
THE CENTRAL SULCUS
RETREAT EDITION | AUGUST 22nd 2025

The Central Sulcus

A letter from the Editors

Welcome to *The Central Sulcus*! *The CS* is a constituent of the Graduates in Neuroscience (GiN) body at Emory University! The team comprises an editor in chief and three editors nominated and elected from the Emory graduate neuroscience program.

As the editorial team of *The Central Sulcus*, we oversee the creation, curation, editing and organization of content submitted to us from students and faculty across the program.

In this edition, we aimed to highlight the depth and breadth of members' experiences in the program, while recognizing their achievements. From faculty interviews and student conference spotlights to Beltline Bingo, we hope you will take something away from the edition!

Preparing this edition has only emphasized the diversity of voices our program boasts. Yet through that diversity falls a harmony around core values: scientific rigor, collegiality and friendship. Whatever challenges may face us in the days to come, it is reassuring that our neuroscience community will always be a bulwark of support and solidarity to those who need it.

Stay safe,

Caius Gibeily
EDITOR-IN-CHIEF

Engila Khan
EDITOR

Patlapa Sompolpong
EDITOR

Abigail Inman
EDITOR

No generative AI, including large language models (LLMs) or image-generating software, was used in the creation of this edition

Editorial Team

Caius Gibeily | Y3, Shultz Lab

Hello, I am a rising third-year student working in the Shultz Lab where my research focuses on understanding the intersection of brain development, behavior, and autism using functional neuroimaging and computational modeling. As a member of Emory's Center for Mind, Brain and Culture program, I also have a passion for interdisciplinary study. I enjoy 3D printing, playing Go and reading non-fiction.

Patlapa Sompolpong | Y2, van Rooij Lab

I am a rising second year student studying the therapeutic application of transcranial magnetic stimulation (TMS) for treating post-traumatic stress disorder (PTSD) in the Stress and Neuromodulation Lab under Dr. Sanne van Rooij. When I'm not working, you can usually find me in the gym or at home cuddling with my cat. I'm also really into makeup, fashion, and non-conventional forms scientific outreach and education!

Abigail Inman | Y2, Shultz Lab

I am a rising second year student in the Shultz Lab at Marcus Autism Center. I am interested in developmental variations in human communication and social function, particularly how social, motor, and cognitive development in infancy interact to shape the early learning environment and future outcomes. Outside of lab, I enjoy rock climbing with my husband, reading about history and the natural sciences, and playing The New York Times games.

Engila Khan | Y2, Bassell Lab

Hi, I am a rising second year student in Prof. Gary Bassell's lab! During my master's, I was involved in research that aimed to induce Parkinson's disease in mice following pesticide exposure. My research now explores mRNA transport dynamics in a primary/immortalized neuronal cell culture system. I enjoy reading work that examines the structural relationships between people in different socio-economic settings, fantasy, and mystery. If I am not reading, I am catching on some kdrama or anime!

Contents

Learning and Research

Faculty interviews

Gary Bassell

Techniques:

Primary neuron culture, human induced pluripotent stem cells (iPSCs) neurons/organoids, microscopy, cloning, multi-omics

How would you describe your research in a couple of sentences?

Our lab investigates mechanisms of RNA dysregulation and synapse dysfunction in genetic neurodevelopmental, neurodegenerative and neuropsychiatric disorders. We utilize mouse and human models for multidisciplinary in vitro and in vivo studies.

An area of expertise is human iPSC derived neurons and 3D organoids derived from individuals affected with brain disorders. We employ advanced microscopy and imaging methods and multi-omics approaches to uncover novel synapse biology adversely affected in disease.

We test therapeutic strategies including small molecule, gene therapy and nucleic acid-based therapeutics.

Please tell us a fun fact about yourself or a hobby you enjoy:

Wine and Scotch enthusiast! I enjoy traveling to wineries and distilleries!

What inspired you to pursue science?

Two early mentors played important roles. My high school chemistry teacher inspired and motivated me. I was fascinated and asked a lot of questions, in particular about biochemistry. My college biochemistry professor and research advisor encouraged me to pursue a PhD and we talked frequently about career paths in biomedical research. I was fortunate to have supportive and inspiring mentors for graduate school and postdoctoral training.
Since setting up my lab (this year is our **30th** anniversary!), it has been so incredibly rewarding. My inspiration has been from so many graduate students and postdocs who have gone on to exciting career paths in research and/or teaching, as well as to pursue other career paths in science.

"Don't be shy to ask the prospective faculty mentor open questions about what you want to know."

Do you have any advice on choosing rotations, or on maximizing the rotation experience?

My recommendation is to talk to several lab members, including current and former graduate students. Talk also to students who rotated but did not join. Remember it's not the opinion of one person but several collective experiences of many mentees that you need to integrate. Of course you need to be motivated by the overall science but also the environment and culture has to fit for you.

Learn about their experiences. Don't be shy to ask the prospective faculty mentor open questions about what you want to know. Confirm funding availability. To maximize the rotation experience, try to have regular meeting with the advisor, attend lab meetings and meet with everyone to learn about multiple research projects. Your future thesis project may be on another topic that you got interested in.

Chris Rodgers

Techniques:

Behavior, electrophysiology, computational modeling

How would you describe your research in a couple of sentences?

Our lab studies how neural circuits in the brain implement computations for perception and action. Using mice as a model organism, we ask how sensory processing and motor control are coordinated across multiple brain regions in order to build an internal model of how the world works. In addition, we study how these cognitive processes compensate and adapt in conditions like hearing loss or neurodegenerative disease.

What inspired you to pursue science?

I was inspired to pursue science by NSF-funded summer research experiences as an undergrad. A professor at one of these programs showed me what it was like to record spikes from neurons, and that made me want to understand how the brain works.

We often hear from incoming students they feel nervous about reaching out to potential rotation mentors. How would you advise these students?

Feeling nervous about approaching a more experienced person is a part of professional life. I still feel this way when I have to email a senior faculty member who I don't know very well to ask for a favor or a letter. There's a certain skill in writing a good email that is polite, concise, and clear about the potential benefit to both people. Building that skill now will help you in all kinds of ways in the future.

Jenni Stevens

Techniques:

fMRI, Cognitive experiments

How would you describe your research in a couple of sentences?

My research explores the neural circuit mechanisms of PTSD risk and resilience and the effects of traumatic stress on women's brain health.

What inspired you to pursue science?

I had the most lovely experience working as an undergraduate RA, but didn't realize I could do research as an actual adult job. An early mentor helped me realize that something that I thought was just for fun could be a real career path.

We often hear from incoming students they feel nervous about reaching out to potential rotation mentors. How would you advise these students?

Don't stress - faculty expect to receive cold emails from students. You can convey your respect for their time by reading their lab website and checking out some recent research findings from their group ahead of time (like reading abstracts of a few recent manuscripts).

Please tell us a fun fact about yourself or a hobby you enjoy:

I've lived in Atlanta for 39 years!

Sarah Shultz

Techniques:

MRI, Eye-tracking, Cognitive assessment

How would you describe your research in a couple of sentences?

My research centers on early social development, specifically the foundational building blocks of social learning in infancy and how these processes diverge in children later diagnosed with autism.

What inspired you to pursue this field?

I first became interested in this area as an undergraduate, studying infants' early preferences for speech over other biological sounds. I was struck by the sophisticated social capacities already present in the newborn period. At the same time, I was working with a four-year-old on the autism spectrum who was learning social communication skill through a very different means—an experience that deepened my curiosity about both neurotypical and neurodivergent developmental pathways.

