

Neuroscience Newsletter

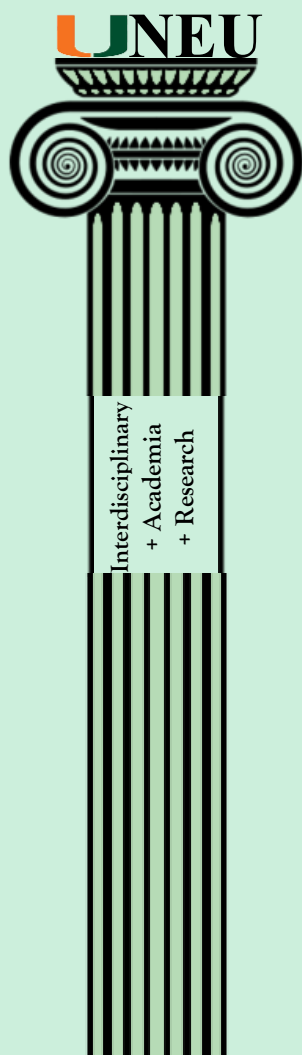
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A Newsletter for Students, Alumni and Friends of the UM Neuroscience Undergraduate Program

University of Miami

from the Office of Neuroscience Advising

Fall 2026



Welcome Back, Neuroscience Students!

We hope you had a wonderful summer filled with rest, new experiences, and time to recharge. As a new academic year begins, we are excited to welcome you back to the Department of Neuroscience and look forward to the discoveries, achievements, and memories that lie ahead.

Neuroscience is one of the most exciting frontiers in science. Every day, researchers around the world uncover new insights into how the brain and nervous system shape who we are—and this year, you can be part of that journey. Whether you're conducting research in the laboratory, mastering challenging coursework, exploring the biology of the brain, or asking your first scientific question, your curiosity and dedication are helping to shape the future of neuroscience. This year will bring new opportunities to learn, collaborate, and grow.

Challenge yourself in the classroom, embrace new research experiences, attend seminars, connect with faculty and fellow students, and take advantage of everything our department has to offer. Some of the most meaningful discoveries begin with a conversation, a new idea, or the courage to ask, "What if?" Remember that science is not only about finding answers—it's about asking great questions, thinking creatively, and persevering through challenges. Every experiment, every setback, and every success is part of becoming a scientist. Our faculty and staff are committed to supporting your success every step of the way. We are excited to watch you grow as scholars, researchers, and future leaders who will advance our understanding of the brain and improve the lives of others. So, as the semester begins, stay curious. Be fearless in your pursuit of knowledge. Support one another, celebrate each other's successes, and never lose sight of the excitement that brought you to neuroscience in the first place. We can't wait to see what you'll accomplish this year.



Dr. Ami Raval
Director of the Neuroscience
Undergraduate Program

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U NEU Faculty Spotlight

THANK YOU DR. BRAMLETT!



Dr. Helen Bramlett

Neuroscience program immediate past director

A warm welcome to Dr. Ami P. Raval who is our new Neuroscience program Director. Dr. Raval currently teaches 3 required courses in the program: NEU 190 Faculty Overview of Research and Undergraduate Mentoring (FORUM), NEU 342 Neural Mechanisms of Disease, and NEU 465 Cellular and Molecular Neuroscience. She also supports several students at her Stroke lab at the Miller School. In addition to being our new Director, Dr. Raval is a Research Professor in the Department of Neurology at the University of Miami Miller School of Medicine and a Research Health Scientist at the Bruce W. Carter Department of Veterans Affairs Medical Center. With more than 25 years of experience in ischemic brain injury research, she is internationally recognized for her contributions to the field. She has authored more than 100 peer-reviewed publications and serves on the editorial boards of several leading scientific journals. Dr. Raval earned her M.S. and Ph.D. degrees in Zoology, with a specialization in Reproductive Physiology, from The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat, India. She completed her postdoctoral fellowship in Neurology at the UM Miller School of Medicine and subsequently earned a Master of Science in Public Health (MSPH) degree from the Department of Epidemiology at the UM. We are honored and excited the Dr. Raval has accepted the nomination to be our new Director!



On behalf of all the current Neuroscience students and alumni, we would like to thank Dr. Helen Bramlett for all the years of leadership, dedication, and guidance to the Undergraduate Neuroscience program. Dr. Bramlett's vision and effort have made the program what it is today. Her experience and countless awards in Neuroscience made her a role model for all her students but even more invaluable was her mentorship, encouragement and support she always offered. Dr. Bramlett gained the respect and admiration of all. We will miss you!

