

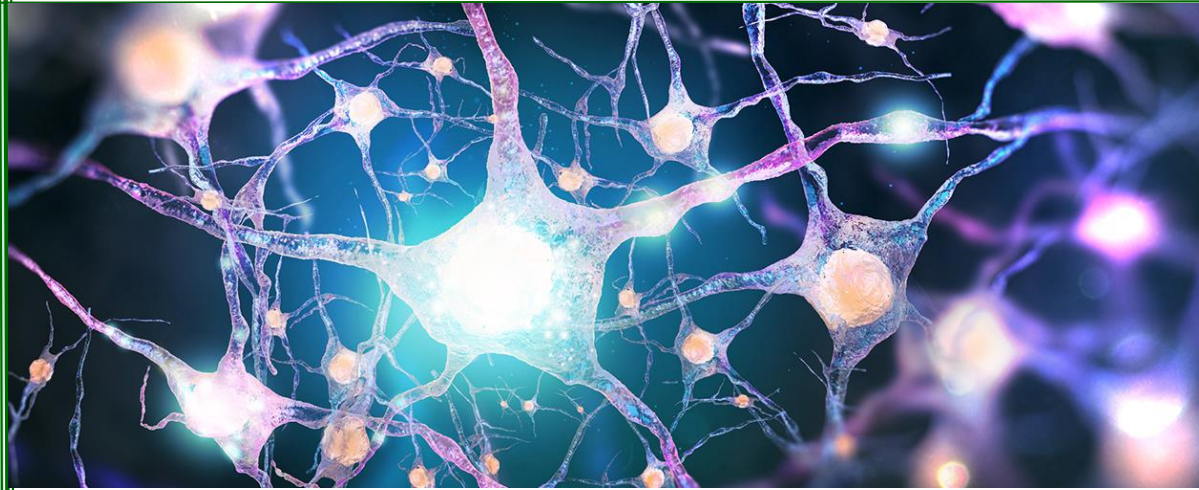
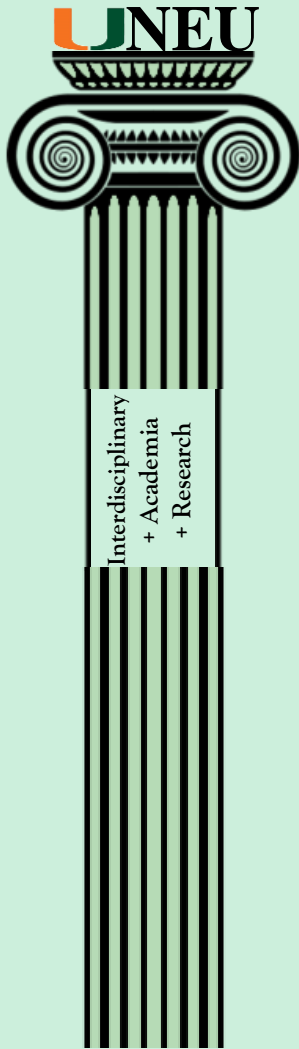
# neuro scientia

A Newsletter for UM Neuroscience Undergraduate Students and Alumni

University of Miami

from the Office of Neuroscience Advising

Spring 2025



*Neuroscience* undergraduates have been diligently working to establish a chapter at UM of the national neuroscience organization Synapse. This organization is principally dedicated to raising awareness about brain injury. The president of Synapse UM is Clara Ford, NEU Junior. The other members of the board are Jake Goldstein, Ally Gallegher, and Victoria Lawreszuk and Dr. David McMillian, Director of Education and Outreach at the Miami Project to Cure Paralysis, will be the primary faculty advisor. Clara states that “this semester they are working on gaining university recognition, outreach, finalize initiatives for the organization and launch the peer support group and buddy system for next semester”. A great opportunity for Neuroscience students and all students interested in the Brain!

For information on joining contact:

[miamisynapse@gmail.com](mailto:miamisynapse@gmail.com)



Synapse

## SYNAPSE PROVIDES



### Community

Creating a powerful community for individuals with brain injuries.



### Compassion

Providing resources and support throughout the recovery process.