Guided by these formative experiences and the notion that "development itself is key to understanding developmental disorders," (Karmiloff-Smith, 1998), I investigate trajectories of brain and behavior development in both neurotypically developing infants and those with autism. Some of my most impactful findings reveal how infants' own actions and exploration shape their social learning opportunities and brain development from the very beginning.

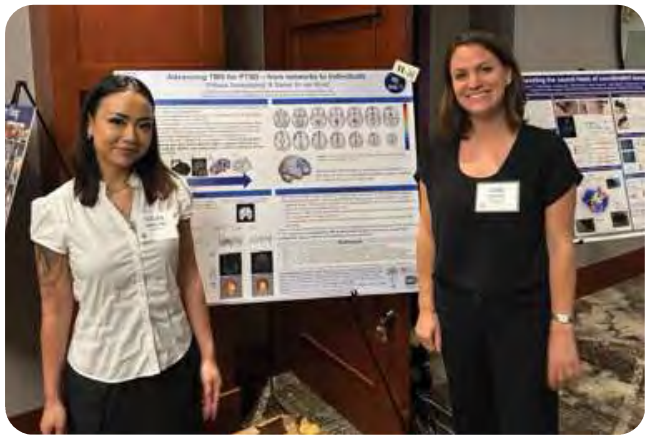
Karmiloff-Smith A. Development itself is the key to understanding developmental disorders. Trends Cogn Sci. 1998 Oct 1;2(10):389-98. doi: 10.1016/s1364-6613(98)01230-3. PMID: 21227254.

Rotation reflections

Sanne van Rooij + Patlapa Sompolpong

Sanne van Rooij

When I met Patlapa, several factors stood out: Patlapa was exceptionally driven and had a **clear vision of what she wanted to learn from the outset.** Her proactive approach during her rotation, and beyond, led to a highly productive first year in the Neuroscience program. **She also seemed a great fit interpersonally and to my mentorship style**, making the collaboration feel natural and mutually beneficial. When selecting rotation projects, we took a strategic approach by designing a plan that would be valuable regardless of which lab Patlapa ultimately joined. This led us to pursue a **literature review and a letter to the editor, focusing on a recent influential paper and connecting it to the methods we were developing and testing in our TMS clinical trial.** One particularly memorable moment was when we unblinded the study. Patlapa has since been closely involved in **writing up the first papers** with the results.



Patlapa Sompolpong

Since the rotation is 8 weeks and I knew how long human research and clinical trials can take, I brainstormed with Sanne to come up with a viable and reasonable project. **We decided on my writing a literature review on the ongoing developments in using TMS to treat PTSD.** Each week, I wrote out my goals and action items for the week, and would prepare an agenda for my weekly meetings with Sanne. I ended up continuing to work on the literature review after my rotation ended! **And it all paid off because the article is now published in the Transcranial Magnetic Stimulation journal!!**

I decided to choose Sanne as my primary mentor because the research project aligned with my interests and what I wanted to do post-grad, and crucially, because she fuels my passion and spark for research. I am super grateful to have a mentor that I get excited to talk to about science and that makes me feel valued and appreciated as a person and an early-career trainee. **Sanne also shares the same interests and values, including community outreach, so I feel like Sanne is a great mentor fit for me across the board.**

Gary Bassell + Engila Khan

Gary Bassell

During the rotation, Engila worked closely with an associate scientist in our lab on a project to **investigate how genetic mutations in a specific kinesin motor causes the neurological disease, hereditary spastic paraplesia**. In one of our meetings, I could sense her excitement in describing the recent result of a successful experiment. The scientist who worked closely with Engila had only very positive things to say about her intellect and scientific motivation. I enjoyed my conversations with Engila about her long-term interests to study **mechanisms of learning and memory**, as well as conversations about her unique experiences as an international student from Dubai. **Our lab has always been proudly international and diverse.** Considering my own interests and the lab's feedback, I was pleased to offer Engila a position at our last meeting. **We are so pleased to have Engila ultimately decide to join our lab!**

Engila Khan

My rotation project in Prof. Bassell's lab involved work with primary cortical mouse neurons. With another scientist in the lab, I **investigated the movement dynamics of a specific kinesin motor protein, both wild-type and mutant variants found in patients with hereditary spastic paraplegia**. Observing the intracellular movement in real time via live cell imaging was an incredibly exciting moment for me!

My rotation experience at the lab confirmed my interests in pursuing molecular neuroscience (and in the long run relating to **mechanisms associated with learning and memory**). Beyond research, I deeply valued the lab's warm and versatile environment, **not only in terms of the cultural diversity (important to me as an international student!**), but also the mix of members at different academic/career stages. I truly appreciated Prof. Bassell's exceedingly flexible and supportive mentorship, along with the balance of structured guidance and independence in planning and executing experiments. This was a perfect fit for my learning style and altogether contributed to an enriching rotation experience as well! **I am grateful to have been offered a position in the lab!**

Chris Rodgers + Karinne Cobb

Chris Rodgers

Karinne Cobb rotated in my lab. During this time, she developed a new behavioral protocol for working with mice. In animal behavior, we sometimes focus too much on the way we've designed the task, and not enough on the rest of the animal's experience, such as how comfortable they are with their handlers. Karinne helped us to find a way to make the mouse more comfortable, and that has helped the mice to learn much faster. I think the key thing to know about rotations is that they are a trial period to see if a mentor and a mentee work well together. Any faculty member might be a great mentor for one person but not a great fit at all for another, so the only way to know is to give it a try. While it's important that both the mentor and mentee dedicate a lot of energy to the rotation, the actual scientific outcomes aren't as important as the interpersonal outcomes: the two people together have to decide whether they are ready for a long-term professional commitment.

