osiecka Rutgers University–Newark

Trainee Professional Development Award (TPDA)

#### Graduate Student

Distinct recovery patterns of words and pseudowords from left-hemisphere stroke as revealed by geodesic clustering of functional connectivity The John I. Simpson Fund

K11

### **Theme H: Cognition**

# Karla Margarita Padilla Olvera Universidad de Chile

Trainee Professional
Development Award (TPDA)

Postdoctoral Fellow

Neural correlates of Mental Imagery During Decision Deliberation: EEG and Eye-Tracking Analysis The John I. Simpson Fund

K14

### **Theme H: Cognition**

### Aasrita Tulluri Loyola University Chicago

Trainee Professional
Development Award (TPDA)
Undergraduate Student
Fear Engrams in the Dorsal Dentate
Gyrus During Fear Learning and
Fear Generalization: Implications
for Post-Traumatic Stress Disorder

L5

### Theme I: Techniques

The John I. Simpson Fund

# Alex Busch Western University

Trainee Professional
Development Award (TPDA)

Graduate Student

A mathematical language for spike patterns in large-scale recordings from Utah arrays and Neuropixels The John I. Simpson Fund

**L24** 

### Theme I: Techniques

# Anal Kumar National Centre for Biological Sciences, Bangalore

Trainee Professional Development Award (TPDA) Graduate Student

Decoding the mechanisms behind a commonly ignored electrophysiological feature – the Depolarization Baseline Offset The John 1. Simpson Fund

L33

### Theme I: Techniques

### Yucheng (Jacky) Tian University of Michigan

Trainee Professional Development Award (TPDA)

### Graduate Student

Development of Bionic Exoskeleton Control via the Muscle Cuff-Regenerative Peripheral Nerve Interface (MC-RPNI) in a Rat Model The John I. Simpson Fund

M13

#### SOCIETY FOR NEUROSCIENCE



### **Theme A: Development**

### Changuk Chung University of California San Diego

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

Cell-type-resolved mosaicism reveals clonal dynamics of the human forebrain Society for Neuroscience

**A7** 

### **Theme A: Development**

# Justin Koesterich Rutgers University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Network analysis of enhancerpromoter interactions highlights cell-type specific mechanisms of transcriptional regulation variation Society for Neuroscience

**A28** 

### **Theme A: Development**

### Charmaine Natasha Nyakonda Neuroscience Institute, University of Cape Town

Trainee Professional Development Award (TPDA)

Graduate Student

White matter microstructural changes in 6-year-old children who are HIV-exposed uninfected in a South African birth cohort - A Diffusion Tensor Imaging Study Society for Neuroscience

Δ40

# Theme B: Neural Excitability, Synapses, and Glia

# Xhoela Bame Dartmouth College

Trainee Professional
Development Award (TPDA)

### Graduate Student

Mitochondrial network reorganization and transient expansion during oligodendrocyte generation Society for Neuroscience

**A74** 

# Theme B: Neural Excitability, Synapses, and Glia

# **Eugene Berezovski**Uniformed Services University

Trainee Professional
Development Award (TPDA)
Graduate Student

Store Operated Calcium Entry in iPSC-derived Astrocytes

Society for Neuroscience

**A76** 

### **ANKAN BISWAS**

Indian Institute of Science

Trainee Professional Development Award (TPDA)

Graduate Student

Enhanced stimulus-induced and stimulus-free gamma in open-eye meditators

Society for Neuroscience

**A77** 

# Theme B: Neural Excitability, Synapses, and Glia

### Caitlyn Cody Northeastern University

Trainee Professional Development Award (TPDA)

Graduate Student

Revealing activity signatures of early life adversity in the basolateral amygdala driving behavior

Society for Neuroscience

**B7** 

# Theme B: Neural Excitability, Synapses, and Glia

# Annabelle Flores Bonilla University of Massachusetts Amherst

Trainee Professional Development Award (TPDA)

Graduate Student

A history of adolescent drinking increases myelination of axons within the corticotropin releasing factor-enriched subregion of the central amygdala in adult mice Society for Neuroscience

**B17** 

### Theme B: Neural Excitability, Synapses, and Glia

# Costanza Lo Cascio Dana-Farber Cancer Insitute

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

The Spatio-Temporal Landscape of Synaptic Diversity Across Pediatric Brain Tumors Society for Neuroscience

