

**MPA**

*Molecular Psychiatry Association*



**2024**

**YOUNG INVESTIGATOR  
TRAVEL AWARDEES**





## **JESSICA ABLES, M.D., PH.D.**

### **ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI**

I am an Assistant Professor in the Psychiatry and Neuroscience departments. I received my Bachelor's of Science in Chemistry from Southwestern University in 2003, my PhD in Integrated Biology from UT Southwestern in 2009, and my MD from Mount Sinai in 2011. I then completed postdoctoral training in Molecular Neuroscience at Rockefeller University in 2015 before returning to Mount Sinai for residency training in Psychiatry. Upon completion of my clinical training in 2019, I joined the faculty at Mount Sinai, where I run a basic science lab focused on understanding how diabetes and drug abuse alter reward circuitry function. I am also involved in clinical trial work with the Depression and Anxiety Center for Advanced Therapeutics, with the goal to move some of our basic science findings into clinical trials. Currently my work is focused on understanding how hyperglycemia alters gene expression in specific cell types within the reward circuitry and how this relates to altered neuronal function and behavior in mice. Future plans include examining reward processing in people with diabetes with the goal to develop treatments for people with comorbid metabolic and psychiatric illness.



## **LISA BAST, PH.D.**

### **KAROLINSKA INSTITUTET**

Since 2020, Lisa Bast is a postdoctoral researcher in the Hjerling-Leffler lab at Karolinska Institute, Sweden. Her current work relates to single cell RNA sequencing data analysis and gene regulatory network inference with the goal to decode the mechanistic molecular

alterations which lead to psychiatric disorders such as schizophrenia. Lisa studied Mathematics in Bioscience at Koblenz University of Applied Sciences and Technical University Munich in Germany and has ever since been fascinated by solving biological or medical problems with computational methods. During her PhD at Technical University Munich under the supervision of Carsten Marr and Fabian Theis, her research focused on computational modeling and model selection in tissue homeostasis processes. At the time she studied the adult healthy and malignant hematopoietic lineage to gain a better understanding of blood cell disorders like myelodysplastic syndromes, but also adult neurogenesis in the subependymal zone of the murine brain to infer cell type specific changes that explain the age-related decline in neurogenesis. In the future, Lisa wants to research neurological and psychiatric disorders and is currently seeking collaboration partners.



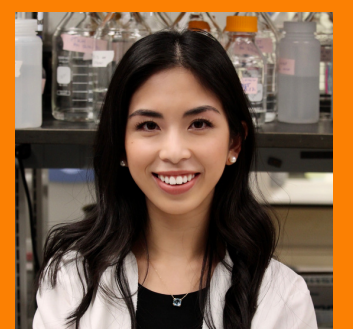


## **AAKASH BASU, B.A.**

### **YALE UNIVERSITY**

Aakash Basu is a graduate student within the Yale Interdepartmental Neuroscience Program. He received his B.A. in Neuroscience in 2020, and completed undergraduate research in the Winder lab studying the interaction between stress and drug

addiction. He currently performs doctoral research in the Kaye lab, studying the biological bases of threat computation with a special focus on norepinephrine and second messengers. Specifically, he relates molecular events such as norepinephrine release and downstream second messengers to components of reinforcement threat learning models.



## **BRIANA CHEN, PH.D.**

### **COLUMBIA UNIVERSITY**

I am currently a postdoctoral researcher in the lab of Dr. Christine Denny at Columbia University. I received my Ph.D. in Neurobiology and Behavior from Columbia University in 2022, where my thesis investigated novel prophylactic compounds to enhance resilience and

prevent stress-induced psychiatric disorders. Prior to that, I received a B.S. in Brain and Cognitive Science from the Massachusetts Institute of Technology in 2016. My current research investigates sex-specific mechanisms of stress resilience with the ultimate goal of improving interventions to treat and prevent stress-related psychiatric disorders such as depression, anxiety, and post-traumatic stress disorder.