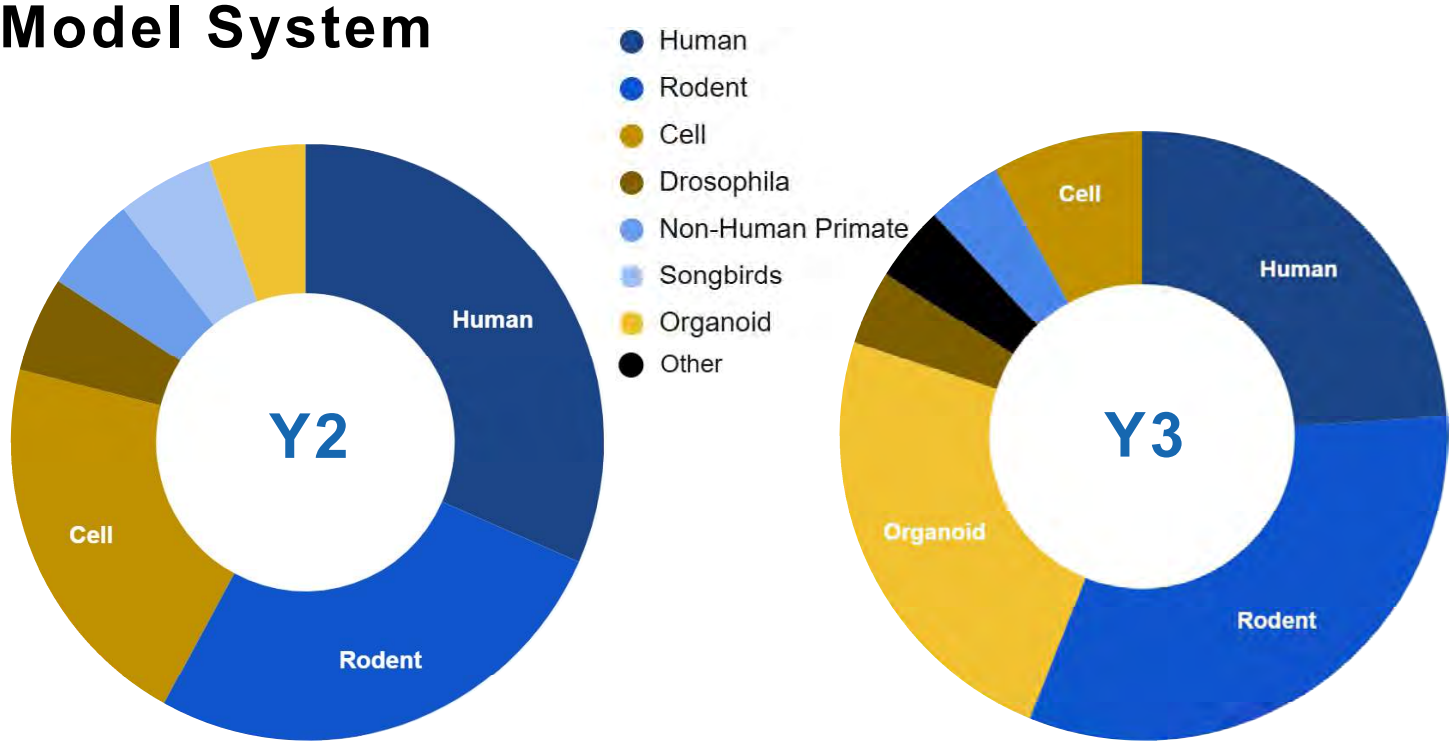
Karinne Cobb

I had an absolute blast during my rotation with Chris Rodgers! His science is, obviously, very cool and I really enjoyed the project I worked on. But I was most impressed by Chris's commitment to his students. It was very clear that he takes his mentorship seriously. I made a joke about not knowing how computers work (it was true) and then he taught me how to build one the following week. Everyone in the Rodgers lab was incredibly supportive and I learned so much from working with them. That rotation was definitely one of my favorite first year experiences.

Years 2 and 3 Lab Matches

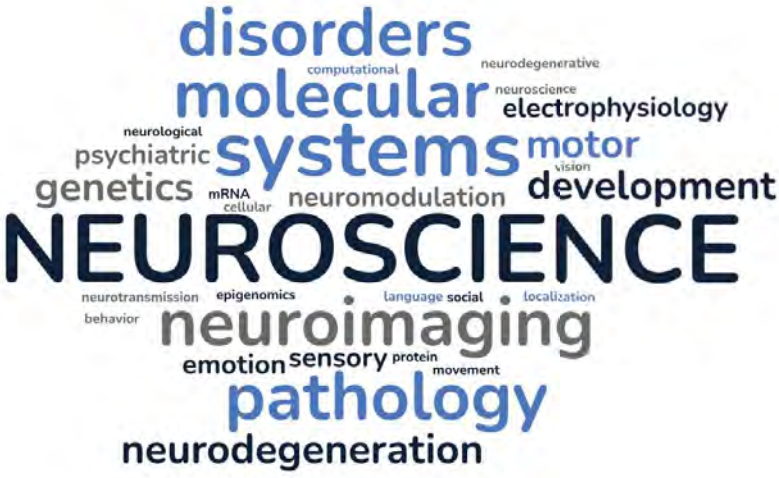
by the Numbers

Model System



Topics of Interest

Y2



Y3

Student Research

Aranis Muniz Perez, on choosing a mentor

As a stem cell biologist by training, I was very interested in using human induced pluripotent stem cell (hiPSC) models of the developing brain to uncover the cellular and molecular mechanisms contributing to the onset of neurodevelopmental disorders. When I began researching potential rotation labs, I had three broad criteria:

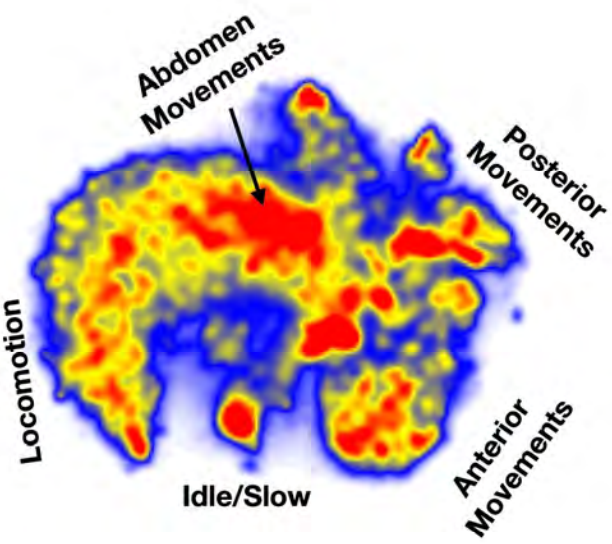
- The lab was interested or had already established hiPSC culture in-house
- The lab used bulk and single-cell transcriptomic assays to profile these cells
- I would have the opportunity to become an expert in both the lab's wet and dry lab components.

"Experiencing three different lab cultures helped me realize that I thrive best in a 'high expectations, high support' environment."

I used these criteria to identify three labs best aligned with my scientific interests, choosing rotation projects that advanced my hiPSC expertise. During each rotation, I prioritized familiarizing myself with the mentorship style of the graduate students, senior scientists and PI. Experiencing three different lab cultures helped me realize that I thrive best in a "high expectations, high support" environment. While I wanted to do cutting-edge research and control the direction of my project, I also wanted a lot of feedback throughout the process, whether on deciding which experiments to prioritize or preparing figures for presentations. The Gorkin lab's mentorship philosophy aligned perfectly with this, so I decided to join. Now, I'm doing really cool research to understand the epigenetic regulation of human neurodevelopment!

Megan Bishop, on new research strategies

While we know animal behaviors are heritable traits that are species-specific, we as yet know little about their evolution. Prior work has linked behavioral traits to different genetic loci, suggesting additive targets of selection. There are, however, challenges in studying the heritability of behavior experimentally, since individual regulatory genes can simultaneously control multiple behavioral phenotypes. My work addresses this by developing a method to perform evolutionary inference on more quantitative representations of behavior across species (see figure). To expand this study across broader phylogenies, I am also refining our behavioral maps so that they parse behavioral differences from anatomical variation in diverse species.



Behavioral repertoire map

Aiden Ford, after graduation

After defending in spring 2024, I transitioned to my current position as a scholarship-track Assistant Professor at Emory School of Medicine. I work in the same research group where I completed my PhD, the Pediatric Neuroimaging Core at the Marcus Autism Center, which I enjoy because it has allowed me to strengthen my expertise in my subdiscipline of developmental social neuroscience and continue working with an outstanding team. In the Core, we study social neurodevelopment in human infants and how divergence in those social learning processes unfolds in neurodevelopmental conditions like autism.

You Asked, We Answered!

What opportunities are there for professional development/networking?

The graduate program is one of your best resources. Your first year classes will introduce you to a variety of faculty with different research programs and professional experiences. Take advantage by participating in lectures that interest you, introduce yourself to the lecturers, and send follow-up emails. These will be some of the people you'll come into the most contact with in the next four or five years, so make sure you start off with a good impression!

Abigail Inman, Y2

How do you balance research and making friends?

Your thesis is not your life's work. It's part of it, sure, but you want to know what your biggest project is? YOU. And just like projects have multiple aims, you do too. You are compilation of the work you do, the people you surrounded yourself with, the content you consume, and the things you participate in. If all your energy goes into Aim 1 and Aims 2-4 fail, you have a bad project! I have to care about the Megan project more than I care about the thesis project alone, because if I truly love my work (and I do), I have to protect it from getting thwarted by any burnout or resentment that neglecting my friends, health, and hobbies could bring.

