Diversifying the Community of Neuroscience (Diversifying CNS)



Inaugural Meeting: August 2-5, 2021

Program and Directory







Acknowledgements

Support for this initiative comes from R25 NS117356. Special thanks to Dr. Michelle Jones-London, Chief of the Office of Programs to Enhance Neuroscience Workforce Diversity (OPEN) at the National Institute of Neurological Disorders and Stroke, National Institutes of Health.

Additional thanks to Dr. Timothy Ebner, Head, Department of Neuroscience University of Minnesota.

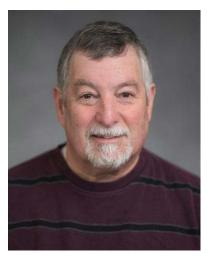
Program Statement:

There is a notable absence of diversity among neuroscience researchers. This absence of diversity suggests that there are inherent barriers for individuals interested in careers in neuroscience research, which in turn limit the range of creative thought in this field. We know that at the same time diversity in neuroscience graduate programs is increasing, this change is not reflected in faculty ranks.

Program Goal:

The overall goal of the program is to create a network of scientists dedicated to increasing the overall diversity of research faculty in Neuroscience. The program is designed to be longitudinal and selfsustaining, and includes graduate students, postdoctoral fellows, and assistant professors. Fostering the career development of the participants to become tenured research faculty is the main objective of the program.

Program Directors:



Dr. Robert Meisel

Dr. Meisel has a research program that has been federally funded for over three decades. In that capacity he has trained high school students, undergraduates, graduate students, and postdoctoral fellows. He is also a mentor for several junior faculty at the University of Minnesota. In addition to Diversifying CNS, Dr. Meisel is a Program Director for an NINDS-funded summer undergraduate R25 research initiative that is in its 9th year of federal support.



Dr. Paul Mermelstein

Dr. Mermelstein has an active research program has federally funded for over 20 years. He has trained undergraduates, graduate students, postdoctoral fellows, and is a mentor to junior faculty. He is the PI of a NIDA-funded R25 grant that provides undergraduate summer research opportunities as well as a T32 training grant that supports training for graduate students and postdocs. He recently served as Chairperson for the Neurobiology of Motivated Behaviors NIH study section.

Program Contributors:



Dr. Kimberlei Richardson

Dr. Richardson is an Associate Professor of Pharmacology at Howard University College of Medicine. She received her postdoctoral training at the Medical University of South Carolina. Dr. Richardson studies the role of orexin in motivated behaviors such as binge eating and drug seeking. She also studies the influence of the orexin system in mediating pain associated with sickle cell disease. Dr. Richardson is a member of the external Advisory Board for the program



<u>Dr. Danielle Watt</u>

Dr. Watt is the Director of the Biomedical Graduate Research, Education and Training (BGREAT) Office of Diversity, Inclusion, and Outreach in the University of Minnesota Medical School where she focuses on the recruitment and retention of graduate students and efforts centered on diversity, equity, and inclusion in STEM. She received her PhD in biological organic chemistry from the University of Connecticut, where she studied how chemicals in the environment may damage DNA causing mutations that could ultimately lead to lung cancer.

Program Contributors:



<u>Dr. Jenna Hicks</u>

Dr. Hicks is the Program Manager for the Office of Professional Development (OPD) for Graduate Students and Postdocs in the University of Minnesota Medical School. She comes to the OPD from her previous role as postdoctoral researcher in the University of Minnesota College of Biological Sciences conducting research on teaching and learning in undergraduate laboratory courses. She received her PhD in biomedical sciences from the University of California, San Diego.



Dr. Sharolyn Kawakami-Schulz

Dr. Kawakami-Schulz heads the Office of Professional Development for Graduate Students and Postdocs in the University of Minnesota Medical School. She was previously a program manager in the NIH Office of Intramural Training & Education, where she developed career development programs and initiatives for NIH trainees of all stages. She received her PhD from the University of Wisconsin-Madison. She is a former Peace Corps volunteer, having spent two years developing a variety of non-technical skills in Ghana, West Africa.