## **JINGYI CHEN, PH.D.**

### **UNIVERSITY OF WASHINGTON SCHOOL OF MEDICINE**

B.S. (2014) Tsinghua University Chemical Biology Study the anti-schizophrenia effect of Magnesium in PCP rat model Ph.D. (2021) Scripps Research (TSRI) Neurobiology Cellular identity and function of Estrogen receptor  $\alpha$  positive neurons in Barrington

Nucleus Understand hypothalamic-midbrain control for mice social vocalization Current position (2021-current): Postdoctoral fellow University of Washington Study the role of Locus coeruleus (LC) and neuromodulation after chronic exercise and social isolation Decoding Claustrum Dynorphin/KOR control of stress-induced binge eating



## **JHAH COOK, B.S.**

### **YALE UNIVERSITY SCHOOL OF MEDICINE**

I attended Mississippi Valley State University from 2018-2021 and earned a Bachelor of Science in Biology and a Bachelor of Science in Chemistry in Spring 2021. Following this, I commenced my graduate studies in Fall 2021 at Yale University, where I joined the

Interdepartmental Neuroscience Program (INP) to pursue a Doctor of Philosophy in Neuroscience degree. Currently, I am a graduate student researcher in the molecular psychiatry department at Yale University, where my research focuses on understanding the molecular mechanisms underlying PTSD using rodent models. Specifically, I investigate cortical dysfunction and dysregulation in the medial prefrontal cortex (mPFC) resulting from traumatic experiences. My thesis research centers on the neuropeptide corticotrophin-releasing factor (CRF) and its potential role in mPFC dysregulation and its contribution to PTSD. My research offers valuable insights into the pathophysiology of trauma-related disorders and may pave the way for novel therapeutic interventions targeting the mPFC for PTSD and related conditions. To achieve these goals, my research employs a range of techniques, including computational behavior tracking, pharmacology, and neuropeptide sensor techniques, in the stress-enhanced fear learning (SEFL) model of PTSD. My primary objective is to uncover the role of CRF in stress-sensitized moment-to-moment threat processing.



## **VICTOR DE OLIVEIRA, PH.D.**

### **UNIVERSITY OF SAO PAULO**

Currently a Postdoctoral Researcher at the University of São Paulo's Department of Physiology and Biophysics, I specialize in molecular biology and genomic research. My scholarly journey commenced at the Federal University of Ouro Preto, Brazil,

culminating in a B.Sc. in Biological Sciences (2010), followed by an M.Sc. (2013) and a Ph.D. (2018) in Biotechnology. My doctoral research, guided by Prof. Renata Guerra Sá, focused on unraveling the genomic complexities and proteasomal mechanisms within the *Schistosoma* genome. This trajectory included a pivotal year at the Max Planck Institute for Molecular Genetics, Germany, under a sandwich Ph.D. program, where I expanded my acumen in bioinformatics. With 22 peer-reviewed publications to my credit, my work illuminates the realms of genetics and pharmacogenomics. In my current role since January 2023, under Prof. Diego Luiz Rovaris's tutelage, I am delving into the genetic foundations of ADHD. Our ongoing project, targeting a diverse cohort of 10,000, aims to elucidate the nuanced relationships between polygenic risk scores and rare genetic variants in ADHD pathology. This revised biography maintains a scientific tone, emphasizing your academic achievements, research contributions, and current scientific endeavors.



## **SAMUEL DIENEL, M.D., PH.D.**

### **UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE**

Samuel J. Diemel, MD, PhD Postdoctoral Scholar  
University of Pittsburgh School of Medicine  
Somatostatin Interneurons in Prefrontal Cortical  
Microcircuits in Schizophrenia



## **LAURENCE DION-ALBERT, M.SC.**

### **UNIVERSITÉ LAVAL (CERVO BRAIN RESEARCH CENTER)**

I am a PhD candidate in Neuroscience at Université Laval (Quebec City, Canada) under the supervision of Dr. Caroline Ménard. I obtained a bachelor's degree in Neuroscience from the University of Montreal and joined Dr Menard's laboratory at the CERVO Brain Research Center in Quebec Mental Health University Institute for a master's degree in 2019. This experience confirmed my passion for fundamental science and mental health research but most importantly, opened my eyes to the remarkable lack of inclusion of sex as a biological variable in all levels of research including in psychiatry. Therefore, after a year, I fast-tracked to PhD and my project now focuses on sex differences in the neurobiology of major depressive disorder (MDD), stress resilience and their implications on neurovascular health.