WELCOME DR. RAVAL!



Dr. Ami Raval

Neuroscience program director

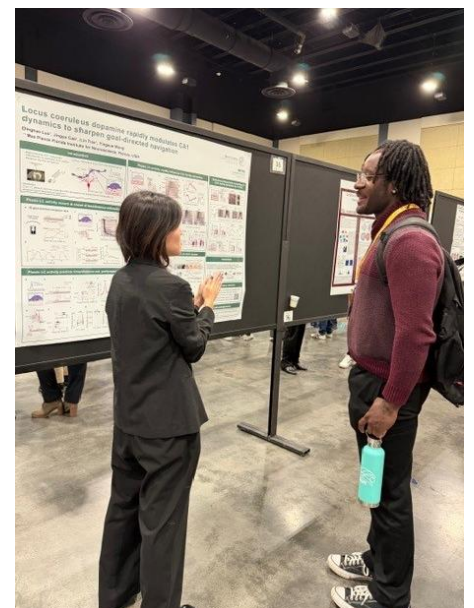
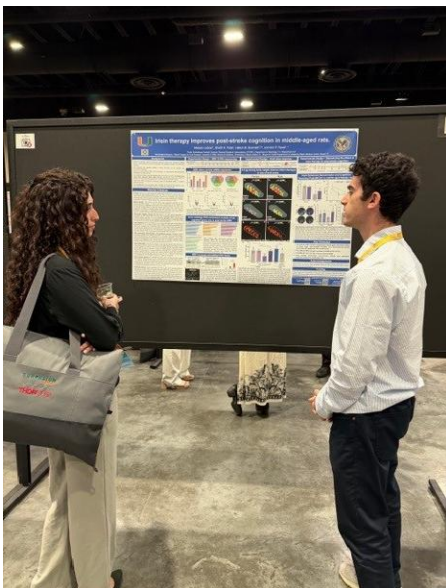
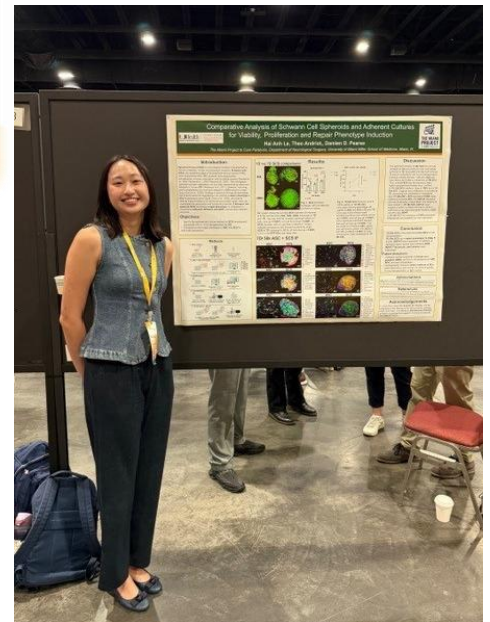
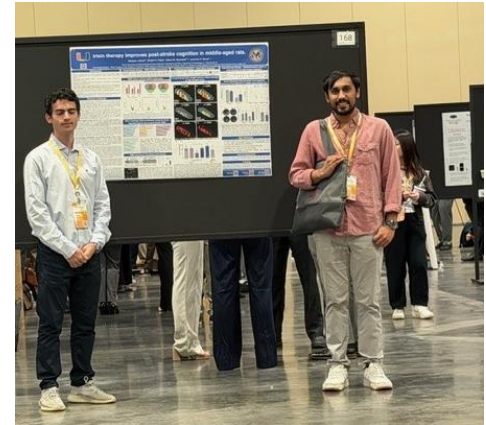
Sunposium

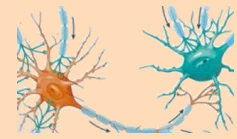


Sunposium neuroscience biennial conference hosted by the Max Planck Florida Institute for Neuroscience, brings together hundreds of global researchers sharing cutting-edge discoveries focused on understanding neural circuits and brain function in health and disease. Dr. Raval and 5 UM Neuroscience students attended and presented their research projects during this prestigious conference. They are:

Etienne Atangana
Shiloh Bass
Medyen Jubran
Hai Anh Le
Iheukwumere Marcus

SUNPOSIUM
2026

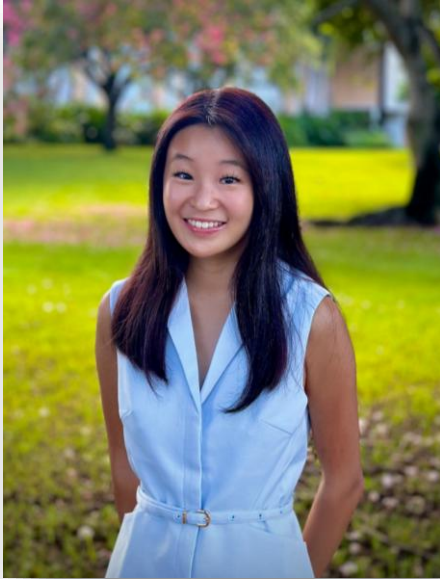
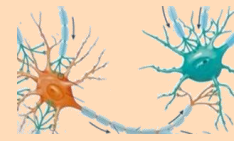




NEU Senior **Henry Albo** is a Research Trainee at the John P. Hussman Institute for Human Genomics (HIHG) along Dr. Younji Nam in his Alzheimer's lab where he tests stained cells for maintenance and measures certain proteins and gene concentrations in them. His advanced math skills, minoring in Math, have proved beneficial when dealing with the new technologies to identify genes involved in human diseases that will be used for diagnosis, intervention, and prevention of illnesses. Henry tutors peer students at the Camner Center in Physics, Chemistry, Math and Biology. He has shadowed for more than 80 hours at La Quinta Medical Center in Hialeah, Florida. He was a clinical volunteer at this same facility where he had the opportunity to work with patients, drug transportation, information systems, lab analysis, and build connections with various doctors. His trilingual language skills, in Spanish, French and English, were convenient when working with patients. Henry has presented at the Research, Creativity & Innovation Forum (RCIF) at UM on the "Effects of SORL1 Variants from African Ancestry on A Beta 40 & A Beta 42 Concentration". Henry is an active member of Nu Rho Psi, Neuroscience Honor Society, AMSA and Association of Commuter Students (ACS). He received an academic recognition grant for his research at the HIHG lab and is the recipient of Dean's list and Provost Honor Roll.



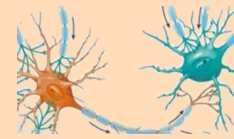
Julia Feury, NEU Senior, is currently a Research Assistant at the UM Wik Lab where she works along Dr. Athula Wikramanayake at the Embryology Lab. Here she investigates the molecular basis for the specification of the animal-vegetal axis. Her current research is focused on identifying maternal egg polarities which activate early Wnt-pathway signaling in sea urchins and *Nematostella*. She volunteers at the Pinecrest Senior Living as a Hospital Buddy. This summer she was a Neurology Lab and Medical Intern at Northwestern Feinberg School of Medicine in Chicago. Here she assisted Dr. Daniela Menichella on her research with neuropathy and chronic pain disorders by investigating the effects of pain on Dorsal Root Ganglion (DRG) neuronal pathways. Previously, Julia was a Clinical Research Assistant at Mount Sinai Hospital in New York. Here she worked at the Seaver Center for Autism Spectrum Disorder (ASD) where she would observe and score ASD assessments and design individual behavioral strategies for children with ASD. She was also a Special Needs Camp Counselor for kids with ASD and other neurocognitive disabilities. Julia is in the College of Arts and Sciences Student Advisory Council as an administrative member, she has a mentoring position in the American Medical Student Association, she is a Chemistry Tutor at the Camner Center and she is part of the UM Club Running Team. Julia is currently working on her Neuroscience Honors Thesis and is the recipient of Dean's List, Provost Honor Roll and President's Honor Roll.