Program Contributors:



Dr. Ana Núñez

Dr. Núñez is a Professor of General Internal Medicine and Vice Dean for Diversity, Equity, and Inclusion at the University of Minnesota. She received her Doctorate in Medicine from Hahnemann University. She has fellowships in medical education from Michigan State University and health services research from the Association of American Medical Colleges (AAMC). She is nationally recognized as a medical education and health services researcher, having developed novel curricula in the areas of sex and gender medicine, primary care, trauma/violence prevention and cultural competence.

Core Directors/Directory:

Viral Innovation Core

Daniel Schmidt: <u>schmida@umn.edu</u>

Ezequiel Marron Fernandez de Velasco: marro014@umn.edu

Imaging Cells During Behavior Core

Suhasa Kodandaramaiah: <u>suhasabk@umn.edu</u>

Russell Carter: <u>recarter@umn.edu</u>

University Imaging Centers

Mark Sanders: <u>msanders@umn.edu</u>

Guillermo Marqués: marques@umn.edu

Program Mentors:

- Dr. Harry Orr <u>orrxx002@umn.edu</u>
- Dr. Patrick Rothwell rothwell@umn.edu
- Dr. Sophia Vinogradov svinogra@umn.edu
- Dr. Matt Chafee <u>chafe001@umn.edu</u>
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- Dr. David Redish redish@umn.edu
- Dr. Stephanie Groman sgroman@umn.edu

Program Schedule:

For Monday August 2nd - Wednesday August 4th, all meetings will take place in Coffman Memorial Union, 4th Floor, Classrooms A, B, and C

Monday August 2:

8:30 – 9:00 am	Breakfast	
9:00 – 9:15	<u>Welcome Address</u> Dean Ana Núñez Vice Dean, Diversity, Equity & Inclusion Professor of Medicine, Medical School	
9:15 – 10:30	Introductions Program Participants and Directors	
10:30 – 11:30	<u>Developing Familiarity and Trust</u> Bob Meisel and Paul Mermelstein	
11:30 – 12:00 pm	Mentor Introductions 1:	
 Dr. Harry Orr - Head, Institute of Translational Neuroscience Dr. Patrick Rothwell - Neuroscience Dr. Sophia Vinogradov - Head, Psychiatry and Behavioral Sciences 		
12:00 - 1:00	Lunch with the Mentors	
1:00 – 2:30	<u>External Barriers to Success</u> Kimberlei Richardson	
2:30 - 3:00	Break	
3:00 – 3:45	<u>Research Core Facilities 1: Viral Innovation Core</u> Ezequiel Marron Fernandez de Velasco and Daniel Schmidt	
3:45 – 4:30	<u>Research Core Facilities 2: Imaging Cells During</u> <u>Behavior Core</u> Russell Carter and Suhasa Kodandaramaiah	

Tuesday August 3:

8:30 – 9:00 am	Breakfast
9:00 – 11:00	<u>Internal Barriers to Success</u> : Danielle Watt
11:00 - 11:30	Break
11:30 – 12:00 pm	Mentor Introductions 2:
• Dr. Robert McG	e - Neuroscience ronner - Neuroscience Govern - Neurosurgery JI Schallmo - Psychiatry and Behavioral Sciences

12:00 – 1:30	Lunch with the Mentors
1:30 – 2:30	<u>Career Development Plan</u> Jenna Hicks
2:30 - 3:00	Break
3:00 – 3:30	<u>Research Core Facilities 3: University Imaging</u> <u>Centers (UIC)</u> Mark Sanders
3:30 – 4:30	<u>Tour of Jackson Hall UIC</u> Mark Sanders, Guillermo Marqués, and UIC Staff

Wednesday August 4:

8:30 – 9:00 am	Breakfast
9:00 – 10:30	<u>Mentoring and Being Mentored</u> : Bob Meisel and Paul Mermelstein
10:30 – 11:30	<u>Navigating the NIH System</u> Paul Mermelstein
11:30 – 12:00 pm	Mentor Introductions 3:
•	
12:00 - 1:00	Lunch with the Mentors
1:00 – 1:30	<u>NIH System Q&A</u> Paul Mermelstein and Bob Meisel
1:30 – 2:30	<u>Assertiveness and Confidence</u> Jenna Hicks
Move to Balcony o	f Coffman Union
2:30 – 2:45	Group Picture
2:30 – 4:30	Social Event with MINDS Program

- Minnesota Inclusive Neuroscience Development Scholars

 Patrick Rothwell and Julia Lemos, Co-Directors
 - Christie Alexandre, Osmar Del Rio, Michaelle DiMagio-Potter, Olalekan (Lukman) Ganiyu, Parsa Najmaie, Dante Rogers, Participants

Thursday August 5:

Note changes in venue

McNamara Alumni Center: Great Hall

9:30 – 11:30 am Life Sciences Summer Undergraduate Research Program (LSSURP) Poster Session

Coffman Memorial Union: Classrooms A - C

12:00 – 2:00 pm	Lunch with Go4Brains High School Program
2:00 – 3:30	<u>Next Steps: Where do we go from here?</u> Bob Meisel and Paul Mermelstein

Graduate Hotel Lobby

5:45 pm	<u>St. Paul Saints Baseball Game</u> :
	Meet in Graduate Hotel Lobby at 5:45
	Light Rail to St. Paul
	Game starts at 7:05

Program Participants:

Graduate Students

- Blanco, Ismary Brown, James Garcia, Jacqueline George, Brianna Hassinan, Cera McCorkle, Taylor Meckel, Katherine Montoya, Samantha Warren, Desmond
- Georgetown University Florida State University Tufts University Wake Forest University University of Washington Drexel University Mt. Sinai Icahn School of Medicine University of Minnesota Georgia State University

Postdoctoral Fellows

Akinsanya, Jemima Borland, Johnathan Cardenas-Iniguez, Carlos Hines, Timothy Landayan, Dan

NIH

University of Minnesota Keck School of Medicine The Jackson Laboratory Stanford University

Early-Stage Investigators

Clemons, Tameka Hill-Jarrett, Tanisha Metcalfe, Mariajose Ng, Rowena Meharry Medical College University of South Florida University of California Irvine Johns Hopkins University



Dr. Jemima (Mima) Akinsanya

I am originally from Nigeria and grew up in New Jersey. I completed Neurology Residency at Emory University June 2020. Currently I am a clinical neuroimmunology fellow at the NIH in my second year of fellowship. My primary research goal during my fellowship is to conduct clinical trials to study neuroinflammatory diseases. My focus is on therapeutics for multiple sclerosis (MS) and Progressive Multifocal Leukoencephalopathy (PML). I also have a strong interest in health disparities research which I am currently conducting through collaboration with the National Advisory Neurological Disorders and Stroke Council (NANDSC)

Working Group for Health Disparities and Inequities in Neurological Disorder. Following my fellowship, I plan to continue my research career as an academic neuroimmunologist with a focus on health disparities research.

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Ismary Blanco

Ismary Blanco is currently a 4th year Ph.D. student in the interdisciplinary program in neuroscience at Georgetown University (GU). At GU, Ismary's advisor is Dr. Katherine Conant, an expert in metalloproteinases. Ismary's research focuses on studying how the secretase matrix metalloproteinase-9 (MMP-9) regulates neuronal population dynamics in the telencephalon of the zebrafish using local field potential recordings. Specifically, she is interested in deciphering the role of impaired MMP-9 activity in the onset and progression of depressive-like symptoms in the zebrafish. She earned her BA in Biology from Bard College and her MS in Biology from New York University. A fun fact is that she enjoys drawing Walt Disney characters.