**B30** 

## Theme B: Neural Excitability, Synapses, and Glia

# Summer Paulson Uniformed Services University of the Health Sciences

Trainee Professional Development Award (TPDA)

### Graduate Student

Determining actin cytoskeleton's role in iC3b-mediated synaptic pruning in mice

Society for Neuroscience

**B47** 

# Theme B: Neural Excitability, Synapses, and Glia

### Shweta Shrotri Indian Institute of Science Education and Research Pune

Trainee Professional
Development Award (TPDA)

Graduate Student

Astrocytes modulate operating point of long-term plasticity induction in hippocampal synapses

Society for Neuroscience

### Clara Xi Wang University of Pennsylvania

Trainee Professional
Development Award (TPDA)
Undergraduate Student

Dysregulation of inhibitoryserotoninergic pathways in the dorsal raphe-prefrontal cortex circuit in an animal model of Dravet syndrome Society for Neuroscience

**B66** 

# Theme C: Neurodegenerative Disorders and Injury

### Juliet Akkaoui Herbert Wertheim College of Medicine, Florida International University

Trainee Professional
Development Award (TPDA)

### Graduate Student

IQCK, a novel Alzheimer's disease risk gene, significantly reduces postsynaptic density protein 95 in the mouse brain Society for Neuroscience

**B76** 

## Theme C: Neurodegenerative Disorders and Injury

# **Chia Hsin Cheng**Boston University School of Medicine

Trainee Professional Development Award (TPDA)

### Graduate Student

Increased blood-brain barrier (BBB) permeability and white matter structural damage detected in vivo using non-contrast MRI in the hippocampus of young APOE4 mice Society for Neuroscience

B94

# Theme C: Neurodegenerative Disorders and Injury

# Ka Hang Karen Chung The University of Queensland

Trainee Professional Development Award (TPDA)

### Graduate Student

Gut-bacteria can control the ultra-structure, pathogenicity and self-replication of amyloid-plaques in Alzheimer's disease Society for Neuroscience

**B98** 

# Theme C: Neurodegenerative Disorders and Injury

### Roberto de Freitas University of Pittsburgh

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Characterization of motor improvements enabled by cervical epidural spinal cord stimulation in individuals affected by chronic hemiparesis after stroke

Society for Neuroscience

# Anne Huntemer-Silveira University of Minnesota

Trainee Professional
Development Award (TPDA)
Graduate Student

Generation of 3D printed spinal neural progenitor cell scaffolds for spinal cord injury Society for Neuroscience

**B137** 

# Theme C: Neurodegenerative Disorders and Injury

# Laura Kondrataviciute University of Toronto

Trainee Professional
Development Award (TPDA)

Graduate Student

A53T alpha-synuclein overexpression rat model of Parkinson's disease: behaviour and electrophysiology phenotyping Society for Neuroscience

C14

# Theme C: Neurodegenerative Disorders and Injury

### Pauline Michel-Flutot Thomas Jefferson University

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Pten inhibition promotes robust growth of bulbospinal respiratory axons and partial recovery of diaphragm function in a chronic model of cervical contusion spinal cord injury Society for Neuroscience

**C30** 

### Theme C: Neurodegenerative Disorders and Injury

### Paulina Michor University of Warwick

Trainee Professional
Development Award (TPDA)

Graduate Student

Measuring purine salvage for hypoxic-ischemic brain tissue metabolic support using a newly developed liquid chromatographymass spectrometry method.

Society for Neuroscience

C31

## Theme C: Neurodegenerative Disorders and Injury

### Tayna Rody Souza Ferreira Federal University of Rio de Janeiro (UFRJ)

Trainee Professional Development Award (TPDA)

Graduate Student

Investigating the role of exercise linked-irisin and extracellular vesicles in Alzheimer's disease Society for Neuroscience

**C62** 

# Theme C: Neurodegenerative Disorders and Injury

### Sandeep Sathyanandan Nair Indian Institute of technology Madras

Trainee Professional Development Award (TPDA)

Graduate Student

Modeling the exploratory dynamics of the Indirect Pathway in the Basal Ganglia using a network of chaotic attractors Society for Neuroscience

