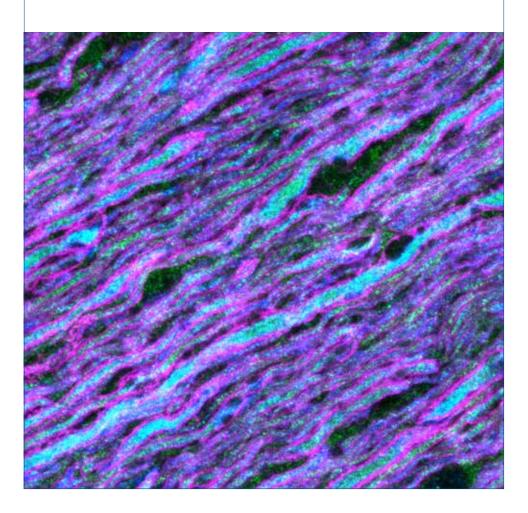


# Trainee Professional Development Awards Poster Session

Saturday, November 3 6:30–8:30 p.m.

San Diego Convention Center, Hall A



PLEASE NOTE: Odd numbered posters will be presented 7–7:45 p.m.; even numbered posters will be presented 7:45–8:30 p.m. Presenters are encouraged to network and visit other presenters' posters when they are not presenting.

The Trainee Professional Development Awards Poster Session is supported by *eNeuro* and *JNeurosci*.

SfN gratefully acknowledges contributions from the following Trainee Professional Development Awards supporters:

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Society for Neuroscience William Mobley, MD, PhD

# **A: Development**

# Samantha Baglot

Social isolation stress alters the expression of hippocampal neurogenesis in adolescent animals prenatally exposed to alcohol

University of Calgary

Graduate Student

# Kinga Bercsenyi

To be, or not to be — neuronal death during development

King's College London

Postdoctoral Fellow

# Tyler Bielinski

Differing effects of hypoxia on development of dopaminergic neurons in the developing zebrafish

University of Scranton

Undergraduate Student

# Morgan Bridi

Inhibitory synaptic transmission by parvalbumin-positive interneurons is perturbed in Cntnap2-KO autism model mice

**Hussman Institute for Autism** 

Postdoctoral Fellow

# **Huijie Feng**

A mouse model for GNAO1-associated movement disorder

Michigan State University

Graduate Student

# Nancy Gallus-Carullo

Enhancer RNAs are necessary and sufficient for gene transcription and neuronal function

University of Alabama at Birmingham

Graduate Student

# Raphael Geddert

Adolescents and young adults with autism spectrum disorder show specific impairments in cognition

University of California, Davis Undergraduate Student

# Ryan Griggs

**JJJ 33** 

**JJJ 32** 

J.J.J 31

**JJJ 30** 

**JJJ 29** 

**JJJ 28** 

**JJJ 26** 

**JJJ 27** 

The diabetes-related metabolite methylglyoxal induces axon initial segment shortening

Wright State University

Postdoctoral Fellow

# Serena Gumusoglu

**JJJ 25** 

Chronic prenatal interleukin-17 is sufficient to cause sex-specific ASD-phenotypes in a mouse model

University of Iowa

Graduate Student

# Samantha Hodges

**JJJ 24** 

Cytokine expression and sickness behavior following lipopolysaccharide stimulation in the Fmr1 knockout mouse

**Baylor University** 

Graduate Student

#### Camille Juzwik

JJJ 23

Inhibition of miR-383 promotes axon regeneration following injury

McGill University

Graduate Student

#### Zsofia Kovacs-Balint

JJJ 22

Development of amygdala-prefrontal cortex circuits in primates: A longitudinal neuroimaging study in infant macaques

**Emory University** 

# Kelsey Lloyd

Adolescent high fat diet impairs motivation and disrupts prefrontal cortex gene expression in adulthood

University of Cincinnati

Graduate Student

#### Melissa Martin

Brain and behavioral consequences of developmental nicotine exposure in a GAD67-GFP mouse model

Florida State University

Graduate Student

#### Veronica Mucciarone

Differential brain activation of OPRM1 genotypes in response to reward during early adolescence

Georgetown University

Undergraduate Student

#### Lauren Neal

Homology in Gyf gene maintains

neuron cell homeostasis in Drosophila melanogaster and Drosophila eugracilis

Agnes Scott College

Undergraduate Student

#### **Bart Nieuwenhuis**

Elevated phosphoinositide 3-kinase activity promotes axon regeneration of central nervous system neurons

University of Cambridge

Graduate Student

# Suzanne Nolan

Dietary rescue of adult behavioral deficits in the Fmr1 knockout mouse

**Baylor University** 

Graduate Student

# Maya Opendak

JJJ 21

J.J.J 20

J.J.I 19

**JJJ 18** 

**JJJ 17** 

JJJ 16

Developmental psychopathology after maltreatment and disordered attachment within the Strange Situation Test: Insights from an animal model

New York University Langone Medical Center

Postdoctoral Fellow

#### Louis-Jan Pilaz

**JJJ 14** 

**JJJ 15** 

Dynamic RNA localization and local translation in the radial glial cells of the mammalian brain

**Duke University Medical Center** 

Postdoctoral Fellow

#### **Hércules Freitas**

**JJJ 13** 

CB1/2 receptor activation induces death of chick embryonic retinal cells **Universidade Federal do Rio de Janeiro** *Graduate Student* 

#### Maria Ryazantseva

**JJJ 12** 

The role of kainate receptors in the development of amygdala internal glutamatergic circuit in neonatal rats

University of Helsinki

Postdoctoral Fellow

# Sophie Schwartz

JJJ 11

Response to own name in noise differs in autistic adolescents with severe language impairments

Boston University School of Medicine Graduate Student

# Morgan Sherer

**JJJ 10** 

An investigation into the long-term impact of prenatal zika virus infection on the developing brain using a rat model of maternal infection

University of Delaware

# Leonid Yermakov Structural changes in axon initial segment in diabetic brain Wright State University Graduate Student

# B: Neural Excitability, Synapses, and Glia

# **Scott Alpizar**

Loss of NF-186 alters the distal accumulation of sodium channels within the axon initial segment