### Education

Raising awareness and creating advocates for individuals with brain injuries.



**Clara Ford**

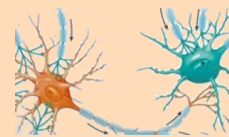
President of Synapse UM



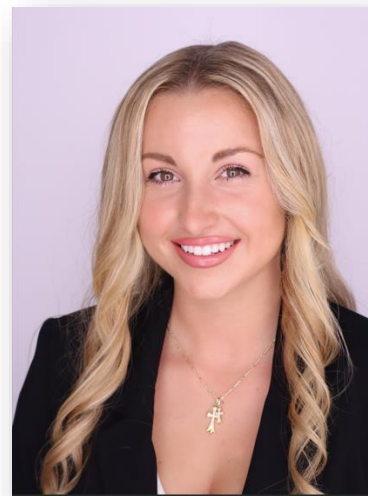
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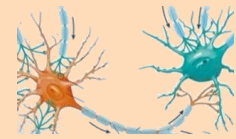
NEU Junior, **Sierra Stiff**, is currently working as a research assistant at the Miller School of Medicine along Dr. Luis Tuesta. She would like to transfer her newly acquired skills in brain imaging and slicing to develop her own project on the recent GLP-1 injections (i.e. Wegovy and Ozempic) and their long-term effects. Sierra also has research experience at Miller on concussion recovery speed due to diet with Dr. Mickey Witte. She was selected to be in the HPM (Health Professions Mentoring) program. She is part of the President's 100, is member of UM Alpha Lambda Delta Honor Society and is active in her sorority, Delta Delta Delta. Sierra also finds time to play in the UM Beach Volleyball and Fellowship of Christian Athletes clubs. Sierra hopes to ultimately receive MD/PHD degrees and study dermatology with a surgical specialty in Mohs for cancer patients.



**Cleide Velasquez**, NEU Senior, is currently an educational instructor at Little Medical School where she promotes STEM programs focused on medicine for children. She has worked as a research assistant at the LeBlanc Research Group, UM Dept. of Chemistry, developing nanoparticles for the application and drug delivery to treat Alzheimer's disease, bone mineralization process, and many types of cancer. Cleide is the co-Founder and ambassador of Magical Moments Foundation where she partnered with oral and maxillofacial surgeons to fulfill dreams of children with craniofacial disorders. She is the co-VP of Nu Rho Psi and a coordinator/facilitator at the Butler Center for Service and Leadership. She is also a resident assistant at Lakeside Village and assists at the Admissions and Financial Aid Department. Cleide is the recipient of the John I. Gerhart Scholarship, Chick-fil-A Remarkable Futures Scholarship, and the American Association of University Women Scholarship.

**Kamryn Elder**, NEU Senior double majoring in Neuroscience and Biochemistry. She is a research assistant at the Miller School of Medicine working on otolaryngology research using the balance beam test in rodent models for analysis of vestibular damage. She has also worked at the Miami Project to Cure Paralysis analyzing behavioral tests such as the water maze test on EthoVision. Jenna is a member of Nu Rho Psi and Executive Board VP of Hillel. She also makes time to be a Youth Soccer Coach and a Jewish Freshman Orientation Leader where she helps incoming students learn about UM and become involved. Jenna has a 4.0 GPA, Dean's list, Provost Honor Roll, President's Honor Roll and is currently completing the Honors Thesis for both of her majors.

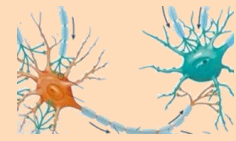




**Ethan Tieu** is a dual degree Senior in Neuroscience and Computer Science. He is the recipient of the Barry Goldwater Scholarship and is a Stamp Scholar, the most prestigious merit award at UM. Ethan has worked in several labs, most recently in the Kellis Lab at MIT where he investigates the effect of diet and exercise on dementia at the single-cell level. He is also a research assistant at the Brambilla and Leibl Lab at the Miami Project and at the Zuchner CMT Genetics Lab at the Miller School of Medicine. He is currently a Machine Learning Intern at Nimbus Health where works alongside engineers and clinicians to enhance patient care using technological advancements and creates machine-learning models to predict hospitalizations a week ahead. Ethan is also the co-founder of Bonsai Computation Group, currently a consultant in computational neuroscience for the Miller School. He is a First Year Fellow and the director of writing for UMIAMI Scientifica Magazine. He is VP of AMSA and president of Inspire U Academy. Ethan has also tutored and volunteered at Doctor's Hospital emergency department. Ethan has a 4.0 GPA, Dean's list, Provost Honor Roll, President's Honor Roll and Foote Fellow.