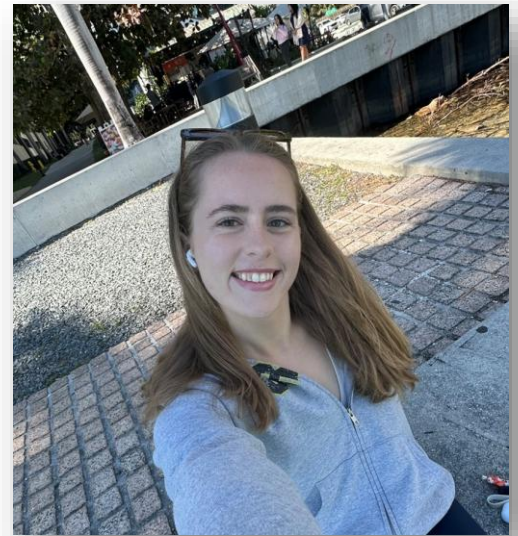
Michelle Zhang, NEU Junior, is currently a Research Assistant at the Sylvester Cancer Center Antoni Lab working along Dr. Michael Antoni at his Coping and Recovery Lab. She is designing graphics for the treatment manual of a study testing a 10-week telehealth program and its effects on stress caused by cancer accelerated aging of breast cancer patients. She also edits study participant questionnaires to track their mood/emotional state during the treatment progress. She created relaxation technique videos for the breast cancer patients as well as pamphlets, flyers, and a website of tips and resources on how to manage their condition. Michelle volunteers with Project Sunshine where she helps provide activities to support families with sick children. This summer she worked as a Research Assistant in the Huang Lab at the University of Pennsylvania Perelman School of Medicine in Philadelphia. She assisted in developing and applying cutting-edge intelligent preclinical and clinical MR neuroimaging and analysis techniques to delineate human brain development and identify clinical biomarkers. Michelle was invited to attend PICI Scientific Retreat hosted by the Parker Institute for Cancer Immunotherapy. She also volunteered this summer at the Nemour's Children's Hospital in Wilmington, Delaware, as a Child Life Volunteer. This Fall she will be taking part in ACS CARES at Sylvester Cancer Center where she will partner with an oncology provider to deliver navigation support to people with cancer and their caregivers. Michelle is a Camner tutor in biology and chemistry and is the VP of Outreach and Marketing for the UM chapter of SYNAPSE. She is a Stamps Scholar, the recipient of Dean's List, Provost Honor Roll and President's Honor Roll and a Foote Fellow.

Medyen Jubran, NEU Junior, is double majoring with Computer Science. He is the recipient of the Shenoy Undergrad Research Fellowship in Neuroscience (SURFiN) placing him as a Research Assistant at the Dallman Lab, along Dr. Julia Dallman, where he investigates neural development and behavior. Here has been able to use both his Neuroscience and Computer Science knowledge when analyzing SHANK3 isoform expression (shank3a/shank3b) using Clustal Omega multi-sequence alignments. Medyen is also a research assistant at Dr. Ami Raval's Stroke Lab at Miller School of Medicine as a Lois Pope Fellow where he currently investigates post-stroke irisin therapy effects. Medyen has presented his research at the Max Planck symposia hosted by the Sunposium Neuroscience Conference, the Simons Foundation in New York and the Research, Creativity & Innovation Forum (RCIF) at UM. He is the founder and president of the Trusk Capital & Crypto, UM organization focused on cryptocurrency, stock markets and fintech. Medyen has volunteered as a student mentor for the Hope Fund program for the U.S. Department of State guiding MENA (Middle Eastern and North Africa) scholars in their professional, academic, and personal development goals. He has received Dean's list, Provost Honor Roll, and is a Foote Fellow.



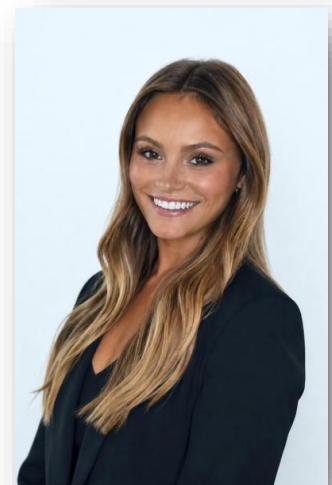


Ainsley Heinz, NEU Senior, has been a Research Assistant at the Farkas Lab at the Miami Project to Cure Paralysis at the Miller School of Medicine. Here she worked on survey data and analyzed results for several of Dr. Gary Farkas' projects. Ainsley was also a Lab Volunteer at the Purdue University Brain Research in Auditory Neuroscience (BRAiN) Lab where along Dr. Maureen Shader, she assisted with patients situated with the Functional near-Infrared Spectroscopy (fNIRS) cap prior to testing. Here she expanded her knowledge on cochlear implants and the use of the fNIRS as a non-invasive brain imaging technique. Ainsley is very interested in nutrition and fitness. She is minoring in Sports Medicine and Biochemistry. She is currently a Fitness Program Assistant at the UM Herbert Wellness Center and has been a UM Hurricanes Football Nutrition Intern. She is The President of the Canes Emergency Response Team, has been a Dean Ambassador. Ainsley is the recipient of Dean's List, Provost Honor Roll and President's Honor Roll and is a Foote Fellow.