Dartmouth College Graduate Student

#### Arielle Baker

Patterns of presynaptic connectivity and modulation in the mouse medial prefrontal cortex

Dartmouth College Graduate Student

# Mora Belén Ogando

Cholinergic modulation reorganizes dentate gyrus microcircuits

University of Buenos Aires

# Graduate Student

P. Lorenzo Bozzelli

The role of PAR-1 activation in sharp wave ripple event frequency

Georgetown University

Graduate Student

# Colleen Carpenter

A novel zebrafish model of GABRB3-linked childhood epilepsy

University of California, San Francisco
Postdoctoral Fellow

#### JJJ 9 Chantel Charlebois

Validating cortical surface electrode localization uncertainty with simulation and clinical stimulation

JJJ 3

JJJ 2

III 66

University of Utah
Graduate Student

JJJ8

**JJJ** 6

JJJ 5

JJJ 4

#### Caroline Cvetkovic

Investigating human neuron-astrocyte functional interactions using a bioengineered 3D coculture platform

Houston Methodist Research Institute Postdoctoral Fellow

# Brionna Davis-Reyes JJJ 1

Role of medial prefrontal cortex NMDA receptors in inherent impulsivity

JJJ7 University of Texas Medical Branch, Galveston Graduate Student

# Margaret DeMaegd III 68

Differential current accumulation from antidromic action potentials modulates stimulus encoding

Illinois State University Graduate Student

# Beatrice D'Orsi

The role of the Mitochondrial Ca2+ Uniporter (MCU) in the pathogenesis of Alzheimer's disease.

**University of Padua**Postdoctoral Fellow

#### Larissa Erben

Analysis of neurodevelopment and schizophrenia-relevant behaviors in ErbB4 mutant mice lacking the Cyt-1 isoform

Graduate Student Partnership Program, National Institutes of Health and University of Bonn

Nicholas Gallo III 65 Jordan Logue III 59

III 63

III 62

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III 60

Axo-axonic innervation of neocortical pyramidal neurons by GABAergic chandelier cells requires ankyrinGassociated L1CAM

Cold Spring Harbor Laboratory/ Stony Brook University

Graduate Student

Wei Huang

Higher-order visual thalamus orchestrates cortico-cortical synchronization during sustained attention

University of North Carolina at Chapel Hill Graduate Student

# Hada Fongha leong

Desynchronized lower alpha rhythms were associated with functional ischemia in the prefrontal cortex in heroin patients after protracted abstinence: a concurrent EEG-fNIRS study

University of Macau Graduate Student

# Ashley Ingiosi

Astroglial contributions to sleep homeostasis

Washington State University
Postdoctoral Fellow

#### Marek Kowalski

Ketamine trapping inside of NMDA channels affects spiking dynamics in Hodgkin-Huxley-like models

Boston University
Graduate Student

# Andrew Lapato

Remodeling of GABAergic innervation may contribute to cortical hyperexcitability and seizures in chronically demyelinated mice

University of California Riverside School of Medicine

Graduate Student

Effects of social isolation rearing and ketamine on hippocampal synaptic plasticity

Florida State University

Graduate Student

#### Ketan Marballi

III 58

EGR3 is required for activity dependent Bdnf exon IV and VI induction in the mouse hippocampus

University of Arizona College of Medicine Postdoctoral Fellow

# Aditya Nair

III 57

Cell-type specific cholinergic modulation of the claustrum

National University of Singapore Undergraduate Student

#### Rosana Penalya

III 56

Role of regulatory T cells in remyelination following cuprizone-induced demyelination

Max Planck Institute for Psychiatry, Germany; Universidad de Buenos Aires Postdoctoral Fellow

# **Austin Ramsey**

III 55

Dynamic control of synaptic substructure and function by adhesion molecules

University of Maryland, Baltimore Graduate Student

#### **Armando Salinas**

III 54

Direct simultaneous comparison of a novel fluorescent dopamine sensor (dLight) with fast-scan cyclic voltammetry in cortex and striatum

National Institute on Alcohol Abuse and Alcoholism

#### Natascha Schaefer

The GLRB mouse mutant spastic - model system to study agoraphobic behavior

University Hospital Wuerzburg/Institute for Clinical Neurobiology

Postdoctoral Fellow

#### Alec Sheffield

Transcranial static magnetic field stimulation of the dorsolateral prefrontal cortex has region specific effects on neural oscillations

Massachusetts Institute of Technology Undergraduate Student

#### **Rachael Stein**

Hippocampal deletion of sodium channel Nav1.1 causes thermally evoked seizures and spatial learning deficits in a mouse model of Dravet Syndrome

University of Washington

Graduate Student

#### Marie-Kim St-Pierre

Identification of a dark microglia specific marker

Université Laval

Graduate Student

#### Alejandro Torrado Pacheco III 49

Sleep temporally segregates the expression of downward firing rate homeostasis in vivo

**Brandeis University** 

Graduate Student

# **Dylan Verden**

Nrf2 function in oligodendrocyte development and injury responses

University of Colorado, Anschutz **Medical Campus** 

Graduate Student

### Caitlin Wotton

III 53

III 52

III 51

III 50

**III 48** 

Contribution of astrocytic purinergic signalling in serotonin neuromodulation

University of Saskatchewan

Graduate Student

# C: Neurodegenerative **Disorders and Injury**

# Nicholas Batty

**III 46** 

Electrical stimulation to promote plasticity in the injured corticospinal tract

University of Alberta

Graduate Student

#### Nicolas Belforte

III 45

Early neuronal pathogenesis and dysfunction by the activation of AMPactivated protein kinase — mammalian target of rapamycin pathway

Univeristy of Montreal Hospital Research Center (CRCHUM)

Postdoctoral Fellow

#### **Brandon Berkemeier**

Pain-like withdrawal responses to conditioned auditory cues associated with repeated von Frey stimuli in two rat models of neuropathic pain

University of Cincinnati College of Medicine

Undergraduate Student

# Molly Braun

III 43

Remote ischemic post-conditioning accelerates hematoma resolution after intracerebral hemorrhage by modulating innate immune activation