### Yuhan Sun University of California, Los Angeles

Trainee Professional
Development Award (TPDA)
Undergraduate Student

The Functional Role of microRNAs in the Pathogenesis of Alpha-Synuclein and Tau Protein in Alzheimer's Disease Society for Neuroscience

**C78** 

# Theme C: Neurodegenerative Disorders and Injury

### Isabella Triana University of California, Davis

Trainee Professional
Development Award (TPDA)
Undergraduate Student

Acute Organophosphate Intoxication in Juvenile Rats Results in the Development of Spontaneous Recurrent Seizures and Altered Cognition

Society for Neuroscience

**C88** 

# Theme C: Neurodegenerative Disorders and Injury

# Antonia Wehn Department of Neurosurgery, LMU Munich University Hospital, Munich, Germany

Trainee Professional
Development Award (TPDA)

Postdoctoral Fellow

Characterization of microthrombimediated blood-brainbarrier dysfunction following traumatic brain injury Society for Neuroscience

C94

### Theme C: Neurodegenerative Disorders and Injury

### Silin Wu

The University of Texas Health Science Center at Houston

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Elucidating the Role of miR-335-3p and ATP1A2 in Cerebral Edema Following Subarachnoid Hemorrhage: Insights from In Vivo and In Vitro Models Society for Neuroscience

**C96** 

### **Theme D: Sensory Systems**

# Ambra Ferrari CIMeC, University of Trento, Italy

Trainee Professional
Development Award (TPDA)

Postdoctoral Fellow

Audiotactile encoding of music in the human brain Society for Neuroscience

C107

### **Theme D: Sensory Systems**

### **Jordan Gregory** University of Pittsburgh

Trainee Professional Development Award (TPDA)

### Graduate Student

Immature olfactory sensory neurons provide complementary odor information

Society for Neuroscience

Society for the

### **Theme D: Sensory Systems**

### **Dianna Hidalgo** Harvard Medical School

Trainee Professional
Development Award (TPDA)

### Graduate Student

Inter-areal interactions in visual cortex in the presence or absence of a visual stimulus

Society for Neuroscience

### C114

### **Theme D: Sensory Systems**

# Ya-Yu Hu The University of Texas at Dallas

Trainee Professional Development Award (TPDA)

### Graduate Student

The role of HPA axis and melanocortin signaling in repeated stress-induced migraine-like behaviors in mice.

Society for Neuroscience

#### C117

### **Theme D: Sensory Systems**

### Bengisu Solgun Hacettepe University

Trainee Professional Development Award (TPDA)

### Graduate Student

Does spreading depression rewire cortical pain networks?

Society for Neuroscience

### C144

### **Theme D: Sensory Systems**

### Hari Srinivasan Vanderbilt U

Trainee Professional
Development Award (TPDA)

### Graduate Student

Navigating the Near: VR Investigations of Peripersonal Space in Autism

Society for Neuroscience

#### C146

### **Theme D: Sensory Systems**

### Daniel Taub Boston Children's Hospital

Trainee Professional Development Award (TPDA)

### Postdoctoral Fellow

Distinct Populations of Neurons in the Secondary Somatosensory Cortex Drive Discrete Somatosensory Behaviors to Noxious Stimuli.

Society for Neuroscience

### C148

### **Theme E: Motor Systems**

### Mehrnaz Asadi University of California Irvine

Trainee Professional Development Award (TPDA)

### Graduate Student

Capturing Temporal Dynamics in Human Basal Ganglia Using Low-Dimensional Dynamic Computational Networks Society for Neuroscience

### **Theme E: Motor Systems**

### Reagan Bullins University of North Carolina at Chapel Hill

Trainee Professional
Development Award (TPDA)

Graduate Student

The effect of behavioral state on motor cortex optogenetic stimulation outcomes

Society for Neuroscience

C158

### **Theme E: Motor Systems**

### Henrique de Oliveira Amaral University of Alabama at Birmingham

Trainee Professional
Development Award (TPDA)
Graduate Student

Single-cell transcriptomic analysis of genetic and phenotypic dystonia mouse models