Hedy Portillo, NEU Senior, has worked as a Research Assistant at the UHealth Neurology Department. She collaborated in patient recruitment for a migraine monitoring study and maintained and updated documentation ensuring it was compliant with research protocols. Hedy is currently a Student Assistant at UM Athletic Training where she assists the trainers in first aid and hydration during football practices. She is the Vice-Chair of the Student Activities and Organizations where she plans and hosts events to promote school spirit and community engagement. She is also the Vice Chair of the Student Government Board of Communications where she creates promotional content for UM Student Government. Hedy has also been a Volunteer Chair of the Canes Science Bowl and has been on the Executive Board of Great Start, assisting new student orientation efforts. Hedy is also part of the Commuter Student Involvement team and has been a Chemistry workshop leader. She is the recipient of Dean's List, Provost Honor Roll and member of Omicron Delta Kappa honor society.

Elaina McCollum, NEU Senior, is a Research Assistant at the JAM Lab where she works with Dr. Jacob Miller in launching a cognitive neuroscience lab focused on brain architecture and working memory. She has also been a research assistant at the Miami Project to Cure Paralysis at Miller School of Medicine. Here she worked along Dr. Damien Pearse in the collection and experimental procedures, in the Spinal Cord Injury Research Lab, using murine models. Elaina was also a Nutrition Intern at Monumental Movements in Cherry Hill, NJ, where she analyzed 70+ gene variants translating complex genetic data into evidence-based, client-friendly insights for individualized nutrition plans. She was recently accepted into the Neural Engineering+1 Master of Science program. She is a UM Presidential Scholar and a member of Nu Rho Psi honor society. Elaina has received Dean's List, Provost Honor Roll and President's Honor Roll.





SYNAPSE



Vanessa Lawreszuk
VP of Outreach and Marketing
Neuroscience



Executive Board 2026 – 2027



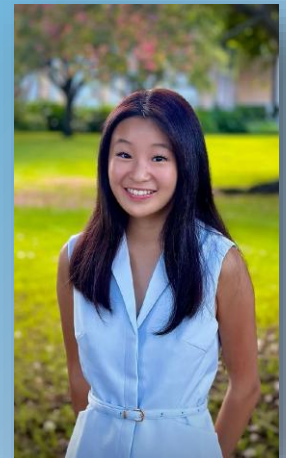
Ashely Munkhbavar
VP Buddy Program
Global Health Studies



Diana Cardenas
VP of Internal Communications
Neuroscience



Victoria Lawreszuk
President
Neuroscience



Michelle Zhang
VP of Outreach and Marketing
Neuroscience



Julia Delurgio
Treasurer
Biomedical Engineering



Beatrice Salvoni
VP of Peer Support
Neuroscience



Rhea Thakkar
VP of Peer Support
Biochemistry



Sonit Mattoo
VP of Events
Neuroscience



SYNAPSE Events



UM chapter of SYNAPSE attended the TBI Expressions Café hosted at the Lynn Rehabilitation Center



10+ Buddy pairings where at least one UM student was paired with an individual who has a Traumatic Brain Injury (TBI)



2026 Brain Fair hosted at Miami-Dade County Public School STEAM Expo

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.





Catalyst Institute

Laura Bredel, rising neuroscience senior, and Georgia Howey, rising biology senior, are the Co-Founders and Directors of Catalyst Institute, a student-led summer chemistry tutoring program designed to help University of Miami students prepare for CHM 121, 221, and 222. Motivated by their own experiences navigating undergraduate chemistry, Laura and Georgia recognized that students often lose foundational knowledge between courses in the chemistry sequence over the summer, making the transition into the next course more challenging than it needs to be. Catalyst Institute was created to bridge that gap by reinforcing essential concepts from previous coursework while also previewing key topics students will encounter in their upcoming chemistry courses. This ensures that students enter the fall semester not only with their knowledge refreshed, but with a head start on the material ahead. This summer, the program included 30 students for structured sessions covering core chemistry concepts, problem-solving strategies, and exam preparation techniques. The Catalyst Institute fostered a collaborative learning environment where students worked together, supported one another, and built connections that extended beyond the classroom. Through Catalyst Institute, Laura and Georgia have built a peer learning community that empowers students to enter the fall semester confident and ready to succeed.