Medical College of Georgia

Graduate Student

III 47

**III 44** 

# Saranya Canchi

Comparison of gene expression profile of Alzheimer's disease using modular maximization reveals role of EGR3

University of California, San Diego Postdoctoral Fellow

# Randall Carpenter

Bad to the bone: Spinal cord injury disrupts hematopoietic and immune cell function in the bone marrow niche

The Ohio State University Graduate Student

# **Amanda Cheung**

Diagnostic and prognostic potential of serum and CSF UCHL-1 in acute traumatic spinal cord injury

University of British Columbia/ICORD Graduate Student

#### Jonathon Chio

Drug Repurposing: High Dose Human Intravenous Immunoglobulin G for Treatment of tTaumatic Cervical Spinal Cord Injury

University of Toronto Graduate Student

# Stephanie Ciarlone

Alterations in amyloid beta peptide levels following subclinical blast overpressure exposure in a rodent model of traumatic brain injury

Naval Medical Research Center Postdoctoral Fellow

#### Marangelie Criado-Marrero III 37

High FKBP52 levels cause tau aggregation leading to hippocampaldependent memory impairments

University of South Florida Postdoctoral Fellow

# Julia Crone

III 42

III 41

III 40

III 39

III 38

Are changes in time-varying network dynamics truly driven by consciousness? University of California, Los Angeles Postdoctoral Fellow

#### Jean-Christophe Delpech III 35

P2X7R inhibitor blocks exosome secretion and delays proteopathic tau accumulation in P301S tau mice

**Boston University** Graduate Student

#### **Beatriz Garcia-Diaz**

Blood vessels guide Schwann cell migration in the adult demyelinated CNS through Eph/Ephrin signaling

Institut du Cerveau et de la Moelle Épinière (ICM)

Postdoctoral Fellow

# **Emily Gilbert**

Using metformin to activate endogenous precursor cells in the spinal cord

University of Toronto Postdoctoral Fellow

#### Jenna Glatzer

Oligodendrocyte dysfunction and c9orf72 als

Johns Hopkins University School of Medicine

Graduate Student

# Albina Ibrayeva

Origins of age-related neurogenesis decline University of Southern California Graduate Student

# Deepak Kaushik

Glycolysis drives leukocyte migration and subsequent neuropathology in an animal model of multiple sclerosis

University of Calgary

Postdoctoral Fellow

**III 36** 

**III 34** 

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III 32

III 31

III 30

# Shahrnaz Kemal

Absence of tau does not prevent dystrophic neurite formation in two Alzheimer's disease mouse models

# Northwestern University

Postdoctoral Fellow

#### Haneui Kim

Western diet impedes recovery after experimental spinal cord injury

#### Mayo Clinic

Postdoctoral Fellow

#### Jacqueline Kulbe

Neuroprotective strategies following experimental traumatic brain injury: Inhibition of mitochondrial permeability transition, lipid peroxidation-derived neurotoxic aldehyde scavenging and monoamine oxidase inhibition

#### University of Kentucky

Graduate Student

#### Mantosh Kumar

Attenuation of excitotoxicty induced molecular changes by NMDAR inhibitors

#### Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Graduate Student

#### **Harald Lund**

Dysregulation of TGF-beta signaling in monocyte-derived macrophages results in fatal neurodegeneration

#### Karolinska Institutet

Postdoctoral Fellow

#### Ian Mahar

Subgenual anterior cingulate white matter and depressive etiology in chronic traumatic encephalopathy

#### **Boston University**

Postdoctoral Fellow

#### Raza Malik

III 29

III 27

III 26

III 25

A novel task to measure lower limb coordination after spinal cord injury and its relation to proprioceptive sense

#### University of British Columbia

Graduate Student

#### III 28 Marta Maltese

III 22

III 23

Differential modulation of striatal projection neurons following dopamine loss and replacement

# New York University Medical Health

Postdoctoral Fellow

# Jose Martinez

III 21

Building a plausible model for tdp-43 driven als/ftd pathology

#### University of Wisconsin

Graduate Student

#### Paola Meade

III 20

Human cerebrospinal fluid induces an increase in proliferation of glioblastoma cells *in vitro* and *in vivo* 

#### **Anahuac University**

Undergraduate Student

#### Ari Mendell

III 19

Finasteride differentially impacts dendritic morphology of hippocampal neurons and impairs object recognition memory in male 3xTq-AD mice

#### University of Guelph

Graduate Student

#### **Daniel Moreno Blas**

III 18

Autophagy dysfunction during neuronal senescence

# National Autonomous University of Mexico (UNAM)

Brandie Morris III 17 Laura Palmer III 11

III 15

III 13

Poly-GR expression in a novel mouse model of C9orf72-ALS

Thomas Jefferson University *Graduate Student* 

Elizabeth Nguyen III 16

Hypothalamic-pituitary-adrenal axis hyperactivity precedes cognitive impairments in female mice genetically vulnerable to Alzheimer's disease

University of Cincinnati College of Medicine

Graduate Student

Maria Nguyen

LRRK2 phosphorylation of auxilin mediates synaptic defects in dopaminergic neurons from patients with Parkinson's disease

Northwestern University

Graduate Student

David Nowak III 14

Combined pro-regenerative strategies and targeted rehabilitation to improve behavioral outcomes after spinal cord injury

Marquette University Undergraduate Student

Daniel Ojeda Juárez

Lipocalin-2 deficiency limits alterations of neurotransmission-related gene networks in a transgenic model of HIV-induced brain injury

Sanford Burnham Prebys Medical Discovery Institute

Graduate Student

Anthony Oppong-Gyebi III 12

Influence of ovarian hormone deprivation length on the neuroprotective effects of genistein in stroke

University of North Texas Health Science Center

Graduate Student

Amyloid  $\beta$  reduces pannexin-1 channel opening during ischemia through a novel mGluR1-mediated mechanism

University of Calgary

Graduate Student

Karen Parra

III 10

**III** 9

III 6

Hippocampal neuropathology in patients with seizures secondary to multiple sclerosis

University of California, Riverside Undergraduate Student

Andrée-Anne Poirier

Therapeutic repurposing of dutasteride as an immunomodulatory drug for the treatment of gut inflammation in a mouse model of Parkinson's disease