Megan Bishop,

What's your advice for choosing rotations?

You might come into the program knowing exactly the type of research you'd like to do, or feel paralyzed by the extraordinary breadth of different options! Either way, use the rotations as a series of mini-experiments, testing your assumptions of what you think you'll enjoy or dislike (as well as forming friendships along the way).

Caius Gibeily, Y3

What are some fun things to do outside of lab?

Outside of lab, Atlanta has a lot of fun opportunities! The Northside Beltline is great for long bike rides with a few people, Emory has pickleball courts at Clairmont Campus, and tubing down the Chatahoochie River is a fun summer time activity! For the more adventurous, white water rapids can be found about two hours north of Atlanta in southern Tennessee (this is where kayaking was done when the city hosted the Olympics) and there are group options for people to try it out!

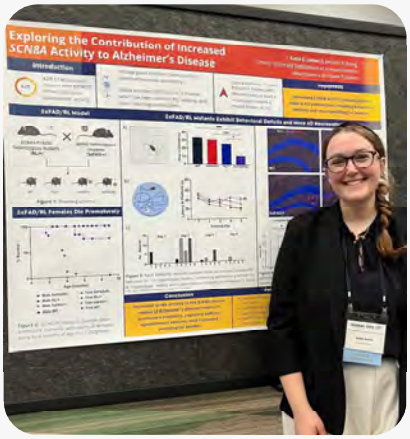
Izzy Witteveen-Patel, Y2

Student Activities

Conference Spotlight

See our students sharing their science!

Katie James , Escayg & Wong Labs



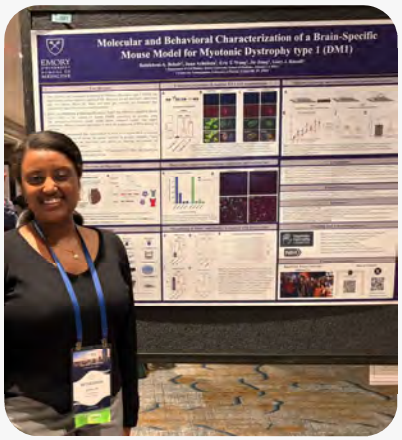
2025 NEURAL (National Enhancement of Under-Represented Academic Leaders) Conference at the University of Alabama

The NEURAL Conference appealed to me as an opportunity to grow my peer network and find community with other students during these tumultuous times. The faculty and student coordinators of this conference are incredibly uplifting, intelligent, generous people who put on an amazing program for neuroscience trainees.

As a bonus, we had the welcome reception at the Birmingham Museum of Art! I was lucky enough to receive a **Travel Award** and **First Place Poster** for my work, entitled *Exploring the contribution of increased SCN8A activity to Alzheimer's disease*. We are interested in how the voltage gated-sodium channel, Nav1.6, contributes to behavioral and pathological changes in Alzheimer's disease, and how this might differ between males and females using mouse models.

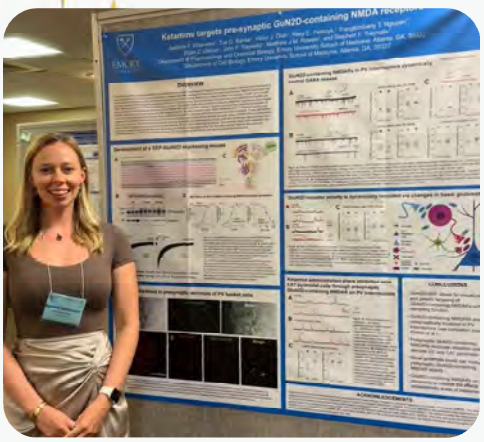
Betty Bekele, Bassell Lab

2025 Myotonic Dystrophy Foundation Conference



I recently attended the Myotonic Dystrophy Foundation Conference in Indianapolis, where I had the chance to share my research through both a short talk and a poster presentation. My work focuses on developing mouse models that more precisely target the central nervous system (CNS) in myotonic dystrophy type 1. Since cognitive, behavioral, and other CNS-related symptoms remain less understood compared to muscle-related manifestations, advancing these models is critical for uncovering disease mechanisms and testing potential therapies that address the full spectrum of the condition. Beyond presenting, I deeply appreciated how MDF intentionally created opportunities for career development. Each trainee was paired with a mentor to discuss research directions, career paths, and practical advice which I found invaluable. The conference also hosted a panel on careers in both industry and academia, offering honest, practical insights into different professional trajectories. I hope to see more spaces in our field that integrate this kind of holistic support for early-career scientists.

Izzy Witteveen-Patel, Traynelis Lab



2025 Gordon Research Conference: Inhibition in the CNS

I had an amazing time attending the Inhibition in the CNS Gordon conference this past July! This was my first time attending a Gordon conference which was a unique experience compared to mega conferences like SFN. I really enjoyed the smaller setting where I got to interact with the same people many times over the course of a few days. I ended up bonding with scientists from all over the world through discussions on interneurons, playing pickleball, and mealtime chats. Everyone was very congenial and made an effort to stop by each others posters to showing genuine interest and support in each other's work. I presented work looking at the localization of NMDA receptor subunits in PV interneurons in the hippocampus. We found that NMDA receptors that contain the GluN2D subunit are primarily expressed presynaptically in PV interneurons which may help to explain the anti-depressant effect of sun-anesthetic doses of ketamine.

Genevieve Craig, Felger Lab

2025 Psychoneuroimmunology Research Society (PNIRS)

I was placed first in the PNIRS Virtual Trainee Event and got the Trainee Travel Award for the PNIRS Conference in France in June. I presented my preliminary findings examining the effects of inflammation on fear and anxiety-related circuitry and symptoms, focusing on a role for dopamine. The data analyzed were from two studies looking at patients with major depressive disorder being treated with levodopa. This preliminary work forms the foundation for my thesis project which is focusing on how inflammation's limitation of dopamine leads to functional alterations in fear and anxiety-related circuitry and drives related symptoms in psychiatric populations.

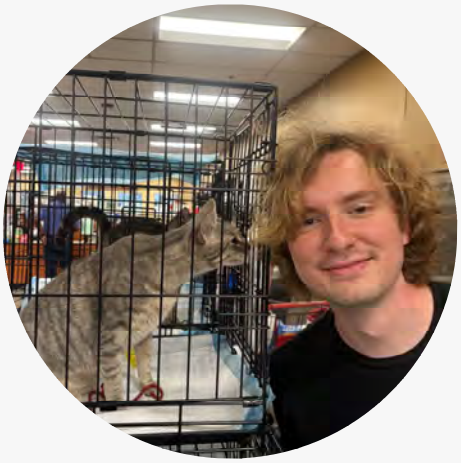
Get Involved

Outreach and community engagement

Trinidi Prochaska, LGSC

The Laney Graduate Student Council (LGSC) is the governing body of Laney graduate students. Its aims include enhancing the graduate student professional, academic, and social experience. LGSC hosts frequent on- and off-campus events and also provides professional development travel grants for students. As Vice President, I manage and support graduate student organizations and chair the honor and conduct code council. I previously served as LGSC Social Chair where I planned monthly events and LGSC's annual gala, one of the most highly anticipated events of the year. Each spring, LGSC sends out a campaign email asking for students interested in serving on the council to submit a written statement, which is how I learned about LGSC and became involved. Please reach out to me via email (tprocha@emory.edu) if you have any questions about LGSC!