Laura Bredel
Neuroscience



Georgia Howey
Biology



— THE —
CATALYST INSTITUTE
SUMMER CHEMISTRY READINESS PROGRAM



YMAA

Youth Movement Against Alzheimer's

MEET THE YMAA *Executive Board*



ADDISON
Founder / President



MATT
Vice President



ISABELLA
Secretary



MARLEE
Treasurer



CELINA
Social Media Chair



ELLA
Recruitment &
Membership Chair

The UM chapter of YMAA is commencing Fall 2026. The first president and founder is Addison Mancill. The Youth Movement Against Alzheimer's empowers young leaders to raise awareness, advance education, support groundbreaking research, and serve individuals and families affected by Alzheimer's disease. Through advocacy, volunteerism, and community engagement, we strive to create a future without Alzheimer's.

Interested in:

- Neurodegenerative Disease Awareness
- Pre-Med Volunteer Opportunities
- Community Engagement
- Brain Health Promotion
- Youth Advocacy

**Join YMAA newest
chapter at UM!**

YMAA WEBSITE!



JOIN THE GROUP ME!



-  President Addison Mancill, Neuroscience
-  Treasurer Marelee Weiner, Sports Medicine
-  VP Matthew Frank, Neuroscience
-  Secretary Isabella Rodriguez, Biochemistry and Molecular Biology
-  Social Media Chair Celina Sordi, Neuroscience
-  Recruitment & Membership Chair Ella Hartsell, Computer Science and Interactive Media