**Etienne Atangana**, NEU Senior, is currently a research assistant for Dr. Roger McIntosh, Department of Psychology, where he is working on the project- Executive Control and Reward Network Effective Connectivity in eating behaviors. He previously worked with Dr. McIntosh in his Executive Functioning as a Moderator of the Relationship Between Mental Stress and Cardiovascular Reactivity in People Living with HIV project. He was a research fellow at Yale University last summer where he worked with Dr. Ralph DiLeone at the Department of Psychiatry and Neuroscience, examining the effects of orexin/hypocretin on binge eating and dopamine release. Etienne has presented at several conferences on his neuroscience research, and he is a Peer Teaching Assistant for Cellular and Molecular Biology. He is minoring in Computer Science and Microbiology and Immunology following his interests in using neuroimaging techniques to discover brain mechanisms of motivation and reward processing in the context of mental illness such as eating disorders and addiction. He has been chosen to participate in the Yale BioMed Amgen Scholars Program and the Lois Pope Neuroscience Summer Research Scholarship. Etienne is the recipient of the Antonio Orlando Neuroscience Award, Dean's list, Provost Honor Roll, President's Honor Roll and Foote Fellow.





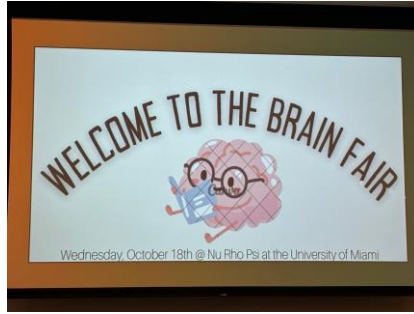
**Hannah Bethel**, NEU Senior, is double majoring in Neuroscience and Medical Anthropology. She is the principal investigator of a project aimed at examining Haiti's COVID-19 pandemic response. She is also a research fellow at the Mayo Clinic Graduate School of Biomedical Sciences where she focuses on undeserved populations to address disparities in access to medical care. Hannah has been an ethnographic researcher at the Department of Anthropology. She has presented her research at several conferences. She volunteers at the Bruce W. Carter Veteran Affairs Medical Center as well as at the Accent Care Hospice. Hanna is the recipient of the Camner Center for Academic Resources Brightest Future Award, the Butler Center for Service and Leadership Most Volunteer Hours Award, The U.S. Department of Veteran Affairs Paralyzed Veterans of American Voluntary Service Distinguished Recognition Award and received travel scholarships from the Office of Undergraduate Research and Community Outreach and the Department of Anthropology.



**Andres Hernandez**, NEU Senior, is currently a research assistant at the Miller School of Medicine, working in Dr. Meghan O'Connell-Blaya and Dr. Helen Bramlett's lab with histological techniques to prepare mice and rat brain tissue samples and perform proteomic analysis through Western blots on these. He also tests for cognitive and sensorimotor defects and behavioral changes in TB1-affected animals. Andres has also worked at the HHMI lab where he researched on several projects in biology and chemistry. He is the co-VP of Nu Phi Psi and the VP of events of the Omicron Delta Kappa Honor Society. He volunteers for Camp Kesem supporting summer camp efforts for children with parents with cancer and at Nicklaus Children's Hospital at the Michael Fux Family Center. He also finds time to help incoming commuter students adjust by volunteering in the Great Start Program, the Commuter Council, and the Commuter and Transfer Assistant Team. He also works on improving our campus safety while working with the UM Police department as the Student Government External Representative, Campus Liaison Council. Andres is a Dean's list, Provost Honor Roll, and President's Honor Roll student.