Society for Neuroscience

**D3** 

### **Theme E: Motor Systems**

### Namrata Dhungana California State University, East Bay

Trainee Professional
Development Award (TPDA)

Graduate Student

Mommy Knows Best: Genetic and Circuit Basis of Female Drosophila Decision-Making Society for Neuroscience

**D4** 

### **Theme E: Motor Systems**

### **Anna Korol**

### West Virginia University

Trainee Professional
Development Award (TPDA)

### Graduate Student

Comparing the effectiveness of synchronous and asynchronous neuromuscular electrical stimulation in controlling human arm movement Society for Neuroscience

**D13** 

### **Theme E: Motor Systems**

# Marianna Rizzo University of Parma

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Quantitative and qualitative analysis of the callosal connectivity in the macaque brain.

Society for Neuroscience

**D25** 

### **Theme E: Motor Systems**

### Hailey Welch University of Texas at Dallas

Trainee Professional
Development Award (TPDA)

### Graduate Student

Comparing the effects of right and left vagus nerve stimulation on motor performance Society for Neuroscience

**D39** 

### Theme F: Integrative Physiology and Behavior

### Meenakshi Asokan Princeton University

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Hormone-mediated reorganization of cortical dynamics during female social choice

Society for Neuroscience

**D48** 

### Theme F: Integrative Physiology and Behavior

### Owura-Serebour Berko NIDA

Trainee Professional Development Award (TPDA)

Undergraduate Student

Brain-wide activation patterns of persistent discriminative stimulus-controlled cocaine seeking in rats **Society for Neuroscience** 

**D54** 

### Theme F: Integrative Physiology and Behavior

### **Richard Kim**

Virginia Commonwealth University

Trainee Professional Development Award (TPDA)

Graduate Student

Social recognition requires TRIM28mediated transcriptional regulation in mouse prefrontal cortex Society for Neuroscience

**E28** 

### Theme F: Integrative Physiology and Behavior

# **Anna McMillen** Flinders University

Trainee Professional Development Award (TPDA)

Graduate Student

Investigating the role of dopamine in the process of forgetting in C. elegans **Society for Neuroscience** 

F4

### Theme F: Integrative Physiology and Behavior

### Amanda Namchuk CAMH

Trainee Professional
Development Award (TPDA)

Graduate Student

Examining sex-specific activation of immature neurons during chronic stress-induced negative cognitive bias Society for Neuroscience

F12

### Theme F: Integrative Physiology and Behavior

### Marco Pagliusi Jr. University of São Paulo

Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Involvement of the projections from lateral habenula to RVM in the social defeat stress-induced behavioral impairments

Society for Neuroscience

F18

### Theme F: Integrative Physiology and Behavior

### **Natalie Truby**

Virginia Commonwealth University

Trainee Professional Development Award (TPDA)

Graduate Student

A Novel Role for Transcriptional Regulators of Transposable Elements in Social Behaviors Society for Neuroscience

G6

### Theme F: Integrative Physiology and Behavior

### **Pei Hsuan Wu** University of British Columbia

Trainee Professional Development Award (TPDA)

Graduate Student

The neurobiology of visually-guided ambush behavior in South American horned frogs (Ceratophrys)

Society for Neuroscience

**G14** 

### Theme G: Motivation and Emotion

# **Kenneth Amaya**Tufts University School of Medicine

D-SPAN; Trainee Professional Development Award (TPDA)

Postdoctoral Fellow

Basolateral amygdala interneurondriven oscillatory states engage valence-specific ensembles and distinct downstream circuits Society for Neuroscience

G18

### **Theme G: Motivation and Emotion**

### Connor Brenna University of Toronto

Trainee Professional
Development Award (TPDA)

### Graduate Student

Modulation of GABA-A receptors in the antidepressant effect of nitrous oxide

Society for Neuroscience

**G23** 

### **Theme G: Motivation and Emotion**

# Megan Greener University of Nottingham

Trainee Professional
Development Award (TPDA)

### Graduate Student

Unravelling the role of dopamine and cAMP-regulated phosphoprotein, Mr 32 kDa (DARPP-32) in addiction Society for Neuroscience

H7

#### Theme G: Motivation and Emotion

### Klaiten Kermoade University of Minnesota

Trainee Professional Development Award (TPDA)