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<u>Dr. Johnathan Borland</u>

Dr. Borland received his undergraduate degree from Emory University and his graduate degree from Georgia State University (GSU). His dissertation research working with Dr. Elliott Albers at GSU focused on sex differences in the oxytocin system regulation of social reward. Johnathan is currently a Postdoctoral Fellow in the labs of Dr. Robert Meisel and Dr. Paul Mermelstein at the University of Minnesota School of Medicine where he is investigating the molecular mechanisms regulating the rewarding properties of aggression and sex behavior.

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James Brown



As a graduate student at Florida State University, my research uses transgenic tools to molecularly dissect the oxytocin system and better understand behavioral preference and social reward from a developmental perspective. The current project examines the genetic contribution of the oxytocin receptor on affiliation and social vigilance in development. The animals I work with are age post-natal day forty-one (P41). This developmental time in mice is closely associated with human adolescence. Adolescence is extremely plastic in mammals because of the rapidly changing and relatively unstable internal and external contexts. Adolescent interactions are rarely aggressive and don't involve mating. Thus, this time period may be ideal to better understand the

underlying approach-avoidance dilemma for sociability, uncontaminated by sexual or aggressive motivations.

I plan to become a tenure-track faculty member at a research university. I hope to extend my skill set to include molecular and cellular approaches to understanding the social environment and genetic contributions to long-term behavior and environmental effects. I plan to continue in research, answering questions regarding affiliation throughout development and adulthood, focusing on sex differences.

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Dr. Carlos Cardenas-Iniguez

Dr. Cardenas-Iniguez (pronouns he/him/his) is currently a postdoctoral scholar in the Herting Neuroimaging Laboratory in the Department of Population and Public Health Sciences at the Keck School of Medicine of the University of Southern California. He earned his PhD in Psychology and Integrative Neuroscience from the University of Chicago in 2019. His research focuses on exploring the impact of social stratification (i.e. political, structural, and social determinants of health) on the environments in which people live, and how these environments, in turn, impact neural and cognitive development and mental health using neuroimaging methods (structural, functional, and diffusion MRI, EEG), self-report,

and psychological testing paradigms. His research interests also include the implementation of spatial analysis, Public Health Critical Race Praxis, and anti-racism principles in neuroscience/psychology research.

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Dr. Tameka A. Clemons

Dr. Clemons was born and raised in Detroit, MI, completed her B.S. in Chemistry from Xavier University of Louisiana, her Ph.D. in Biochemistry at Meharry Medical College, and her postdoctoral experience at Emory University. Currently, she is an Assistant Professor in the Department of Professional and Medical Education at Meharry Medical College where she teaches interdisciplinary in the areas of biochemistry, pharmacology, and medical ethics. In addition to her teaching role, she also conducts biomedical research in the area of cell signaling as it relates to the link between Type II diabetes and Alzheimer's disease. Specifically, Tameka is interested in analyzing the role of amylin in inflammation in both the

pancreas and the brain in order to better understand the possible link between Type II diabetes and Alzheimer's disease.

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Jacqueline Garcia

I am originally from Pagosa Springs Colorado and graduated from Worcester Polytechnic Institute in 2019 with a degree in Biology and Biotechnology. I joined the Dulla lab at Tufts in May of 2020 and aim to focus on how injury-induced changes in astrocytes, which help control neuronal activity and communication, contribute to the cellular and circuit-level changes that lead to Post Traumatic Epilepsy (PTE). To address this question, I will use cutting edge glutamate and voltage imaging in the brain to determine how injury contributes to the progression of PTE. When completed, I will have novel insight into how glutamate dynamics are altered following TBI, as well as the mechanisms that contribute to

these changes.

Outside of the lab I enjoy watching basketball, exploring historic Boston, listening to music, and drinking lots of coffee.

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<u>Brianna George</u>

Brianna George is currently a doctoral candidate pursuing a PhD in Neuroscience at Wake Forest School of Medicine. She earned her Bachelor's degree in Psychology from Texas Tech University. As an undergraduate, Brianna worked in the lab of Dr. Paul Soto to investigate the long-term effects of adolescent exposure to antipsychotic medication on behavior, cognition, weight, and metabolic function. Her current doctoral work, under the mentorship of Dr. Sara Jones, focuses on identifying alterations in dopamine system functioning that may underlie vulnerability to opioid abuse. Her long-term goal is to obtain a tenure-track faculty position at a research-intensive university. She is looking to

participating in this program in hopes to become a better mentor and advocate for increased diversity and inclusion in neuroscience.