## **KRISTEN ECKSTRAND, M.D./PH.D.**

### **UNIVERSITY OF PITTSBURGH SCHOOL OF MEDICINE**

Dr. Eckstrand is a board-certified child & adolescent psychiatrist, an Assistant Professor of Psychiatry at the University of Pittsburgh, and the Medical Director for UPMC LGBTQIA+ Health Quality. Their research focuses on the neuropsychiatric underpinnings of trauma and resilience in adolescents, with an emphasis on minoritized communities and vulnerable populations. Dr. Eckstrand's research has been published in top-tier journals such as JAMA Psychiatry and Biological Psychiatry, and been recognized by Honorary Membership in the World Psychiatric Association and awards from the American



Academy of Child & Adolescent Psychiatry, American Psychiatric Association, and Society for Biological Psychiatry. Dr. Eckstrand is nationally recognized for their leadership supporting the health of LGBTQ+ communities. Dr. Eckstrand has published four textbooks and numerous peer-reviewed papers on the health needs of LGBTQ+ communities, including on training healthcare professionals and optimizing organizations to provide affirming and responsible care to LGBTQ+ individuals. Dr. Eckstrand's commitment to diversity has been recognized through awards from the American Medical Association, American Medical Student Association, the Association of American Medical Colleges, and the Tennessee Medical Association.



**MACKENZIE GAMBLE, B.S.**  
**UMASS CHAN MEDICAL SCHOOL**

I am currently a PhD candidate in the lab of Dr. Ryan Logan at Boston University where I study the molecular mechanism of substance use disorders with a focus on understanding the drivers of sleep disruption due to opioid use. Previously, I was research

assistant for a few years in the labs of Drs. Dr. Tim McKenna, Robert Strecker, and Ritchie Brown (McCarley Labs) where I studied sleep and its dysfunction in the context of insomnia. I received my B.S. from Stonehill College before that in Neuroscience becoming the first person in my family to obtain a college degree.



**WEI-KAI HUANG, PH.D.**  
**MGH/HARVARD MEDICAL SCHOOL**

I received my Ph.D. degree in Pathobiology from the Johns Hopkins University in May, 2021. I conducted my thesis research under the mentorship of Dr. Guo-li Ming and Dr. Hongjun Song, who are pioneers in the field of human stem cell-based neuroscience research.

I generated the first ever three-dimensional subregional hypothalamic arcuate organoids from human induced pluripotent stem cells (iPSCs) and used these hypothalamic arcuate organoids to investigate the biology underlying Prader-Willi syndrome. In addition, I established a cortical neuron differentiation platform to study chromosome conformation capture and understand enhancer-promoter interactions in the noncoding genome. I also undertook a small-molecule screen to identify compounds that inhibit Zika virus infection in human iPSC-derived neurons. I am currently a postdoctoral fellow at Harvard Medical School and Massachusetts General Hospital, working with Dr. Rakesh Karmacharya in the Center for Genomic Medicine. I am using cerebral organoids

differentiated from human iPSCs from healthy and schizophrenia individuals to study the roles of pro-inflammatory cytokines in neurodevelopment. By exposing developing cerebral organoids to specific cytokines during critical periods in development, I will use single-cell transcriptomics and functional characterizations in multi-electrode arrays to identify mechanisms underlying effects of inflammation in neurodevelopment.



## **JENESIS KOZEL, M.S.**

### **UNIVERSITY OF PITTSBURGH**

Jenesis (Gayden) Kozel is a fifth year graduate student at the University of Pittsburgh School of Medicine pursuing her PhD in Neurobiology. Previously, she earned her B.S. in Psychology at Syracuse University and her M.S. in Integrative Neuroscience at

Georgetown University. Her thesis work focuses on elucidating the regional heterogeneity of striatal neuronal subpopulations and its functional relevance to opioid use disorder. Particularly, she is interested in how striatal neurons that co-express dopamine receptor subtypes may show unique localization and physiological properties that translate to addiction behaviors. She is also passionate about science communication, education, and public policy.



## **FELIX KYERE, B.SC.**

### **UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL**

My name is Felix Kyere, a neuroscience PhD candidate from Ghana in the laboratory of Jason Stein at UNC Chapel. My research area focuses on studying brain structural changes associated with