Lucas Williamson, GIVE



These are tough times. Turmoil at the global and national stage can cause a lot of stress, both at a personal level, but also for our local community. I have found that volunteering in the Atlanta area is a great way to calm my own worries while also making a real and tangible difference in the lives of our neighbors. GDBBS involved in volunteerism at Emory (GIVE) is a graduate student club that organizes volunteer events across Atlanta for Emory researchers. GIVE offers a huge variety of service events, with options for everyone. Since 2023, I have sorted food at the Atlanta Community Food Bank, made breakfast at the local Ronald McDonald House, maintained trees in neighborhood parks with Trees Atlanta and more. Most recently, I cleaned the cat adoption area at a pet store with Rescue Cats, and this fall I will be organizing a Chatahoochie river cleanup event. If you're interested in getting involved, stay tuned for our announcements in the weekly GDBBS email newsletter, and be sure to attend our monthly general body meetings for the latest information on upcoming GIVE opportunities (and free food, too).

Engineers & Scientists Acting Locally (ESAL)

ESAL is a nonprofit that helps people with STEM backgrounds get involved in their local communities. You don't need to be a policy expert, just interested in making a difference where you live. Here in Georgia, ESAL members work on a wide range of projects, from advocating for the maternal mental health services to using data to develop sustainable energy solutions that help reduce energy burdens in Atlanta. Anyone with a STEM background can join the ESAL Community to connect with others, share ideas, and find ways to get involved. ESAL offers a supportive space to explore civic engagement and grow your impact beyond the bench. Learn more or get involved at www.esal.us.
Mariana Rochi

Atlanta Regional Brain Bee

The Atlanta Regional Brain Bee is a neuroscience competition open to Georgia middle and high school students ages 13-19 (students from neighboring states that do not host Brain Bees are also welcomed). Our mission is to motivate students to learn about the brain and to inspire them to pursue careers in neuroscience so they can help treat and find cures for brain disorders. There are three tiers to this competition: students compete at their Local Brain Bee (Atlanta), the local winners then compete at the National Brain Bee, and National Brain Bees send one representative to compete at the International Brain Bee (IBB) World Championship.

Atlanta Science Festival

The Atlanta Science Festival is an annual celebration of the world-class learning and STEM career opportunities in metro Atlanta, featuring 100+ engaging events for curious kids and adults at venues all across the region. We are committed to expanding access to science learning opportunities for all in metro Atlanta, and our evaluations show that the racial/ethnic diversity among Festival attendees closely matches that of the metro Atlanta region. The Atlanta Science Festival is engineered by Science ATL, nonprofit organization dedicated to bringing people together through the wonder of science.

2025 Neuroscience Award Recipients

STUDENT AWARDEES

Jarildy Javier
Leadership

Trinidi Prochaska
Early Scientific Achievement

Hymavathy Balasubramanian
Mentorship

Aranis Muniz Perez
Outreach
First-Year Involvement

Jennifer Isaac
Scientific Achievement

Yasmine Bassil
Teaching

Uriel Rufen-Blanchette
University Service

Katie James
Student Service

FACULTY AWARDEES

John Hepler
Smith-Calabrese Neuroscience Service Award

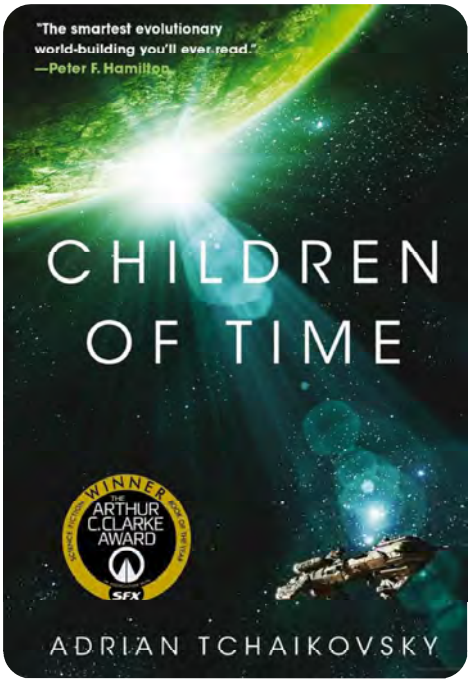
Steven Sloan
GIN Faculty of the Year Award

CONGRATULATE OUR RISING 2ND YEARS!

T32 NIH-FUNDED TRAINING GRANT RECIPIENTS

REBECCA ROTH	CAITLIN FIX
KAREEM CHAMBERS	MORGAN BADE
ABIGAIL INMAN	ARANIS MUNIZ PEREZ
ROBERT LAMPRECHT	IZZY WITTEVEEN-PATEL

Book Reviews



This book is about spiders. But not scary spiders. Genius, giant, evolved spiders. Okay, maybe that is still scary, but hear me out! I LOVE science fiction (kind of a cliché as a scientist, I know), but this one is special. Earth has become uninhabitable, and to terraform other planets, a group of scientists has sent a ship full of monkeys and a virus to accelerate their evolution to life on various new potential homes, hoping to test how well humans might survive there. Well, what happens when the monkeys don't make it and the only life on this planet is an itsy-bitsy spider?

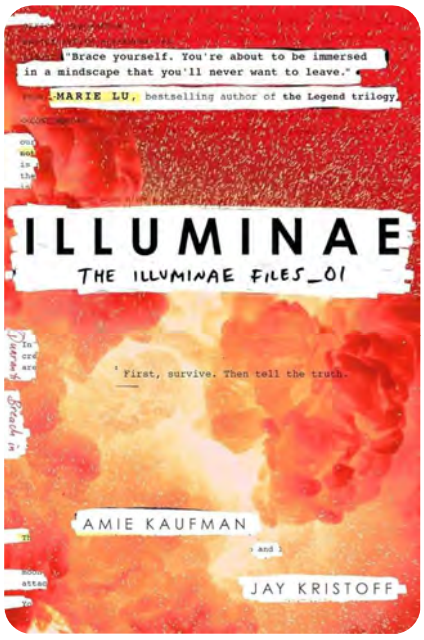
This book. It is a gloriously crafted commentary on how and why we evolve, both in physical form and societal structure. I cannot recommend it enough.

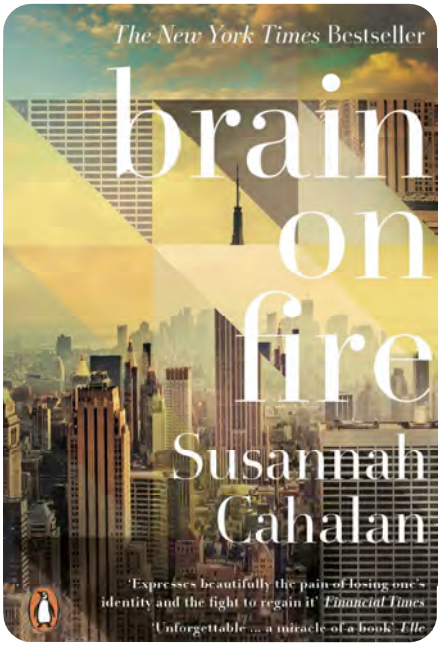
Katie James, Y3

I am recommending *Illuminae* by Amie Kaufman and Jay Kristoff. Technically, it is a young adult sci-fi novel, but its creativity through storytelling from multiple points of view and mixed media makes it a perfect low-stress, but high-adrenaline and witty read.

It involves an intergalactic war, a sentient spaceship, a deadly zombie-creating virus, and a handful of humorous normal folk trying to survive. Also, the second book is arguably better (it includes incubation of alien worms in cow brains), so this is the opener to a series that will keep you hooked!