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<u>Cera Hassinan</u>

Cera Hassinan is originally from Tempe, AZ, is a member of the Crow Creek Sioux tribe with her maternal family originating from South Dakota and her paternal family based in Cairo, Egypt. In the future, Hassinan wants to build upon her family's legacy and help Native communities by becoming a Native American researcher. Cera graduated from Johns Hopkins University with a bachelor's degree in Neuroscience. Following graduation, Cera was an NIH-funded postbaccalaureate research education program scholar at the Johns Hopkins School of Medicine, where her research focused on Neurofilament, a cytoskeletal protein, in the context of spinal muscular atrophy in Charlotte Sumner's lab.

Cera joined Jihong Bai's lab in 2020 and is a graduate student in the Molecular and Cellular Biology program at the University of Washington. Her research centers on neurodevelopmental mechanisms important for locomotor rhythmic behavior such as running. Toddlers run, but their running patterns are very distinct from those of adults. Cera wants to understand the connections between developmental pathways and the neuronal circuitry critical in producing smooth rhythmic output. She is using a nematode C. elegans to elucidate how rhythmic circuits are established, regulated, and maintained throughout development.

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<u>Dr. Tanisha Hill-Jarrett</u>

Dr. Hill-Jarrett is a neuropsychologist and an Assistant Professor in the Department of Neurosurgery and Brain Repair at the University of South Florida. Her broad research interests include cognitive aging and has largely centered on understanding (1) racial/ethnic disparities in cognitive aging and (2) the effects of psychosocial contributors (e.g., education, environmental stressors) on the cognitive functioning and cognitive trajectory of Black older adults. Her current grant funding examines the relationship between racism/gendered racism across the lifetime, psychological coping style, and the cognitive functioning of Black older adults.

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Dr. Timothy Hines

I have had an interest in neuroscience and neurological disease for as long as I can remember. I graduated from Appalachian State University in 2012 with a B.A. and B.S. in Psychology and minors in German and Chemistry. I then attended the University of South Carolina for graduate school where I worked in the lab of Dr. Deanna Smith studying the regulation of dynein-dependent axonal transport. After completing my Ph.D. in 2018, I joined the lab of Dr. Rob Burgess at The Jackson Laboratory in Bar Harbor, Maine, where I am studying the cellular and biochemical mechanisms underlying forms of inherited peripheral neuropathy associated with dominant mutations in tRNA synthetases. In

the future, I hope to run my own lab group using my knowledge of axon biology to better understand disease mechanisms so that more effective therapeutics can be designed.

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<u>Dr. Dan Landayan</u>

My father and mother emigrated from the Philippines to California. I became the first person in my family to get into college. During my undergraduate, my favorite course was introductory psychology. It was here I learned of Sigmund Freud's theory of the mind and the underlying principles he established to explain human behavior. I was also intrigued by his paradigm of the mind as a black box: first, a stimulus enters the "black box." Second, something mysterious and unexplainable occurs within the black box. Then finally, a behavior is measured. From this point on, I was obsessed with the inner machinations of the nervous system. For my graduate work, I focused on understanding how the brain

encodes motivated behaviors to satisfy thirst and hunger using the fruit fly model. As a post-doctoral scholar, I want to translate my fly expertise to the study of how motivated social behaviors are encoded in the mammalian brain. In the longer term I would like to explore the circuit interactions that modulate different innate behaviors.