**Laval University** *Graduate Student* 

Ayumi Pottenger

Evaluating the effects of subanesthetic ketamine on microglia morphology in a pre-clinical model of L-DOPA induced dyskinesia

University of Arizona Undergraduate Student

Daniel Quesada-Yamasaki III 7

Chronic corticosterone administration without posterior immune challenge induces depressive-like behavior and microglia priming but not proliferation in young adult and middle-aged rats

University of Costa Rica
Undergraduate Student

Pilar Rivero-Ríos

Pathogenic LRRK2 alters endolysosomal trafficking through impairing Rab8a function

IPBLN-CSIC
Graduate Student

#### **Madeline Ross**

Astrocytes determine pathway of cell death triggered by oxidative stress in neurons

#### **Boston University**

Undergraduate Student

# Jessika Royea

Angiotensin II type 2 receptors' role in a mouse model of Alzheimer's disease

#### McGill University

Graduate Student

#### Marissa Schafer

Circulating GDF11 is associated with cortical thickness, amyloid burden, and cognitive performance

#### Mayo Clinic

Postdoctoral Fellow

#### Cristina Simon-Martinez

Functional connectivity of the sensorimotor network is influenced by the corticospinal tract wiring pattern in unilateral cerebral palsy

University of Leuven – KU Leuven Graduate Student

# **Hailong Song**

Characterization of mitochondrial damage due to low-intensity primary blast injury

University of Missouri, Columbia Graduate Student

# Shanshan Song

Selective deletion of Na+/H+ exchanger in Cx3cr1+ microglia stimulates white matter myelination and improves post-stroke function recovery

University of Pittsburgh

Postdoctoral Fellow

# III 5 Ann Van der Jeugd

Reversal of memory and neuropsychiatric symptoms and reduced taupathology by selenium in 3xTg-AD mice

#### **KULeuven**

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**HHH 61** 

Postdoctoral Fellow

#### Susanne Van Veluw

**HHH 59** 

**HHH 60** 

Vasoactivity as the driving force for paravascular clearance in the awake Alzheimer model mouse brain

Massachusetts General Hospital/ Harvard School of Medicine

Postdoctoral Fellow

#### Hai Vo

**HHH 58** 

Klotho regulates the activity of hippocampal neurons

University of Alabama at Birmingham Graduate Student

#### Katharine von Herrmann HHH 57

Neurogenic inflammation resulting from expression of constitutively activated NLRP3 in mesencephalic dopamine neurons

Geisel School of Medicine at Dartmouth Graduate Student

# Philippa Warren

**HHH 56** 

The effects of chronic paralysis on the mechanical properties and fibre-type composition of the diaphragm

University of Leeds

Postdoctoral Fellow

#### Kobi Wasner

**HHH 55** 

Investigating a novel role for parkin in mitochondrial dna maintenance in induced pluripotent stem cell-derived neurons from Parkinson's disease patients

Université du Luxembourg

Alison Weiss Jolande Fooken **HHH 54 HHH 48** 

Assessing altered cortico-basal ganglia circuitry in a novel AAVmediated non-human primate model of Huntington's disease

Oregon Health & Science University Postdoctoral Fellow

Chung-Yang Yeh

**HHH 53** 

Neuroprotection by small molecule inhibition of Kv2.1/syntaxin interaction

University of Pittsburgh

Graduate Student

Alexis 7iemba

**HHH 52** 

Characterization of a hypothermic coating to target cortical neuroinflammation

Rensselaer Polytechnic Institute

Graduate Student

**D: Sensory Systems** 

**Rachel Barborek** 

**HHH 51** 

**HHH 50** 

Identifying the molecular components of cold nociception in Drosophila melanogaster

James Madison University Undergraduate Student

Sampurna Chakrabarti

Role of transient receptor potential (TRP) channels in acute inflammatory knee pain

University of Cambridge

Graduate Student

Sisi Chen **HHH 49** 

Inflammatory and neuropathic pain enhances neural excitability and synaptic transmission in a population of GRM2+ neurons in anterior cinqulate cortex

University of Cincinnati

Postdoctoral Fellow

Eye and hand movement characteristics during rapid go/no-go decisions in Parkinson's disease

University of British Columbia

Graduate Student

**Emma Holmes** 

**HHH 47** 

Understanding speech in background noise relies on similar processes to figure-ground segregation

University College London

Postdoctoral Fellow

Suraj Honnurajah

**HHH 46** 

Cellular and circuit mechanisms underlying processing of binocular visual information in visual cortex

Australian National University

Graduate Student

Kathleen Hupfeld

**HHH 45** 

Neural correlates of vestibular processing during exposure to a spaceflight analog with elevated carbon dioxide

University of Florida

Graduate Student

**Ethan Knights** 

**HHH 44** 

Hand-selective areas of both dorsal and ventral visual streams represent how to appropriately grasp 3D tools

University of East Anglia

Graduate Student

Yuanning Li

**HHH 43** 

Pre-stimulus endogenous activity modulates category tuning and influences perceptual behavior

Carnegie Mellon University

# Kristyn Lizbinski

HHH 42

### Tim Rohe

**HHH 35** 

Multiple neuromodulators influence odor coding via distinct mechanisms

West Virginia University

Graduate Student

Postdoctoral Fellow

# University of Tuebingen

#### Flora Midavaine

**HHH 41** 

Therapeutic gene modulation of the CCR2 chemokine receptor confers analgesia and anti-proliferative activity in a rat model of cancer-induced bone pain

Université de Sherbrooke

Graduate Student

# Shrevas Mysore Suryanarayana

**HHH 40** 

Sensory organization in the primordial lamprey cortex

Karolinska Institutet

Graduate Student

#### **HHH 39**

Jacquelyn Omelian Developmental differences in immune

response to gustatory nerve loss

University of Nebraska at Omaha Graduate Student

#### Natalie Ortiz-Vega

**HHH 38** 

Retinal albinism and abnormal electroretinograms in VAMP7 null

Universidad de Puerto Rico, Bayamon Undergraduate Student

#### Nicole Pacchiarini

**HHH 37** 

Discrimination learning with tactile stimuli in rodents

Cardiff University

Graduate Student

#### Atit Patel

**HHH 36** 

Cellular and behavioral requirements for calcium induced calcium release mechanisms in cold nociception