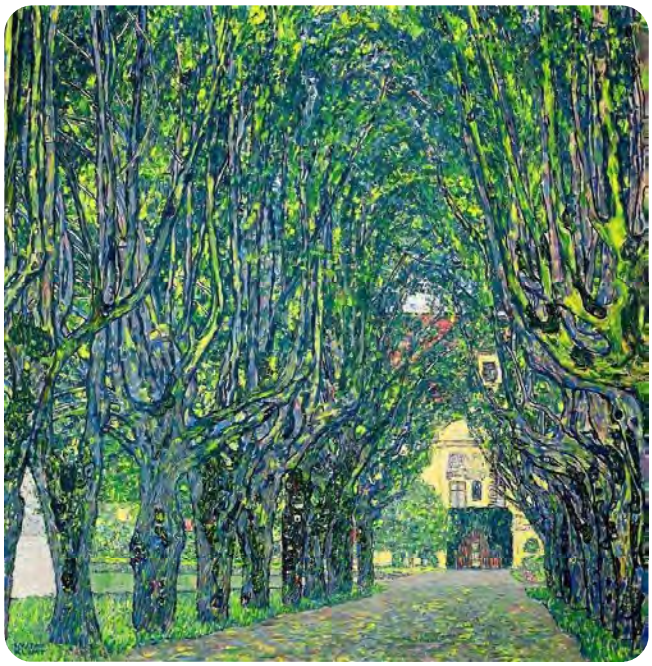
Genevieve Craig, Y3





Two books I read recently that stuck with me were *Brain on Fire*, by Susannah Cahalan, and *A Tree Grows in Brooklyn*, by Betty Smith. *Brain on Fire* is a memoir detailing Cahalan's experience with anti-NMDA receptor encephalitis, an autoimmune disorder where the immune system attacks NMDA receptors in the brain.
There is something for everyone in this book: whether you're looking to better understand yourself, the human condition, or mental illness, I guarantee you'll walk away with new insights. As scientists, this book also offers a cool example of research transcending the benchside to the hospital, mainly helping women who suffer a terrifying and deadly illness.

Reading *A Tree Grows* in Brooklyn is like taking a wandering stroll, one in which you frequently stop to inspect an eye-catching view, reflect on a memory, or ponder the meaning of an experience. Smith encourages you to explore your environment and its many twists, turns, and sidepaths.
For these reasons, I would recommend the book as an audiobook – there's no way I would have gotten through it otherwise. The rich details might be boring at times but they paint such a beautiful picture by the end. Overall, the novel imbues the reader with an appreciation of humans capacity for resilience and perseverance.
continued on page 22



Avenue of Schloss Kammer Park, Gustav Klimt (1912)

I first listened to this novel as a young teen and in the 15 years since, I've thought about this book a lot. As I listened this time around, I was struck by how often I remembered this book. It made me realize what an impact this story had on me hearing it at such an impressionable age and how it shaped my perspective while growing up. My main takeaway was gratitude, that I was lucky to have never experienced even a tenth of the hardships experienced by the Nolan's.

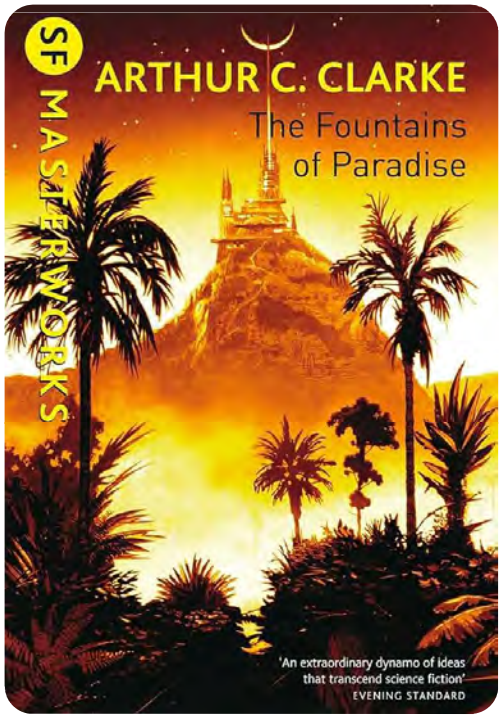
Another impact was the lesson that girls and women are incredibly strong, not just in a physical sense but also an internal one. The grit and fortitude women needed to possess to survive the violence and oppression they experienced in this time is remarkable. This strength is something we can still embody, now more than ever as our hard fought rights are being challenged.

Izzy Witteveen-Patel, Y2

Where it pertains to science fiction, Arthur C. Clarke easily falls in the same league (perhaps 20,000 of them) as Jules Verne. *The Fountains of Paradise* offers a continuum between mysticism and pure scientific idealism: could humankind design an elevator to ascend the Earth and reach the heavens?

Why not rocket propulsion? Too inefficient, according to ingenious engineer, Vannevar Morgan, who tirelessly pursues the task (though fraught with catastrophe) of constructing the first space tower. This 36,000 km colossus would connect Earth to a geostationary satellite, allowing easy transport of payloads and people to and from inner space. But as it ironically transpires, only the site of a sacred pleasure garden and its ancient fountains would suffice.

Caius Gibeily, Y3



ROCK & ROLL

How our scientists roll... (hint: they rock!)

Meet *la brat*, the band formed from Dr. Michael Borich's lab

la brat was conceived on a whim by four colleagues turned friends at a research conference in the fall of 2024. What started as a chat obsessing over the prior night's karaoke evolved into frenzied discussions of starting a band. Taking inspiration from our musical backgrounds and shared connection to music of all genres, we found ourselves often leaving the lab and heading straight to band practice.

Yasmine Bassil
VOX, BASS

Nathan Baune
GUITAR

Iran Gutierrez
VOX, KEYS

Camille Guzman
DRUMS

Continue reading for a Q&A feature from Iran Gutierrez!

Q&A WITH IRAN GUTIERREZ

Is “la brat” a spin on “lab rat”?

Yes! labrat is a spin on lab rat, which is funny considering none of us have ever done animal research. Not only was it applicable to our field though, it also sounded posh, making it overall more fun!

How did you guys handle the logistics of the band on top of research?

Logistics were handled mostly by Yasmine and Nathan (shoutout to them)! When it came to big decisions like picking a venue, we went as a group and made decisions together either in person or in our ‘labrat’ group chat. As a group, I think we all get very excited about small details and logistics so this was definitely a dream come true and satisfying experience! Even the band room we practiced in, it was an attic with our banner posted across the wall which made us feel like a band in an early 2000s movie. We practiced at Nathan’s house once a week and as we got closer to the date, we met twice a week. Practices were usually from 6-8/9ish and always consisted of a samosa dinner break

Do you have any words of advice for people in the program who might want to start a band or group but are unsure how to go about it?