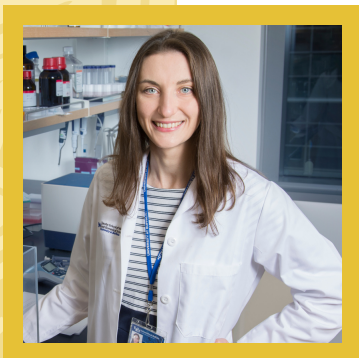
neurodevelopmental disorders using mouse models, MRI, whole brain tissue clearing technology, confocal and light sheet microscopy and computational analysis. Currently, I am focused on characterizing the trajectory of a Chd8-associated macrocephaly phenotype observed in both human and mouse models and identify the cell types involved in the brain overgrowth using MRI, tissue clearing and light sheet microscopy. Previously, I graduated from Philander Smith University summa cum laude with a BS in Biology and a minor in Chemistry. While a student at Philander, I worked in the lab of Dr. Yu-Qing Cao at Washington University in St. Louis. My project focused on investigating mouse models for studying the mechanisms involved in chronic migraine. Following my undergraduate training, I spent two years in the Novartis Postbac program where I investigated a novel mechanism that could be harnessed to upregulate SCN1A expression to treat Dravet Syndrome. My research interest for the future involves a research environment that addresses tough questions of neurological disorders and produces viable solutions for serious human health problems.



## **BRIDGET MATIKAINEN-ANKNEY, PH.D.**

### **RUTGERS UNIVERSITY**

I attended Stony Brook University to earn a BEng in Biomedical Engineering (2009), and went on to complete an MS in Biomedical Engineering from Columbia University (2011). After working as a technician at Albert Einstein College of Medicine for two years, I earned a PhD in Neuroscience from the Icahn School of Medicine at Mount Sinai in the lab of Dr. Deanna Benson studying early postnatal changes in basal ganglia circuits in a mouse model of Parkinson's disease (2017). I began my postdoctoral training in the lab of Dr. Alexxai Kravitz at the NIH in 2017 studying the effect of obesity on physical activity and basal ganglia circuits, and relocated to St. Louis in 2020 after Dr. Kravitz moved his lab to Wash U. I completed my postdoctoral training in 2023, and recently (September 2023) started my own lab at Rutgers University in the Behavioral and Systems Neuroscience area of the Psychology Department. My lab studies how obesity changes brain motivation circuits, exploring behavioral phenotypes overlying identified plasticity changes. I am particularly interested in the persistent nature of such changes.



## **KATERYNA MURLANOVA, PH.D.**

### **STATE UNIVERSITY OF NEW YORK AT BUFFALO**

Kateryna Murlanova is a fourth-year postdoctoral associate at the Department of Physiology and Biophysics at State University of New York at Buffalo. She previously was a trainee at the Johns Hopkins Department of Psychiatry and Behavioral Sciences. She earned her BS and MS degree from Bogomolets National Medical University, Ukraine, and her PhD in neuroscience from Ariel University, Israel. Kateryna's research focuses on the mechanisms of neuron-glia interaction in the pathophysiology of behavioral alterations in neuropsychiatric disorders. These mechanisms are studied using mouse genetics, molecular, cellular, and systems approaches. Kateryna is interested in the role of glial cells in mediating adverse neurodevelopmental effects of environmental factors, including prenatal immune activation and cannabis. Using a complex mouse model of environmental adversities, she showed that an interaction between maternal immune activation and adolescent cannabis exposure produced adult psychopathology resulting from elevated glutamatergic gliotransmission in the striatum of mice. Kateryna's major goal is to identify the molecular mechanisms whereby adverse environmental factors interact with one another and/or associated genetic variants to affect brain and behavior development.





**GEORGIA PANAGIOTAROPOULOU, M.SC.**  
**CHARITE UNIVERSITY MEDICAL CENTER BERLIN**

- BSc & MSc School of Electrical & Computer Engineering, National Technical University of Athens (NTUA), Greece (2008 - 2015) - Research Assistant - Manoach Lab, Athinoula Martinos Center for Bioimaging, MGH, Harvard - MIT, Boston, MA (2016 - 2018) - Currently a PhD Student in the Laboratory for Statistical Genetics - Graduate Program in Medical Neurosciences, Charité University Hospital Berlin, Germany (2008 - ) I am currently working on the genetics of common psychiatric disorders, including developing and maintaining computational pipelines for quality control, imputation and association results (GWAS) for the discovery of genetic variants, and also follow-up analysis of functional properties and polygenic predictive ability of variants genome-wide. My work currently has a special focus on the relation of schizophrenia and genomic regions implicated in immunity and auto-immunity, such as the major histocompatibility complex on chromosome 6.



**CAROLYN STINE, B.S.**  
**UNIVERSITY OF WASHINGTON SCHOOL OF MEDICINE**

I received my undergraduate degree in Biochemistry and Molecular and Cellular Biology (BS, Summa Cum Laude) from the University of Arizona Honors College in 2019. As an undergraduate research assistant in Dr. John Streicher's lab, I published a first-author paper showing that heat shock protein 90 inhibition can block the pain-relieving effects of opioids such as morphine in certain types of cancer pain. I am currently a Ph.D. Candidate in Molecular and Cellular Biology at the University of Washington, Seattle (2019 - present). I am a graduate student in Dr. Michael Bruchas' lab where I investigate the endogenous opioid neurocircuitry modulating stress, reward-seeking, and motivated behavior.