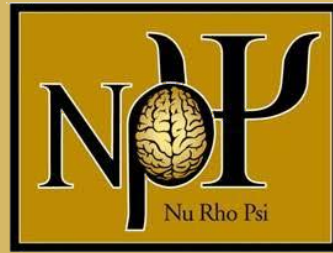


Nu Rho Psi

Neuroscience Honor Society



Grace Garvalia - Vice President



Executive Board 2026 - 2027



Isabel Rodriguez - Secretary



Mia Begera - PR Chair



Samantha De Castro -
Co-President



Krish Relan -
Co-President



Mariana Vergel - Treasurer



Nina Cottone -
Co Mentorship Chair



Matthew Frank -
Co Mentorship Chair

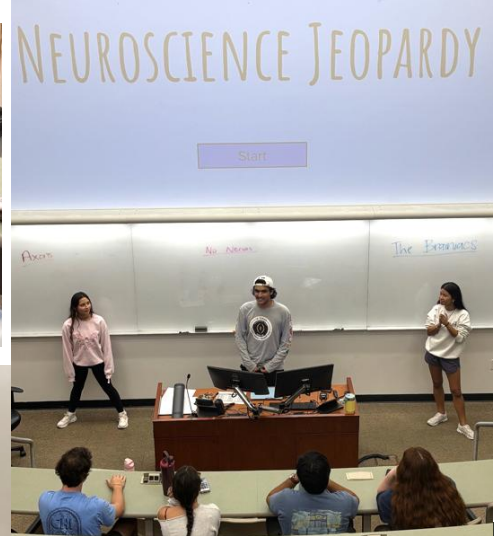


Ariel Shavit -
Co Outreach Chair



Hailey Weintraub -
Co Outreach Chair

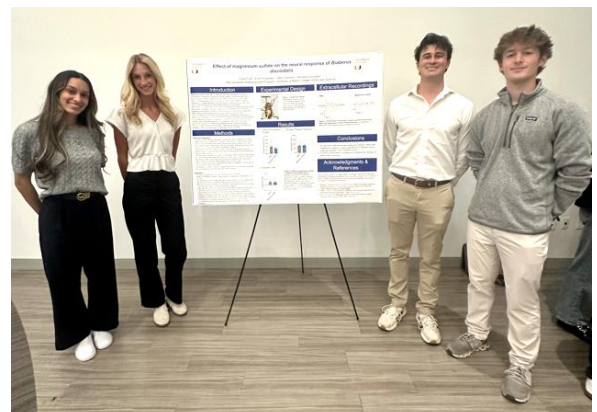
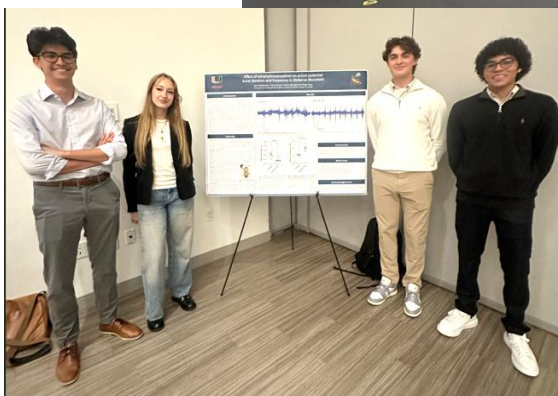
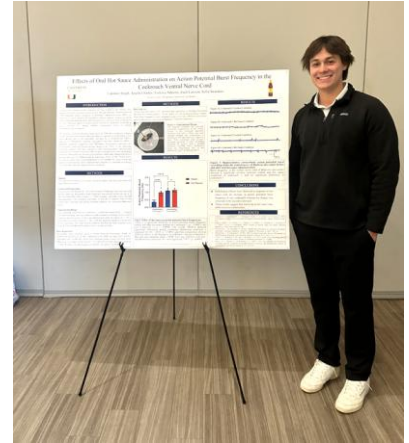
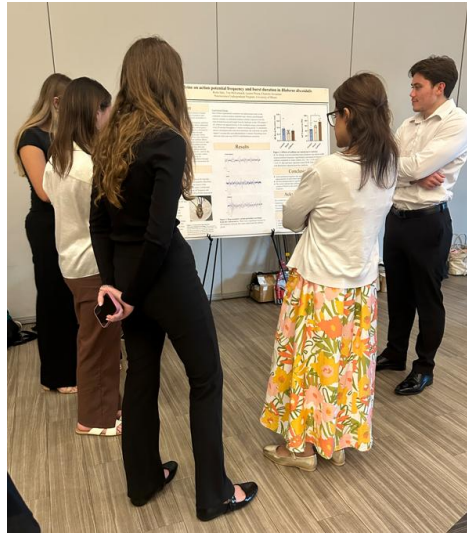
Trivia Night March 3rd, 2026



100	100	100	100	100
200	200	200	200	200
300	300	300	300	300
400	400	400	400	400
500	500	500	500	500



Faculty Mixer April 16th, 2026





Neural Engineering+1 Program

Congratulations to our Neuroscience students who were accepted into the Neuroscience BS/MS Neural Engineering+1 Program!

Emilly Matias, NEU Class '25'

The Neural Engineering Master's program has been an incredible experience. As someone with a background in Neuroscience, I wanted to expand my knowledge by learning how engineering can be used to develop innovative solutions for neurological disorders and improve patient care. Through the program, I've had the opportunity to integrate machine learning, biomedical engineering, and clinical research into real world neuroscience applications. It has allowed me to translate concepts into meaningful research, strengthening both my technical skills and passion for research.



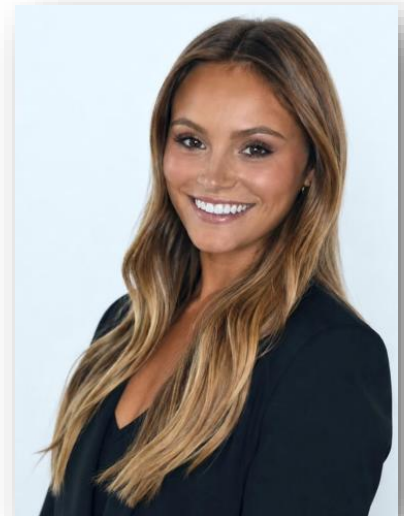
Zach Lawson, NEU Class '26'

I am excited to continue at the University of Miami as an M.S. candidate in Neural Engineering because the program allows me to build on my neuroscience background while exploring the intersection of medicine, engineering, and translational research. Through my master's project in Dr. Damien Pearse's lab at The Miami Project to Cure Paralysis, I hope to deepen my understanding of biomaterials, spinal cord repair, and regenerative neurotherapeutics. I would especially recommend the program to students who are interested in applying neuroscience beyond the classroom and connecting it to research, innovation, and patient care. I am grateful for the opportunity to continue growing at UM while pursuing clinical work, cancer survivorship research, and my long-term goal of becoming a physician.

Elaina McCollum, NEU Class '26'

I'm very excited and grateful to have been accepted into the Neural Engineering 4+1 BS/MS program at UM. As a neuroscience major, I've loved learning about the brain and psychology in my undergraduate courses, but I've also realized that I'm interested in branching into engineering and technology as I explore future career paths. Being involved in neuroscience research has furthered my curiosity about the brain, especially the ability of neuroplasticity to shape learning, recovery, and adaptation. My research experiences have encouraged me to explore how engineering and technology can be used to better understand and improve brain function.