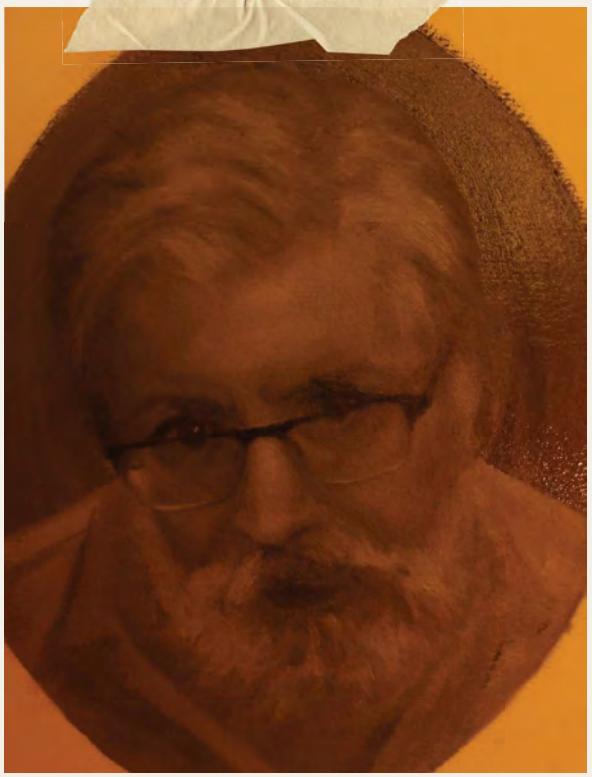
For anyone interested in joining or starting a band, I highly encourage it! Music has always been an outlet for me growing up and it’s a hobby that pairs extremely well with academics. A big contributing factor to how we started was our love of similar music so that would be how I might recommend starting out: Chappell Roan, Arctic Monkeys, Harry Styles, etc. It’s basically karaoke but even more fun! When we first started, I purchased a keyboard from Facebook marketplace at a reasonable price and just practiced when I got home on weekdays or during weekends. Though learning an instrument can be intimidating and costly, there are lots of avenues to rent or purchase second-hand instruments to still pursue a new passion. YouTube tutorials are always a useful way to start!

Is there going to be a comeback?

We honestly haven’t discussed a comeback since our lead drummer, Camille, moved back to Chicago shortly after our performance. However, you never know ;)

"This piece is of my dad. He has Parkinson's, and I wanted to capture the facial features of the disease, such as the lack of expression (even when he tries to smile he looks like that), the characteristic "staring" look from reduced blinking, and the muscle stiffness that shapes his face."

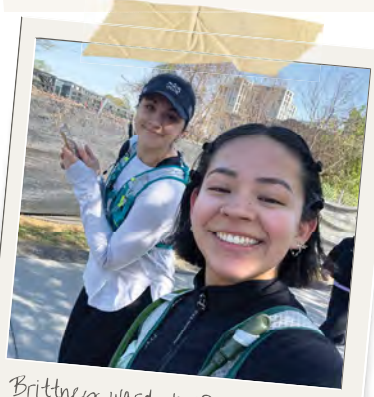
-Zabdi



Original Artwork by Zabdi Herrera Mata

Students in Action

Life outside lab

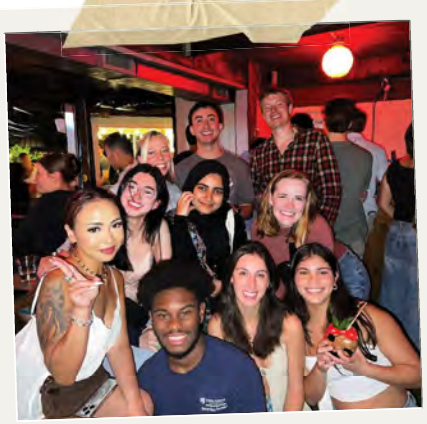


Brittney Ward & Iran Gutierrez training for a half-marathon

Brittney Ward's Bachelorette at St. Petersburg

Part-time grad student, part-time Spin instructor Megan Bishop

Lincie Taylor & Yasmine Bassil doing at-home karaoke



The 2024 cohort celebrating after their first ever epam!

Grady Trauma Project members slaying at the LGSC Gala

Robert Lamprecht (right) performing with his band KITS

Resources and guides

AXON COMMITTEE

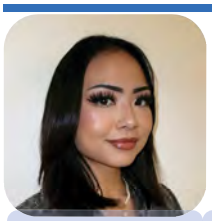
Advancing eXperiences and Opportunities in NGP

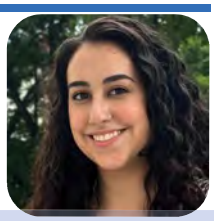
Mission

The AXON Committee is designed to promote a culture and environment that supports the success and well-being of NGP students and faculty. We are committed to recognizing and enhancing awareness regarding obstacles individuals may encounter during their graduate school and scientific careers, with the goal of mitigating these barriers. We will act on the demands brought forth from the NGP community to advance student experiences and opportunities at both the level of our program and, more broadly, within the Emory community.

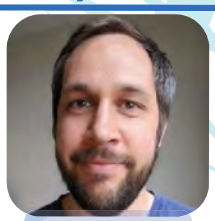
Team

Co-Chairs


Patlapa Sompolpong


Hadassah Mendez-Vazquez

Faculty Co-Chair


Zachary Johnson

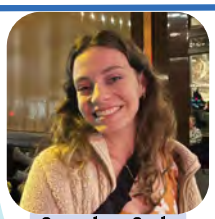
Executive Committee Liaison


Mar Sanchez

Communications Subcommittee

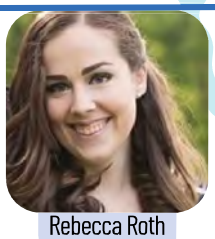

Aranis Muniz Perez

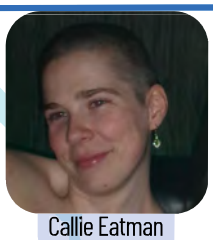
Accessibility Subcommittee


Genevieve Craig


Katie James


Isabelle Witteveen-Patel


Rebecca Roth


Callie Eatman

Events: Past & Upcoming

Financial workshop for graduate students *February 2025*
Filing taxes as a graduate student can be confusing! We partnered with Finances with Carolina, LLC to clear up confusion and guide students through completing their tax forms.

DEI Seminar & Mentorship Session *April 2025*
We hosted Dr. Vasiliki Michopoulos to give a talk on mentorship for the Frontiers in Neuroscience seminar series, followed by an informal discussion with students and faculty.

NeuroArts Panel *September/October 2025 (TBD)*
We will be hosting artists and scientists from different backgrounds to present on how they have combined arts and sciences to promote health and well-being, followed by a Q&A discussion. Panelists include Dr. Madeleine Hackney, Marina Skye, Professor Craig Coleman and Dr. Amanda Jacob.

Advocacy

Promoting Accessibility in NS courses
We are continuously working closely with faculty to ensure accessibility needs are met for all students, especially in courses that have multiple lecturers and module leaders throughout.

Resources & Outreach

NEW! The NGP DEI Committee Newsletter
We are excited to introduce our brand-new newsletter, where we share upcoming events, highlight inspiring stories of students, faculty, and alumni, and provide curated resource lists for Heritage Months, accessibility, and more!

View the Newsletter

HIDDEN RESOURCES

Food Security Safeguard Program (FSSP)

Designed to assist any Emory student with an immediate food security need on the Atlanta campus. Sign up to get three meal swipes at the Dobbs Common Table: https://www.onecard.emory.edu/ecard/FSSP/

Student Hardship Fund

A grant offered to Emory faculty and staff who've experienced a catastrophic event or temporary emergency and need financial support for their living expenses.

Emory GSGA MARTA Unlimited access rides pilot program

Eligible graduate students residing >1 mile from campus and currently using MARTA at least 2 days/week may receive a 30-day UNLIMITED MARTA pass for $18.50 instead of at the normal rate of $68.50.

Transportation & Parking Services 20-trip MARTA card

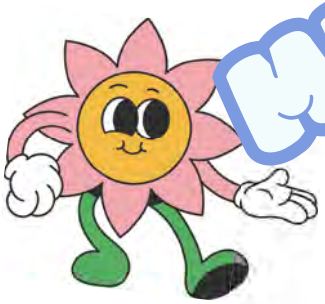
Eligible graduate students residing >1 mile from campus that do not have an annual parking permit and commute via biking or walking can receive two 20-trip MARTA Breeze cards (one per semester) as a backup commute method.