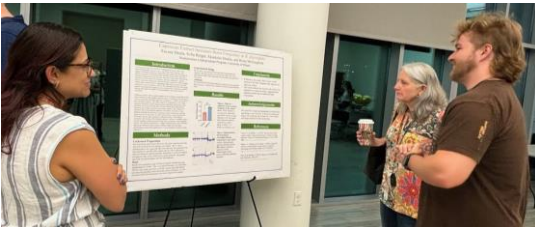


## Brain Fair October 17<sup>th</sup>, 2024





## Faculty Mixer, November 15<sup>th</sup>, 2024







Our exemplary student spotlight is on NEU graduating senior **Bhavya Sharma**. Bhavya is double majoring in Neuroscience and Global Health. She is a member of the Omicron Delta Kappa Leadership Honor Society and the Kappa Gamma Delta Pre-Health Sorority. She is also the recipient of President's Honor Roll, Provost Honor Roll and Dean's list and 4.0 student. Bhavya has been a research assistant for the Miller School of Medicine at the Department of Neurology for Dr. Daniel Adesse's lab. She studied the neurological complications associated with SARS-CoV-2 infection and her research was published in *NeuroImmune Pharmacology and Therapeutics* scientific journal. She was also a summer research scholar at the Case Western Reserve University School of Medicine and University Hospitals in Cleveland, Ohio, where she worked at Dr. John J. Letterio's lab spearheading \$5,000 independent research project involving drug discovery to improve pediatric cancer treatment. She presented at several symposiums her findings.



Currently, she is volunteering at the Mirabelle Long-Term Care Community supporting patients and their families dealing with memory care diagnoses and conditions. She is also shadowing pediatric, dermatology, and gastrointestinal physicians at Holtz Children's Hospital and Jackson Memorial Hospital.



Bhavya is also involved in several organizations on campus actively with board positions. She is the University Affairs Vice Chair, NOW Senator for the University of Miami Student Government Senate, Mentor, President and Fundraising Chair for Big Brothers Big Sisters, President and Treasurer of the National Organization for Women at UM, and the President of the Neuroscience Honor Society, Nu Rho Psi.



Bhavya yet finds time to work as Co-President of Kesem UM where she support children whose parents or caregivers have been impacted by cancer through year-round programming and regional free flagship summer Camp Kesem by fundraising over \$90,000! Way to go Bhavya!

Her hobbies are painting, running, building Legos, and reading mystery novels.

**Congratulations Bhavya on all your Accomplishments!**



# Neuroscience Program

## Neuroscience

is the study of the nervous system (i.e., brain, spinal cord and peripheral nerves), the mechanisms of behavior, and the nature of mind and consciousness. Neuroscience is an interdisciplinary field that draws from a number of scientific disciplines including medicine, biological sciences, psychology, physics, chemistry, mathematics and engineering, and beyond with the nervous system serving as the common focus.

## Our Program

Neuroscience is one of the most rapidly advancing fields of research and training. At the University of Miami, over 50 faculty members from 13 departments on three campuses participate in undergraduate, graduate and postdoctoral training. They engage in neuroscience research that accounts for more than 20% of the University's federally sponsored research dollars.

While the home of the major is in the College of Arts & Sciences, the teaching faculty and Steering Committee come from several schools, including the Miller School of Medicine. The College of Arts & Sciences Department of biology and psychology are home to many of our faculty as well.



## Program Director

**Dr. Helen Bramlett**

Professor of Neurological Surgery at UM Miller School of Medicine. Research Health Scientist at the Bruce W. Carter Dept. of Veterans Affairs Medical Center with more than 25 years of experience in

CNS (Central Nervous System) injury. She is internationally known and has received multiple awards, including WIAM (Women in Academic Medicine) Career Achievement Award. She has published over 114 peer-reviewed manuscripts and is the Editor-in-Chief on Neurotrauma Reports and in the Editorial board of several journals. She is a founding member of InflamaCORE, LLC., - a company dedicated to treating and diagnosing inflammatory injury and disease. She received her MS and PhD degrees in Behavioral Neuroscience at UM.



## Contact Us

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