Georgia State University

Graduate Student

#### Francisco Sacadura

**HHH 34** 

Thermal grill model of human pain perception facilitates late but not early somatosensory evoked potentials

The pre- and post-stimulus dynamics of

the brain's multisensory causal inferences

University College London

Undergraduate Student

#### Joshua Sanchez

**HHH 33** 

Characterizing the pathological effects of prenatal alcohol exposure on spinal neuroimmune mechanisms that result in neuropathic touch sensitivity

University of New Mexico

Graduate Student

# Takuma Sonoda

**HHH 32** 

A subpopulation of GABAergic intrinsically photosensitive retinal ganglion cells in the mouse retina

Northwestern University

Graduate Student

# **E: Motor Systems**

#### Matthew Becker

**HHH 31** 

Graded and bidirectional control of realtime reach kinematics by the cerebellum

University of Colorado

Graduate Student

#### **Justin Brantley**

**HHH 30** 

Noninvasively recorded human cortical dynamics during level-ground, incline, and stair locomotion

University of Houston

Digna de Kam

Do performance errors and environmental switches regulate generalization of learned locomotor features across contexts?

University of Pittsburgh

Postdoctoral Fellow

Shlomi Haar

**HHH 28** 

**HHH 29** 

Neurobehavioural imaging of natural motor learning in a complex human skill

Imperial College London

Postdoctoral Fellow

Masaaki Hayashi

**HHH 27** 

Promoting excitability of corticospinal tracts from a targeted hemisphere through interplay with EEG-based brain-computer interface

**Keio University** 

Graduate Student

Elena Kokkoni

**HHH 26** 

Merging enriched environments and assistive technology to enhance early exploratory and motor activity in young children

University of Delaware

Postdoctoral Fellow

Liu Liu

**HHH 25** 

Mesoscale analysis of decision making, motor planning and movement initiation

**Baylor College of Medicine** 

Postdoctoral Fellow

Yin Liu

**HHH 24** 

Molecular and functional diversity of pulmonary sensory neurons revealed by single-cell RNA sequencing

Stanford University

Postdoctoral Fellow

**Brianna Marsh** 

Decoding the neural substrates of intent to speak

The University of Kansas

Undergraduate Student

J. Patrick Mayo

**HHH 22** 

**HHH 23** 

The relative contributions of area MT and the frontal eye fields to the latency of smooth pursuit

**Duke University** 

Postdoctoral Fellow

Ayuno Nakahashi

**HHH 21** 

Fronto-parietal neural activity during multi-attribute decision-making with conflicting value information

University of Montreal

Graduate Student

Alica Rogojin

**HHH 20** 

Sex-related differences in the relationship between dementia risk and cognitive-motor integration performance

York University

Graduate Student

Naveen Sendhilnathan

**HHH 19** 

Mid-lateral cerebellar Purkinje neurons participate in visuomotor associative learning

Columbia University

Graduate Student

**Jared Smith** 

**HHH 18** 

Whole-brain mapping of the input-output organization of claustrum implies its functional role as a limbic-motor interface

Salk Institute for Biological Studies

Postdoctoral Fellow

Rini Varghese

**HHH 17** 

Interlimb differences during bimanual aiming after stroke: Effect of target distance

University of Southern California

# F: Integrative Physiology and Behavior

#### Amber Alhadeff

**HHH 16** 

Hunger inhibits inflammatory pain through a hypothalamic-hindbrain peptidergic circuit

#### University of Pennsylvania

Postdoctoral Fellow

# Alexandria Beland

**HHH 15** 

The effect of GLUT1 and MCT1 inhibition on cerebral glucose and lactate levels following intraperitoneal injections of metabolic fuels in mice

#### University of Ottawa

Graduate Student

#### Olga Borodovitsyna

**HHH 14** 

Age- and stress-dependent changes in locus coeruleus physiology and anxiety-like behavior

#### **Rowan University GSBS**

Graduate Student

#### Julie Butler

**HHH 13** 

Reproductive state dependent visual sensitivity in an African cichlid fish

#### Louisiana State University

Graduate Student

#### Cali Calarco

**HHH 12** 

Nicotinic acetylcholine receptors in the arcuate nucleus and their implications for feeding behavior

#### Yale University

Postdoctoral Fellow

#### Patricia Cintora

HHH 11

Early life emotional neglect predicts shorter telomere length in adulthood

University of Illinois at Urbana-Champaign

Graduate Student

# Michael Elbaz

**HHH 10** 

Closed- and open-loop control of fine whisker movements

#### Université Laval

Graduate Student

#### Sedona Ewbank

**HHH 9** 

The role of AgRP neurons in shaping the composition and energy harvest capacity of the gut microbiota

#### University of Washington

Undergraduate Student

#### Sarah Framnes

**8 HHH** 

The effect of bromocriptine, a D2 receptor agonist, in lean and obese mice

#### Marquette University

Graduate Student

#### Katherine Hatcher

HHH 7

Two models of circadian disruption modify locomotor activity and circadian clock gene expression in the suprachiasmatic nucleus of male and female Long-Evans rats

# University of Illinois at Urbana-Champaign

Graduate Student

#### **Marques Jackson**

**HHH 6** 

Regional examination of glucocorticoid receptors and endogenous opioid signaling genes in self-injurious behavior

# University of Louisiana at Lafayette

Graduate Student

#### **Daniel Lee**

HHH 5

Evolutionarily conserved regulation of sleep by epidermal growth factor receptor signaling

# California Institute of Technology

Peng LiHHH 4Amy NelsonGGG 25Brain correlates of fractal regulation in<br/>motor activity — Results from the RushRegulating pericytes with optogenetics<br/>University of Southern California

HHH 2

Harvard Medical School/Brigham & Women's Hospital

Postdoctoral Fellow

Memory and Aging Project

Megan Linscott HHH 3 Social network 6

Tet1 regulates Fgf8 expression in the developing hypothalamus during gonadotropin-releasing hormone neuron emergence