The Community Fridge and Pantry

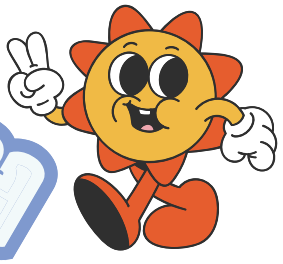
Available to anyone on campus who needs food. The fridge is located on the first floor of the Alumni Memorial University Center (AMUC), if you enter from the ADA ramp entrance the fridge is directly inside to the right. The fridge is stocked when food is available, to receive stocking updates, follow the fridge on Instagram @emorycommunityfridge

LGS Emergency Loans

Available to help students through unexpected financial crises, such as illness, family job loss, and delays in other types of funding.
The maximum loan amount is $1,000. A student who receives an emergency loan must sign a promissory note agreeing to repay the loan within 89 days of issue. Emergency loans are interest free for the 89 day period.



MENTAL HEALTH MATTERS



I need therapy. How do I start?

Set up an initial appointment with the Counseling and Psychological Services (CAPS) at Emory online or by calling **404-727-7450.** Try to do this as soon as you can because there is sometimes a waitlist. CAPS now does not limit the number of therapy appointments graduate students can have, but they do emphasize their goal is to connect you to external therapists rather than be your primary.

What if I don't want to see an Emory therapist?

You still need to have the initial screening appointment with CAPS to receive referrals (and have it approved by insurance) if you have the University Health Insurance Plan. You need to request for an insurance referral activation EVERY AUGUST.

I am on medication and refills. What do I need to do?

You can either schedule a psychiatry appointment through the Student Health Services portal or find an external psychiatrist accepting your insurance (no CAPS referral required)

Additional Resources

CAPS 24/7 Contact	404-727-7450
GA Crisis & Access Line	1-800-715-4225
Crisis Text Line	Text 'Home' to 741-741 (Text "Steve" for BIPOC responder)
Help line for peer-to-peer support	404-727-4357
Student Intervention Services	404-430-1120 (24/7 assistance)
Emory Healthcare psychiatrist-on-call	404-778-5000 (available after hours or weekends)
Classroom accommodations	https://accessibility.emory.edu/
TimelyCare 24/7 TalkNow service	visit timelycare.com/emory (use your Emory email to set up your account)

Graduates in Neuroscience (GiN) Officers 2025

Co-Presidents Iran Gutierrez, Kareem Chambers

Treasurer Brittney Ward

Secretary Nisan Sele

Peer Liaison Megan Bishop, Nikki Boon

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Katie James, Patlapa Sompolpong

Curriculum Committee Representatives
Aryaman Gala, Abigail Inman

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Awards Coordinator Gianna Vitelli, Caitlin Fix

Central Sulcus Editor-in-Chief Caius Gibeily

Central Sulcus Editors
Abigail Inman, Engila Khan, Patlapa Sompolpong

Alumni Coordinator Janhavi Bhalerao, Aryaman Gala

DSAC Representative Tony (Mingee) Chung

International Student Resources

International Student and Scholar Services (ISSS) | Emory University | Atlanta GA (https://isss.emory.edu)

Really helpful for any visa related issues and travel documents
Follow for them for updates on SSN, specific days when the officials come on campus at the ISSS facility and you can submit your documents very easily

Some other resources

Life in the US

New Students | International Student and Scholar Services (ISSS) | Emory University | Atlanta GA

A - Z resources compiled by ISSS: Resources | International Student and Scholar Services (ISSS) | Emory University | Atlanta GA

Be involved:

Emory Intercultural Leadership Program (EILP)

Emory International Council (EIC)

Look out for these events & more:

ISSS welcome reception

International Community Friday Lunch

Sign up to be part of GBiN email list!

"GDBBS Bridge International Network (GBIN) is to provide essential **support for international PhD students** in the field of biomedical and biological sciences, focusing on **career** development, **networking** opportunities, and **community** support."

GBIN Board Members 2024-25

Fikri Birey, PhD (Faculty Advisor)
Shirley Zhang (President)
Betty Bekele (Vice President)
Amartya Pradhan (Secretary)
Sabra Mouhi (Treasurer)
Lauren Gao (LGSC Representative)

GBIN

@emory_gbin

Exploring Atlanta!

brought to you by:

Catie Mason

https://mfbc.us/m/rx2efu3

"Over the past year or two, my partner and I developed something called Beltline Bingo that we play every time we visit the Beltline! We designed the spaces so that you are almost guaranteed to get bingo on every trip to the Beltline, especially the Eastside Trail. I have it loaded into a free online Bingo maker which is great because it usually gives out different versions of the cards for each player, and also lets you mark down the spaces as you go."

Pic courtesy: Kevin |@StoneBowl House

Some of Kevin's favorite food places:

Magic Tacos (**Mexican** food)
Evergreen (bakery)
Burles (for drinks and social gatherings)
StoneBowl House (**Korean** food)

Exploring Atlanta!

Izzy's Favorite Restaurants!

Okiboru (Japanese)
Delbar (Middle Eastern)
Bomb Biscuits
Mamak (Malaysian)

and Rock-climbing recs:
Central Rock Gym (indoors)
Foster Falls in Southern Tennessee (outdoors)

Some other places to explore...

Apple picking @ **R&A orchards**!

Atlanta Aquarium
(don't miss out their dolphin and sea lion show!)

Zoo Atlanta

Eagle Eye Bookshop

Trying out stretchy ice cream, baklava, chai, and more @Wowbooza!

Enjoying some Indian food @Chai Pani

Tell Tales Bookshop

Jerusalem Bakery & Grill

strawberry sliders

if you're looking for some fresh seasonal doughnuts, check out **Revolution Doughnuts** (got some great vegan options too)!

Read on to learn about Betty's secret spot in the city...

Exploring Atlanta!

Jeju Korean Spa: A 24-Hour Zen Locale in Atlanta

Tucked away in Duluth, just outside Atlanta, Jeju Korean Spa offers a 24-hour spa and relaxation experience (perfect for chronically stressed grad students!) For about $40, you can spend the entire day (or night) hopping between hot and cold baths, steam rooms, dry saunas, and themed relaxation spaces.

What to expect: When you walk in you are greeted by a faint scent of herbal steam. At the front desk, you'll pay your entry fee and receive a wristband with a locker key (this will be your wallet inside, so no need to carry your card with you while you purchase food or pay for services inside the spa) Once you are in, you'll swap your street clothes for the provided cotton spa uniform (shorts and a T-shirt) for co-ed areas, or head straight to the gender-specific bathhouse section if you're starting with the pools and steam rooms. If you go to the bathhouse, expect a row of hot and cold soaking tubs, wet and dry saunas, an option to add-on the famous Korean body scrub service. Once you're ready, you can explore the sprawling co-ed floor with heated rooms, or a cool "ice" room, nap mats, and a café serving Korean and American comfort food.

What makes Jeju special is its mix of cultural immersion and total accessibility. Whether you go at midnight to sweat out exam stress or spend a Sunday recharging for the week ahead, it's a unique way to take care of both body and mind without breaking the bank. Highly recommend dragging a few friends along for a first-time experience (or making it a quarterly self-care date as it has become for me!)

Betty Bekele, Y5

The Central Sulcus

Any comments, recommendations or questions? Would you like to work with *The Central Sulcus?* Please visit us at https://sites.google.com/view/thecentralsulcus-emory/contact-us

Thank you for reading! We would also like to thank all content contributors from the neuroscience program and Kyra Renahan for her illustration of this edition's cover.

Keep an eye out for digital content published by *The Central Sulcus* throughout the year