## **ANGÉLICA TORRES-BERRÍO, PH.D.**

### **MASSACHUSETTS GENERAL HOSPITAL**

My scientific career has not been a straight line. Indeed, coming from a developing country made me face several financial and language barriers, whereas searching for opportunities in science pushed me to navigate the academic system in different countries. I

was born and raised in Colombia, where I developed a passion for neuroscience research during my undergraduate in Psychology at the National University of Colombia. Becoming the first woman to achieve a professional degree in my family motivated me to pursue a scientific career. However, the lack of opportunities in my home country encouraged me to look for options abroad. First, I went to Spain to complete my Neuroscience master's program under a scholarship from the University of Seville. Then, I moved to Canada for my PhD in Neuroscience at McGill University, after obtaining the GPNS Recruitment Award granted to outstanding international applicants. For my postdoctoral studies, I joined Dr. Eric Nestler's laboratory at the Friedman Brain Institute at Mount Sinai, where I studied stress-induced "chromatin scars". In July 2023, I opened my laboratory in the Pediatrics Department at the Massachusetts General Hospital and became the Director of the Social and Cognitive Research Division at the Lurie Center for Autism.



## **BRIE WAMSLEY, PH.D.**

### **DAVID GEFFEN SCHOOL OF MEDICINE AT UCLA**

Brie Wamsley's research seeks to uncover how the development of the nervous system is orchestrated with the aim to improve our understanding of human neurodevelopmental and neuropsychiatric disorders. Dr. Wamsley completed her undergraduate degree in

neurobiology at Hunter college with minors in chemistry, psychology, German, and art, she then received her PhD at NYU where she studied the role of ASD-associated genes and neuronal activity in the development of cortical interneurons under the mentorship of Gord Fishell. Dr. Wamsley then joined Dan Geschwind's lab at UCLA where her current studies involve exposing the cell-type specific genomic changes underlying autism spectrum disorder (ASD).



**JIAWEI WANG, PH.D.**  
**YALE SCHOOL OF MEDICINE**

I have been a postdoctoral associate at Dr. Matthew Girgenti's lab at Department of Psychiatry of Yale School of Medicine since November 2022. I received my Ph.D. degree in Computational Biology & Bioinformatics in October 2022, under the supervision of Dr. Hongyu Zhao from Department of Biostatistics at Yale School of Public Health. Before that, I got my Bachelor's Degree in Biological Sciences at Tsinghua University in 2016. I have a dual Bachelor's Degree in Mathematical Sciences from Tsinghua University too. My area of research falls in neurogenomics, with a focus on the multiomics analysis of multiple regions of postmortem PTSD brains, including transcriptomics, proteomics, epigenetics in both bulk and single cell sequencing. I am interested in studying pathological mechanisms in the brain characterized by sex, cell type, brain region, neurotransmitter, and other biological features.



**ROBERT WILLIAMS, B.A.**  
**UNIVERSITY OF VIRGINIA**

I completed my BA degree in Psychology at Queens University of Charlotte, NC, in 2018, after which I had a non-traditional path to PhD. After graduating from college, I worked in animal husbandry at 3 different universities in North Carolina, before I was finally offered a laboratory technician position in Dr. Adema Ribic's lab at the University of Virginia (UVA). A few months after my start in the Ribic Lab, I was accepted into the Bridge to the Doctorate, a competitive post-baccalaureate program at UVA. I had an accelerated path in this program, and I graduated 1 year early to enroll in the PhD program at UVA, where I am currently a 2nd year student. My current research is focused on understanding the adaptive and maladaptive consequences of increased brain plasticity, especially in the context of stress, depression, and learning.





## **SARAH WILLIAMS, B.S.**

### **ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI**

I am a Neuroscience PhD Candidate at the Icahn School of Medicine at Mount Sinai, co-mentored by Drs. Nan Yang and Kristen Brennand (Yale University). My research utilizes human stem cell-derived neurons

to understand the functional impacts of non-coding genetic variants identified in psychiatric and neurodevelopmental disorders. I previously received my B.S. in Biochemistry from Northeastern University in 2019.