Kent State University

Graduate Student

Trevor McPherson

Physiological correlates of the ANS and HPA-axis in active and passive music therapy interventions

University of North Carolina at Chapel Hill Undergraduate Student

Mackenna Mejdell HHH 1

Sex-specific effects of endocannabinoid action on cued fear conditioning and extinction

Northeastern University Undergraduate Student

Dulce Minaya Caba GGG 27

Roux-en-Y and vagotomy increase DNA fragmentation in vagal afferent neurons of rats within 24h

University of Georgia

Postdoctoral Fellow

Kathleen Morrison GGG 26

Epigenetic programming of chromatin accessibility by stress during puberty

University of Maryland School of Medicine Postdoctoral Fellow Mariana Rodriguez Santiago

Postdoctoral Fellow

**GGG 24** 

Social network effects on learning and neural processing of a visual cue discrimination task

The University of Texas at Austin Graduate Student

Loranzie Rogers

**GGG 23** 

The effect of self-generated movement on lateral line sensitivity in the toadfish, Opsanus tau

University of Minnesota, Duluth Graduate Student

Marc Schneeberger Pane GGG 22

Dorsal raphe nucleus gabaergic neurons control adaptive thermogenesis

The Rockefeller University Postdoctoral Fellow

Kristina Smiley GGG 21

Identifying prolactin-responsive neurons important for the transition to paternal care

University of Otago
Postdoctoral Fellow

Stefanos Stagkourakis GGG 20

Maternal aggression depends on a prolactin- and oxytocin-sensitive switch in ventral premammillary nucleus (PMv) network behavior

Karolinska Institutet, Biomedicum Graduate Student

Kathryn West GGG 19

Neural-vascular uncoupling mediates motor performance decline in multiple sclerosis

University of Texas at Dallas

Tiffany Yang

**GGG 18** 

**Jordan Carter** 

**GGG 12** 

Exercise-induced neuronal activation differs following acute and chronic exposure to wheel running

University of Illinois at Urbana-Champaign Graduate Student

# G: Motivation and Emotion

#### Elisabeth Abs

**GGG 17** 

Learning-related plasticity of dendritic inhibition in neocortical layer 1

Max Planck Institute for Brain Research Graduate Student

#### Ibukun Akinrinade

**GGG 16** 

Oxytocin regulation of social buffering and social contagion of fear in zebrafish **Instituto Gulbenkian de Ciencia** *Graduate Student* 

# **Charlotte Bavley**

**GGG 15** 

Prelimbic to accumbens core projection in reinstatement of cocaine conditioned place preference: role of Cav1.2 L-type calcium channels

Weill Cornell
Graduate Student

# Sriya Bhattacharya

**GGG 14** 

**GGG 13** 

Pre-conception predator stress induces physiological and behavioral changes in offspring

Memorial University
Graduate Student

# Jennifer Blaze

The role of NSUN2-mediated tRNA methylation in the adult mouse cortex on depressive- and anxiety-like behavior lcahn School of Medicine at Mt. Sinai

Postdoctoral Fellow

seeking in male and female rats

Long-term impact of acute stress on

cognition, anxiety, and reinstated heroin

Medical University of South Carolina

#### Victor Cazares

Graduate Student

**GGG 11** 

Neural mechanisms underlying impaired extinction learning in a wild-type inbred mouse strain

# University of Michigan

Postdoctoral Fellow

#### **David Clewett**

**GGG 10** 

Brain mechanisms by which emotional learning selectively and retroactively enhances memory for related information

#### **New York University**

Postdoctoral Fellow

#### Kara Cover

GGG 9

Contribution of the rostral intralaminar thalamic nuclei to striatal physiology and behavior

University of Maryland School of Medicine Graduate Student

# **Kirstie Cummings**

GGG8

Prefrontal somatostatin interneurons encode memory through disinhibition

Icahn School of Medicine at Mt. Sinai Postdoctoral Fellow

# Johannes de Jong

GGG 7

A neural circuit mechanism for coding negative motivational stimuli in the mesolimbic dopamine system

University of California, Berkeley
Postdoctoral Fellow

Elizabeth Doncheck	GGG 6	Stacey Kigar	FFF 24
Prelimbic cortical estrogen receptor contributions to 17β-estradiol-potentiated reinstatement of cocaine-seeking behavior in female rats		Adaptive immune signaling at the meningeal barrier: neuroimmune interactions underlying stress-induced mood disruption	
Marquette University		National Institutes of Health	
Graduate Student		Postdoctoral Fellow	
Mehdi Farokhnia	GGG 5	Alexandros Kokkosis	FFF 23
A deeper insight into how CARA R		Chronia atrona compromisso the	

A deeper insight into how GABA-B receptor agonism via baclofen may affect alcohol seeking and consummatory behaviors: Lessons learned from a human laboratory investigation

National Institute on Alcohol Abuse and Alcoholism; National Institute on Drug Abuse

Postdoctoral Fellow

Kurt Fraser GGG 4

Dynamic regulation of cue-triggered reward seeking by the basolateral amygdala and orbitofrontal cortex **Johns Hopkins University** *Graduate Student* 

Madalyn Hafenbreidel GGG 3

The effect of nonmuscle myosin II inhibition on polydrug memories and reconsolidation The Scripps Research Institute

Postdoctoral Fellow

Peter Hamilton GGG 2

Endogenous and CRISPR-mediated CREB-Zfp189 interactions regulate a resilient-specific transcriptional network in mouse models of depression

Icahn School of Medicine at Mt. Sinai Postdoctoral Fellow

Ann Hoffman GGG 1

Projection specific mechanisms of auditory sensitivity that contribute to enhanced fear after TBI

University of California, Los Angeles

Postdoctoral Fellow

Chronic stress compromises the NG2-glial cellular homeostasis in a murine depression model

Stony Brook University
Graduate Student

Michelle Land

FFF 22

FFF 21

Cys23Ser single nucleotide polymorphism alters function and localization of the serotonin 2C Receptor (5-HT2CR) *in vitro* 

University of Texas Medical Branch Graduate Student

Casey Lardner

Elucidating the cell type-specific transcriptional patterns differentiating stimulant versus opiate addiction