Furthermore, meeting with Dr. Prasad to discuss the program, course planning, different career options, and opportunities has helped me see how well this program aligns with my goals. I applied to this program to help me further understand what type of career I want to work in, as this program is more personalized and hands-on than undergraduate courses. I appreciate how personalized the program is, and I'm excited to gain hands-on experience, develop new technical skills, and explore how neuroscience and engineering can come together as I determine the direction, I want to take my career.





Neural Engineering+1 Program

Congratulations to our Neuroscience students who were accepted into the Neuroscience BS/MS Neural Engineering+1 Program!



Madison Lundy Hawkins, NEU Class '26'

My experience in the combined B.S./M.S. program in Neural Engineering has been extremely rewarding. This program has allowed me to engage with rigorous graduate-level coursework during my undergraduate studies. These courses have challenged me to grow academically by shifting the focus from standard testing to a more comprehensive understanding of material. This interdisciplinary program has also broadened my professional opportunities beyond traditional medical fields. Overall, enrolling in this program has been one of the most impactful decisions of my academic career.

Kiara Arjune, NEU Class '25'

What drew me to the Neural Engineering Master's program was the opportunity to merge my two undergraduate majors, Neuroscience and Applied Mathematics, to tackle complex, real-world clinical problems. The curriculum is rigorous and interdisciplinary, allowing me to see the nervous system from brand-new perspectives, especially from my fellow classmates from different academic disciplines. Most of all, the mentorship I have received has been nothing short of exceptional! Dr. Prasad has personally advised me and all other Neural Engineering students throughout the program, allowing me to best leverage the degree for my future studies. I started this program with the intention of pursuing my Ph.D. in Neuroscience, and this degree has completely solidified my passion for its translational applications.



Emily DeBender, NEU Class '25'

The Neural Engineering Master's program has truly exceeded my expectations. The professors and researchers who are experts in their field double as amazing professors who make it a priority to support their students every step of the way. I've especially valued working with Dr. Ozdamar on my final project, whose mentorship has made a real difference in my experience in the program and my life in general. Through this program, I've learned so much about applying machine learning, medical devices and neurology, which has deepened my passion for the field. I'm proud to be a double cane, and I am so thankful for this program.



Julia McDevitt, Graduated from Neuroscience in 2024 and received the Bachelor of Science in Neuroscience along the Masters in Neural Engineering in 2025. She received a Six Sigma Green Belt Certificate in business processes. Julia has moved to Washington DC where she is excited to be working in a field where she can combine her science background along with the business side of the life sciences industry.

Julia is currently a Life Sciences Consultant as a Compliance Associate at Potmac River Partners in DC. Here she partners with life sciences clients to navigate complex compliance requirements, developing practical solutions that align business objectives with regulatory and ethical standards. She also contributes to business development initiatives through proposal development, client relationship management, and participation in new business opportunities.

She also supports client compliance programs across diverse functional areas and evolving industry requirements. Right after graduation Julia worked as a Regulatory Affairs Intern at Boston Scientific at Maple Gove, Minnesota, in their Interventional Oncology-Peripheral Interventions Division. Here she partnered with cross-functional new product development teams to accelerate FDA and EU approval and market commercialization of medical devices. She also worked on reducing approval timelines for new device indications and conducted competitor market research. She supported clinical and regulatory strategies for exploratory and early-stage interventional oncology projects and contributed to clinical trial oversight for a glioblastoma IDE early feasibility study and a prostate cancer trial.

While she was a student at UM Julia was a Research Assistant at Dr. Abhishek Prasad's Neural Interfaces Lab at The Miami Project to Cure Paralysis at the Miller School of Medicine. She also worked at the ALS Research Collaboration as a clinical research assistant at the UHealth Department of Neurology and the Family Lab at the UM Don Soffer Clinical Research Center as a research assistant along Dr. Youngmee Kim. Julia won 1st place for her research presentation at the College of Engineering Master of Science Showcase Poster Session and was a Category Winner at the College of Engineering Research Symposium. She was the Service Chair for Phi Delta Epsilon Medical Fraternity and part of the philanthropy general board of her sorority, Sigma Delata Tau. Julia was the recipient of the Merit Scholarship, Dean's List, Provost Honor Roll, President's Honor Roll and member of the Nu Rho Psi Honor Society.

Currently, besides enjoying her new position at work, she values her leisure time exploring DC as well as traveling, spending time with family and friends, and being a fitness instructor at Tremble.

We are so proud of your accomplishments, Julia! Your journey is a true inspiration to the current NEU students, and we look forward to celebrating your future success!