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Taylor McCorkle

Taylor McCorkle, MS, is a rising 4th year neuroscience PhD student studying traumatic brain injuries in the lab of Dr. Ramesh Raghupathi at Drexel University College of Medicine. She is originally from Pittsburgh, PA, and prior to graduate school, she received her BA in biology from the University of Pennsylvania in Philadelphia, PA. For her research, she uses an adolescent rat model of repetitive sports-related concussion to determine sex differences in behavioral outcome post-injury. Her thesis work focuses solely on postinjury impairments and sex differences in hippocampal-based cognition, and she has suggested a novel mechanism through which these deficits occur. The mechanism involves

corticotrophin-releasing factor serving as a neuromodulator of acetylcholine within the medial septum, ultimately leading to decreased synthesis/release of acetylcholine in the hippocampus. There are currently no FDA approved pharmacological treatments for cognitive deficits following traumatic brain injury, therefore, she hopes her research can serve as a steppingstone in the advancement of the field.

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Dr. Mariajose Metcalfe

Dr. Metcalfe received her undergraduate degree from the Pontificia Universidad Catolica de Chile in 2004, and her Ph.D. from The Graduate Center of the City University of New York in 2012. She completed her postdoctoral training at Burke Neurological Institute where she studied axonal degeneration in the context of spinal cord injury (SCI).

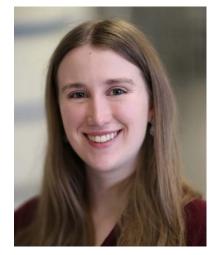
In 2015, Dr. Metcalfe joined the University of California, Irvine, as Laboratory Director, where she focused on studying a therapeutic approach to enable regeneration to reverse paralysis by manipulating genes in the cortical neurons that give rise to the corticospinal tract (CST), one of the tracts

that is interrupted after a SCI. In 2019, Dr. Metcalfe became a Project Scientist, with her studies centered on the development of combinatorial strategies to promote axonal growth using viral vector approaches.

Building on recent advances in AAV biology, Dr. Metcalfe has developed a new and very powerful platform for SCI regeneration, based on the development of "rAAV-retro" that are robustly transported in a retrograde fashion. Dr. Metcalfe has engineered a retrograde AAV that carries the shRNA against PTEN (rAAV-retro/shPTEN) and single injections of rAAV-retro-shPTEN/GFP into the cervical spinal cord of rats, thereby eliciting PTEN knock-down in the motor cortex. The use of this technology addresses interventions to study neuron-intrinsic growth regulators; however, regeneration is still impeded by the growth-hostile environment of the damaged spinal cord. One way to address this impediment is to digest the scar tissue formed by chondroitin sulfate proteoglycans (CSPGs) produced by reactive astrocytes. Because scar tissue acts as a stop signal for growing axons, digesting CSPGs with the enzyme chondroitinase ABC (ChABC) will enable neuronal extension and axonal regeneration. Consequently, Dr. Metcalfe designed an AAV-ChABC, that effectively digests CSPGs in the spinal cord. Further advancing and building on her work, Dr. Metcalfe's lab is testing whether a twin vector system, with one vector of the pair expressing shPTEN that will target intrinsic factors promoting regeneration of cut axons, and the second vector expressing ChABC, thereby targeting CSPGs that contribute to the growth-hostile environment present after SCI, will promote sprouting of spared axons after a SCI. Current and future projects reflects her long-standing interest to contribute to our understanding of the biology of regeneration.

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Katherine Meckel



Katherine Meckel is a doctoral candidate in Neuroscience at the Icahn School of Medicine at Mount Sinai. She earned a B.A. in Biochemistry and a B.M. in Voice Performance from Lawrence University, both summa cum laude. There she performed behavioral pharmacology and electrophysiology research under Dr. Bruce Hetzler. She next joined the University of Chicago, working with Drs. Joel Pekow and Marc Bissonnette in the Section of Gastroenterology, where she developed an interest in understanding how peripheral factors such as dietary metabolites modulate brain function. Now in the lab of Dr. Drew Kiraly, she examines the effects of the gut microbiome and its metabolites on cocaine-seeking

behaviors. For her efforts, she has been honored with an Excellence in Teaching Award, the Philip Hausfeld Memorial Scholarship Award, a Society for Neuroscience Trainee Professional Development Award, and an NIH Blueprint D-SPAN F99/KOO Fellowship. Beyond the bench, Katherine is the co-founder of the student disabilities group (DREAMS) and serves as a student representative on the Graduate School Steering Committee. She volunteers with Mentoring in Neuroscience Discovery at Sinai, Music and Medicine Concerts, and previously with the Sinai COVID-19 Biobank Team. In the long-term, Katherine hopes to establish her own research laboratory where she will interrogate brain-gut interactions underlying substance use disorders.