Icahn School of Medicine at Mt. Sinai Graduate Student

Jennifer Lissemore FFF 20

Combining transcranial magnetic stimulation and machine learning to predict treatment outcome in late-life depression

University of Toronto Graduate Student

Alessia Mastrodonato FFF 19

Prophylactic ketamine protects against fear overgeneralization

Columbia University

Nora McCall FFF 18 Jimit Raghav FFF 12

**FFF 17** 

FFF 16

**FFF 15** 

FFF 14

**FFF 13** 

Selective manipulation of inhibitory signaling in dopamine neurons of the ventral tegmental area alters behavioral response to cocaine

University of Minnesota

Graduate Student

Philipp Mews

Mechanisms of epigenetic priming in cocaine addiction

Icahn School of Medicine at Mt. Sinai Postdoctoral Fellow

**Habiba Noamany** 

Optogenetic activation of medial prefrontal cortex projections to the dorsal periaqueductal gray decreases reward consumption

Massachusetts Institute of Technology Undergraduate Student

Chloe Page

Effects of chemogenetic inhibition of prefrontal parvalbumin interneurons on emotional and cognitive behaviors following chronic stress exposure

The Ohio State University
Graduate Student

**Rachel Pearcy** 

Characterization of mice lacking galanin in noradrenergic neurons

Emory University
Graduate Student

**Thomas Prevot** 

Anxiolytic, antidepressant and pro-cognitive properties of novel positive allosteric modulators at  $\alpha 5$ -containing GABAA receptors

University of Toronto
Postdoctoral Fellow

AM7438, a novel controlled deactivation cannabinoid with reduced tolerance and dependence profiles

Northeastern University

Graduate Student

Amanda Russo

FFF 11

Phosphorylation of mitogen-activated protein kinase in the medial prefrontal cortex is associated with individual variation in extinction recall in rats

Stony Brook University

Graduate Student

**Dennis Sholler** 

FFF 10

The 5-HT2A receptor (5-HT2AR) antagonist/inverse agonist pimavanserin suppresses impulsive action and cocaine cue reactivity in rats

University of Texas Medical Branch Graduate Student

Elizabeth Sneddon

FFF 9

A chemogenetic investigation of striatal and cortical contributions to aversionresistant alcohol drinking

Miami University Graduate Student

Konstantina Theofanopoulou FFF 8

The effect of social reward in vocal learning: Testing an oxytocindependent mechanism

Universitat de Barcelona Graduate Student

**Kevin Uribe** 

FFF 7

Overexpression of a stress peptide in the nucleus accumbens selectively increases nicotine self-administration in female versus male rats

The University of Texas at El Paso Graduate Student

Territ vari der 200	111 0	Allia Zilverstaria	LLL 20
Sex specific role for Slit1 inregulating susceptibility to chronic stress  Maastricht University  Graduate Student		Resting-state connectivity defines neurobiological subtypes underlying different cognitive-emotional profiles in cocaine addiction Icahn School of Medicine at Mt. S	inai
Rachel Walker	FFF 5	Postdoctoral Fellow	
Comparisons of vIPAG cell body and midline/intralaminar thalamus terminal inhibition in positive prediction error signaling		H: Cognition  Andy Alexander	EEE 25
Boston College		-	LLL 23
Graduate Student		Retrosplenial and entorhinal cortical representation during	
Alonzo Whyte	FFF 4	visually-based triangulation  Boston University	
β1-integrin during adolescence suppo- complex decision making and confers	Postdoctoral Fellow		
resilience to cocaine-seeking behavior in adulthood  Emory University  Postdoctoral Fellow		Caitlin Bowman	EEE 24
		Tracking the development of specific and generalized representations during concept learning	
Kathryn Windsor	FFF 3	University of Oregon Postdoctoral Fellow	
Structural and functional changes of input-specific excitatory synapses on igral dopamine cells caused by coca Trinity University  Undergraduate Student		Iva Brunec Global and local hippocampal representations during virtual reality spatial navigation	EEE 23
Kristina Wright	FFF 2	University of Toronto Graduate Student	
Optogenetic inhibition of caudal substantia nigra globally inflates fear in multi-cue Pavlovian discrimination		Lucie Charles	EEE 22
Boston College Graduate Student		Neural correlates of subjective and objective freedom of choice University College London	
Yafang Zhang	FFF 1	Postdoctoral Fellow	
Activation of amylin receptors in the		Juliet Davidow	EEE 21
nucleus accumbens shell reduces voluntary oxycodone taking in rats <b>University of Pennsylvania</b> Postdoctoral Fellow		Development of prefrontal cortical connectivity and the enduring effect of learned value on cognitive control Harvard University	

Postdoctoral Fellow

Yentl van der Zee FFF 6 Anna Zilverstand EEE 26

# **Elena Dominguez**

Cortical thickness as a predictor of superior memory across the lifespan and in the 90+

University of California, Irvine Graduate Student

#### Maria Eckstein

Evidence for hierarchically-structured reinforcement learning in humans

University of California, Berkeley Graduate Student

# Steven Errington

Microcircuitry of performance monitoring: Laminar structure of visual and conflict monitoring in the supplementary eye field

Vanderbilt University
Graduate Student

# Jordan Guerguiev

Biologically plausible deep learning with segregated dendrites and multiplexing University of Toronto, Scarborough Graduate Student

#### Laura Gwilliams

Parsing continuous speech into linguistic representations

New York University

Graduate Student

# Sarah Haigh

Abnormal diffusion across the brain in schizophrenia compared to autism

Carnegie Mellon University
Postdoctoral Fellow

# Sam Hall-McMaster

Understanding why rewards improve cognitive performance using representational similarity analysis

Oxford University
Graduate Student

# Marius Cătălin Iordan

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**FFF 19** 

**FFF 18** 

**FFF 17** 

**DDD 16** 

**FFF 15** 

**FFF 14** 

Using closed loop real-time fMRI neurofeedback to induce neural plasticity and influence perceptual similarity

Princeton University
Postdoctoral Fellow

#### Sarah Johnson

EEE 12

**EEE 13** 

Hippocampal, perirhinal, and lateral entorhinal contributions to mnemonic discrimination in young and aged rats