### Graduate Student

CHEMOGENETIC MANIPULATION
OF VENTRAL PALLIDAL PROJECTIONS
TO THE LATERAL HABENULA
ALTERS AVERSION-RESISTANT
ALCOHOL CONSUMPTION
Society for Neuroscience

H17

#### Theme G: Motivation and Emotion

### Jinah Lee The Graduate Center, City University of New York

Trainee Professional
Development Award (TPDA)

Graduate Student

Sex Differences in Serotonin Signaling in the Bed Nucleus of the Stria Terminalis Society for Neuroscience

**H22** 

#### Theme G: Motivation and Emotion

### **Ignitius Lim** Louisiana State University

Trainee Professional
Development Award (TPDA)
Graduate Student

Neural encoding of valencies in the BNST-CeA-DRN circuits, and the implications for stresslinked behavioral responses.

Society for Neuroscience

**H25** 

### **Theme G: Motivation and Emotion**

### Haocheng Ma New York University

Trainee Professional
Development Award (TPDA)

#### Graduate

Multivariate Pattern Analysis of Amygdala Predicts Psychopathy in Incarcerated Females During an Empathy Task Society for Neuroscience

**H27** 

### Theme G: Motivation and Emotion

# Robin Magnard Johns Hopkins University

Trainee Professional
Development Award (TPDA)

### Postdoctoral Fellow

Dysregulation of mesolimbic dopamine signaling negative reward prediction error and its impact on behavioral flexibility Society for Neuroscience

**H28** 

#### Theme G: Motivation and Emotion

# Austin Pothikamjorn University of Pennsylvania

Trainee Professional
Development Award (TPDA)
Undergraduate Student

Unraveling the Role of Interpeduncular Nucleus GLP-1R Agonism in Fentanyl-Induced Striatal Dopamine Signaling Society for Neuroscience

13

#### Theme G: Motivation and Emotion

### Elora Williams University of Colorado Boulder

Trainee Professional Development Award (TPDA)

Graduate Student

Midbrain circuitry controls threat processing and innate defensive adaptive learning Society for Neuroscience

127

### **Theme H: Cognition**

### Fahimeh Arab University of California Riverside

Trainee Professional
Development Award (TPDA)

### Graduate Student

A meta-study of whole-brain causal connectivity during decoded neurofeedback

Society for Neuroscience

131

### **Theme H: Cognition**

### Julio Esparza Instituto Cajal - CSIC

Trainee Professional Development Award (TPDA)

### Graduate Student

Cell-type-specific geometric transformations in the hippocampal spatial code Society for Neuroscience

J11

### Theme H: Cognition

### Jing-Jing Li UC Berkeley

Trainee Professional Development Award (TPDA)

### Graduate Student

An algorithmic account for how humans efficiently learn, transfer, and compose hierarchically structured decision policies Society for Neuroscience

**J35** 

### **Theme H: Cognition**

### Kritika Ramesh University of Texas Southwestern Medical Center

Trainee Professional Development Award (TPDA)

### Graduate Student

Roles of mediodorsal thalamus on observational fear-responding activity in anterior cingulate cortex Society for Neuroscience

**K21** 

### **Theme H: Cognition**

### **Sanikaa Thakurdesai** University o f Maryland

Trainee Professional Development Award (TPDA)

### Postbaccalaureate

Within-subject comparison across neurological lesion cases reveals the functional relevance of the medial temporal lobe in visual short-term memory precision Society for Neuroscience

L4

### **Theme H: Cognition**

### **Guochun Yang** University of Iowa

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow
Dynamics of multi-form
task representations during

task representations during sequence learning

Society for Neuroscience

L12

### Theme I: Techniques

# Domokos Meszena Institute of Cognitive Neuroscience and Psychology, HUN-REN Research Centre for Natural Sciences, Budapest, Hungary

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Unraveling the individual membrane current components and local microcircuit states of CA1 pyramidal cells using ground-truth recordings

Society for Neuroscience

L36

### Theme I: Techniques

**Trainee Professional** 

### Felix Schwock University of Washington

Development Award (TPDA)
Graduate Student
Identifying dynamic functional
connectivity biomarkers for
Alzheimer's disease detection using
graph diffusion autoregression
Society for Neuroscience