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Samantha Montoya

Samantha (Sam) A. Montoya is a second-year student in the Neuroscience Graduate Program at the University of Minnesota, supervised by Dr. Michael-Paul Schallmo and Dr. Stephen Engel. Sam studies visual perception, with a particular interest in populations who experience altered visual perception. She is currently studying visual processing and perception in people with psychosis using behavior, neuroimaging (fMRI), and electroencephalography (EEG). She is also planning to apply behavioral and neuroimaging methods to study Visual Snow Syndrome—a condition characterized by the persistent experience of flickering specks covering the entire visual field. In addition to her

research, Sam uses art to communicate scientific findings with the community and advocate for people with visual disabilities. Sam received her B.A. in Neuroscience and Studio Art from Kenyon College in 2019.

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<u>Dr. Rowena Ng</u>

Dr. Ng is a pediatric neuropsychologist at Kennedy Krieger Institute and an assistant professor at the Department of Psychiatry and Behavioral Sciences at Johns Hopkins University School of Medicine (JHUSOM). She received her doctorate from the University of Minnesota Institute of Child Development in Child Clinical Psychology. Dr. Ng completed a clinical psychology internship at the University of California Los Angeles David Geffen School of Medicine and a pediatric neuropsychology fellowship at the University of Michigan -VA Ann Arbor Consortium. In addition to these training experiences, she was previously highly involved in multisite neurobehavioral phenotyping investigations at the Salk

Institute of Biological Studies and UCSD School of Medicine.

Dr. Ng's research to date has focused on developing experimental designs to collect imaging data, behavioral data, and psychophysiological assays to best capture the social and cognitive phenotype of Williams syndrome (WS), partial WS, and idiopathic autism spectrum disorder. Her work at the University of Minnesota and University of Michigan also expanded to applying interdisciplinary methods to study risk factors of youth with psychopathology and children with developmental disorders using a combination of imaging biomarkers, neuropsychological diagnostic tools, and qualitative data coding/analysis. Currently, she is interested at behavioral disease phenotyping rare conditions - specifically epigenetic syndromes with disruptions in the regulatory pathways for gene expression. Her investigations involve integrating standardized neuropsychological tests with laboratory-based behavioral paradigms and electrophysiological measures to determine syndrome-specific neurobehavioral profiles and biomarkers, which may be utilized in assessing efficacy of clinical trials.

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Desmond Warren

Desmond Warren is a first-generation college student, who currently resides in Chicago, IL. He received his B.A. in Psychology at Governors State University in 2015 and went on to complete his M.A. in Clinical Psychology in 2018 at Governors State University as well. Desmond is an incoming Clinical Neuropsychology Ph.D. Student at Georgia State University. Neuropsychology became a passion of his for a couple reasons. For one, he has always been intrigued by the brain and how it impacts human behavior. Secondly, there's a significant lack of research and treatments concerning Black populations in this field of study. He's interested in how adverse experiences intersect with race-related

neuropsychological outcomes to better comprehend how diversity of social experiences relates to paths of recovery. His research interests include cognitive aging, traumatic brain injuries (TBI), mild cognitive impairments (MCI), and neurodegenerative diseases (e.g., Alzheimer's, dementia). Additionally, he would like to utilize structural and functional neuroimaging techniques to enhance his understanding of these neurologic conditions. Ultimately, Desmond wants to engage in translational research to create relevant treatment modalities to reduce and fundamentally prevent cognitive decline via cognitive interventions, such as cognitive remediation and lifestyle changes (e.g., exercise).

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University of Minnesota: Diversifying CNS (2021)