University of Florida
Postdoctoral Fellow

#### **Seth Koslov**

**EEE 11** 

Managing cognitive control for prospective memory in dynamic environments

University of Texas at Austin Graduate Student

#### Lukas Kunz

**EEE 10** 

Cortico-hippocampal communication during goal-directed navigation: Evidence from functional magnetic resonance imaging and intracranial electroencephalography

University of Freiburg
Postdoctoral Fellow

# **Felix Leroy**

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Dual gating by vasopressin of hippocampal CA2 soma and presynaptic terminals in lateral septum

Columbia University
Postdoctoral Fellow

#### Katherine Moen

EEE 8

Strengthening spatial reasoning: Elucidating the neural mechanisms associated with mental rotation skill development

Louisiana State University

# Zachary Monge

Age-related changes in memory representational networks

**Duke University** 

Graduate Student

#### Matthew Piva

Representation of decision conflict for self and other agents in the dorsomedial prefrontal cortex is consistent across tasks and predicts social attitudes

Yale University

Graduate Student

#### Nathaniel Powell

How over interpretation of simple behavioral models can lead to unexpected results: In search of the optimal sampling distributions for delay values on the Restaurant Row task

University of British Columbia

Postdoctoral Fellow

# Stephanie Prince

CA1 neural activity during spatial navigation in the 5XFAD mouse model of Alzheimer's disease

**Emory University** 

Graduate Student

#### Athula Pudhiyidath

Hippocampal representations of temporal statistics predict subsequent reasoning

The University of Texas at Austin

Graduate Student

#### Adam Ramsaran

Maturation of hippocampal perineuronal nets underlies the ontogeny of memory specificity

The Hospital for Sick Children

Graduate Student

# Rakib Rayhan

Characterizing dynamic functional connectivity changes following a physiological stressor in Myalgic Encephalomyelitis/Chronic Fatique Syndrome and Gulf War Illness

**Howard University** 

Graduate Student

#### Zeena Rivera

**DDD 24** 

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Hippocampus and lateral habenula interact to support delayed alternation performance in rats

Seattle University

Undergraduate Student

#### Samantha Santacruz

**DDD 23** 

Stimulation in primate caudate nucleus modulates striatal and cortical value signals

University of California, Berkeley

Postdoctoral Fellow

#### **Drew Schreiner**

**DDD 22** 

The role of the secondary motor cortex in feedback integration to guide decision-making

University of California, San Diego Graduate Student

# Mark Schurgin

**DDD 21** 

Psychological scaling reveals a single parameter framework for visual working memory

University of California, San Diego

Postdoctoral Fellow

# Terri Scott

**DDD 20** 

Functional dissociation of language and working memory revealed by pattern analysis of subject-specific conjunction maps

**Boston University** 

Graduate Student

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#### **Andrew Sheriff**

Coherent theta and respiratory oscillations between sensory systems and the hippocampus

University of Chicago

Graduate Student

#### **Ethan Solomon**

Connectivity-guided choice of intracranial stimulation targets for optimal cognitive enhancement

University of Pennsylvania

Graduate Student

# Claire Symanski

Odor-place associative memory in the hippocampal-prefrontal network

**Brandeis University** 

Graduate Student

#### Lina Tran

**DDD 16** 

Modeling the impact of neurogenesis on memory formation and stability

University of Toronto

Graduate Student

# Anna Vongphrachanh DDD 15

Delay discounting of punishment during economic decision-making in rats

University of Memphis

Graduate Student

#### Krista Wahlstrom

**DDD 14** 

Basolateral amygdala inputs to the medial entorhinal cortex in the consolidation of spatial and cued-response memory

University of Iowa

Graduate Student

#### Liyu Xia

**DDD 13** 

Option transfer in humans enables faster exploration

University of California, Berkeley

Graduate Student

# Xiyu Zhu

DDD 19

**DDD 18** 

**DDD 17** 

DDD 12

Adolescent stress during critical periods alters the developmental trajectory of hippocampal parvalbumin (PV) interneurons and recapitulates circuit dysfunction implicated in schizophrenia

University of Pittsburgh

Graduate Student

# I: Techniques

#### **Hannah Cates**

**DDD 11** 

Revealing the chromatin-bound long noncoding RNA landscape of the brain Icahn School of Medicine at Mt. Sinai Postdoctoral Fellow

# Erica Depasquale

**DDD 10** 

KRSA: A user-friendly tool for identifying significant differences in kinase activity from kinome array data

University of Cincinnati

Graduate Student

#### Megan Finnegan

DDD 9

Addressing the atlas concordance problem in fMRI

University of Illinois at Urbana-Champaign Graduate Student

# Tomoyuki Mano

8 000

CUBIC-Cloud: A point-cloud-based computational framework to analyze, visualize and share data for whole brain profiling by tissue clearing

The University of Tokyo

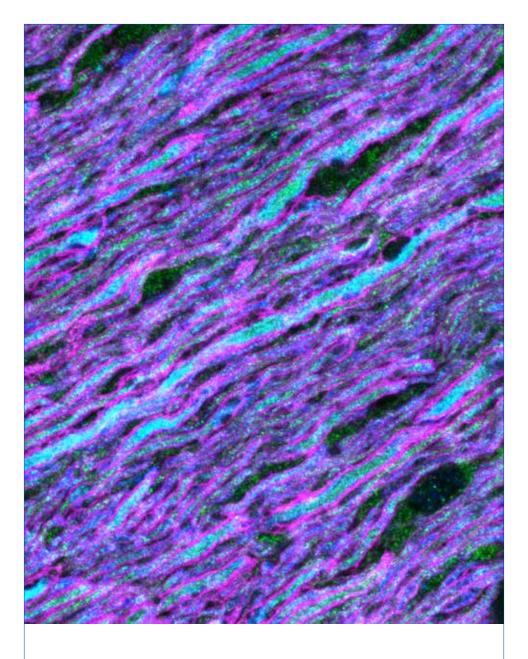
Graduate Student

# **Emily Warner**

DDD 7

Sex differences in behavioral training

University of Rochester





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