**M8** 

### Theme I: Techniques

### Kaylee Taylor Central Michigan University

Trainee Professional Development Award (TPDA)

### Graduate Student

Developing and optimizing bioluminescent neurotransmitter sensors and neurotransmitter dependent neuromodulators

Society for Neuroscience

M12

# Theme J: History, Education, and Society

### Jacob Liu University of California, Irvine

Faculty for Undergraduate Neuroscience (FUN); Trainee Professional Development Award (TPDA)

### Undergraduate Student

Influence of first-generation status on student metacognition and academic performance in undergraduate biology education Society for Neuroscience

**M24** 

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# The Nancy Rutledge Zahniser Fund

# Theme B: Neural Excitability, Synapses, and Glia

# **Brittney Boublil**University of California, Irvine

Trainee Professional
Development Award (TPDA)
Postdoctoral Fellow

Hippocampal representation of a new environment in a rodent model of temporal lobe epilepsy The Nancy Rutledge Zahniser Fund

**A79** 

## Theme B: Neural Excitability, Synapses, and Glia

### Ashley Copenhaver University of Maryland, Baltimore County (UMBC)

Neuroscience Scholars Program (NSP); Trainee Professional Development Award (TPDA)

### Graduate Student

Sex-specific mechanisms underlying long-term potentiation at hippocampus-nucleus accumbens medial shell synapses

The Nancy Rutledge Zahniser Fund

**B10** 

## Theme B: Neural Excitability, Synapses, and Glia

### Annette Fernandez Oropeza University of New Mexico

Trainee Professional
Development Award (TPDA)

### Graduate Student

ONE-HOUR ISOLATION STRESS ALTERS CORTICOLIMBIC MRNA EXPRESSION OF STRESS, CLOCK, AND PROINFLAMMATORY IMMUNE FACTORS IN PAE FEMALE ADOLESCENT MICE.

The Nancy Rutledge Zahniser Fund

B15

# Theme C: Neurodegenerative Disorders and Injury

# Rachel Boyd Johns Hopkins University School of Medicine

Trainee Professional
Development Award (TPDA)

### Graduate Student

Protection against motor deficits in a Parkinson's disease mouse model, achieved by CRISPR-mediated deletion of a neuronal  $\alpha$ -synuclein (Snca) intronic enhancer.

The Nancy Rutledge Zahniser Fund

B85

# Theme C: Neurodegenerative Disorders and Injury

### Yuejiao (Camelia) Zheng Stony Brook University

Trainee Professional
Development Award (TPDA)
Graduate Student

Taste processing in a mouse model of frontotemporal dementia

The Nancy Rutledge Zahniser Fund

### Theme F: Integrative Physiology and Behavior

### **Yeeun Bae** Virginia Tech

Trainee Professional
Development Award (TPDA)

### Graduate Student

RPN 13 as a potential sex-specific regulator of proteasome function during fear memory formation

The Nancy Rutledge Zahniser Fund

#### **D50**

### Theme F: Integrative Physiology and Behavior

# **Shannon Bennett** Princeton University

Trainee Professional
Development Award (TPDA)

### Postbaccalaureate

Effects of pharmacological manipulation of thyroid hormone signaling during development The Nancy Rutledge Zahniser Fund

#### **D53**

### Theme F: Integrative Physiology and Behavior

# Nadia McLean Washington State University

Trainee Professional
Development Award (TPDA)

#### Graduate Student

Selectively targeting cerebellar adaptations during withdrawal reduces alcohol withdrawal severity

The Nancy Rutledge Zahniser Fund

### F2

### Theme G: Motivation and Emotion

### Yorkiris Marmol Contreras The University of Texas Medical Branch

Trainee Professional
Development Award (TPDA)
Graduate Student

Operant tasks of emotional reactivity: Force and duration of pressing are sensitive to distinct psychological constructs

The Nancy Rutledge Zahniser Fund

### H29

### Theme G: Motivation and Emotion

### Chiho Sugimoto Michigan State University

Trainee Professional Development Award (TPDA)

### Graduate Student

Androgen receptor dependent regulation of projection-specific hippocampal neuronal excitability The Nancy Rutledge Zahniser Fund

### 115