



A NS STUDENT-RUN PUBLICATION

THE CENTRAL SULCUS

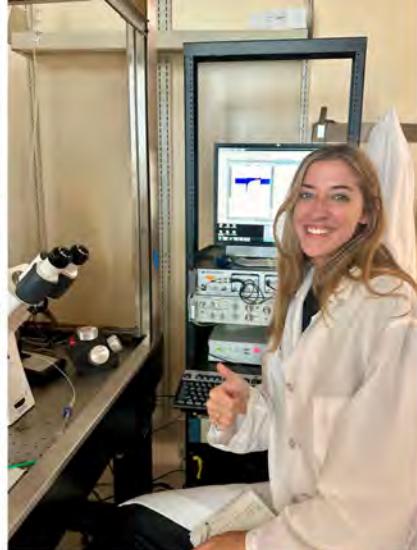
*TERRIBLE
TWO'S:
HOW TO
TACKLE Y2*

PICK YOUR
NEXT
ROTATION
LAB!

Find out what
we're listening
to in the lab,
ATL hidden
gems, AND
more...



NEUROSCIENCE RETREAT 2024 EDITION



In this issue of...

THE CENTRAL SULCUS

Welcome to the Emory NS 2024 Retreat! You really know it's 2024 when the first thing I did was ask ChatGPT "Can you write a letter from the editor for my neuroscience program's magazine?" I'll spare you all the uninspired, generic response it generated, but I did appreciate its capacity for cringe. It really said, "Let's make some neural magic happen!".... I think the editors are safe from an AI takeover of The Central Sulcus, at least for now (we'll keep using it to calculate dilutions and molarity though).

....

Make sure to check out our contact info below, and send us your ideas or feedback on articles! Read on for some new, unique articles in this edition, including advice from Y3s on how to tackle the "terrible two's" (Y2), what we're listening to in the lab, & navigating ATL without a car.



Retreat
2024

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EMMIE BANKS

Y4, Rowan Lab

Helloooo! Can't believe we're back yet again for *The Central Sulcus*! I'm stoked to welcome the Y1s to the program. Feels like just yesterday I was quaking in my boots as a Y1. Here are some things that shaped my childhood so you all can hopefully get to know me a little better: the Nancy Drew PC games, falling out of a second-story window into a hydrangea bush, those messed up looking Spongebob icecreams. I'm consistently trying to not take anything too seriously. Hope this clears things up.

JANHAVI BHALERAO

Y3, Gourley Lab

Hi friends :) I am super excited to be on the *Central Sulcus* team this year! I am a rising Y3 in the Gourley Lab working on understanding the circuit mechanisms that allow us to engage in habits and routines. I am a homebody who loves to eat good food, watch shows that ultimately result in me being an emotional wreck, and cuddle with my cat. Hope you enjoy this issue!



SABRAMOUHI

Y2, Andersen Lab

Hellow! I'm happy to be part of the new *Central Sulcus* team! I am a rising second year in the Andersen lab where I am studying glia and neurodegeneration using organoid models! Outside lab, I like to draw and read graphic novels, and recently got into doing puzzles. However, I am trying to find a new hobby to stick with for the next couple of years (or the rest of my life).



MEGAN BISHOP

Y2, Berman Lab

Hi & hello! I'm so excited to be a part of *The Central Sulcus* team! Our program is full of brilliant, curious, and kind people that are so fun to highlight and brag about through each of our editions. Briefly, I am a rising Y2 in the Berman Lab, where I use computational models to study behavioral evolution. If I'm not in lab I'm teaching spin class at CYCLEBAR, watching trash reality TV, pirating music off of SoundCloud, or playing with my cat Daphne.



MEET THE EDITORS





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Recent Defenses



2023-24 Academic year

April Ratliff
Ashlyn Johnson
Elizabeth Heaton
Kate Heffernan
Caitlin Sojka
Juliet Santiago

Mallika Halder
Alyssa Roeckner
Aiden Ford
Changtian (Sherry) Ye
Annie Goettemoeller
Adam Hamilton



Dr. Annie Goettemoeller holding a gift from her advisor at her post-defense celebration



Dr. Sherry Ye with her advisor
Dr. James Zheng



Dr. Alyssa Roeckner
and the Stevens lab

Terrible twos

Advice from Y3s on tackling Y2

Aryanna Wiggins-Gamble | Gourley Lab

When making weekly itineraries for oneself, be sure to schedule in breaks and time with friends or family. And getting a pet or plant will beneficially enhance your experience drastically!



Janhavi Bhalerao | Gourley Lab

Give yourself grace and room to grow. I remember being frustrated because I always under- or over-estimated how much time it took me to do any task, whether it be an experiment or writing a draft of my proposal. But I got the hang of it eventually :)



Abigail Grassler | Sober+Berman Labs

Don't panic over your first draft of your specific aims, it's going to change a lot anyway.



find your next

rotation lab!

Looking for a rotation lab? We hope the Research Rodeo on August 20th was informative and helped you learn about some great work going on in the program. In case you missed it or need a refresher, here's your one-stop-shop on which PIs are looking for rotation students and what kind of research they do!

Alan Emanuel, PhD | <https://www.emanuellab.com/>

Department: Cell Biology, School of Medicine

Research: Tactile processing, computations of neural tactile feature representations

Some Techniques: Calcium imaging, chemogenetics, optogenetics

Annabelle Singer, PhD | <https://singer.gatech.edu/>

Department: Biomedical Engineering, Georgia Tech

Research: Non-invasive brain modulation in Alzheimer's disease and epilepsy, spatial navigation

Some Techniques: Virtual reality, silicon probe recordings

Farzaneh Najafi, PhD | <https://www.najafilab.org/>

Department: School of Biological Sciences, Georgia Tech

Research: Circuit mechanisms and computations underlying predictive processing

Some Techniques: Two-photon imaging, machine learning

Candace Floyd, PhD | <https://med.emory.edu/departments/emergency-medicine/innovation-discovery.html>

Department: Emergency Medicine, School of Medicine

Research: Treatments for traumatic brain injury, spinal cord injury, and neuropathic pain

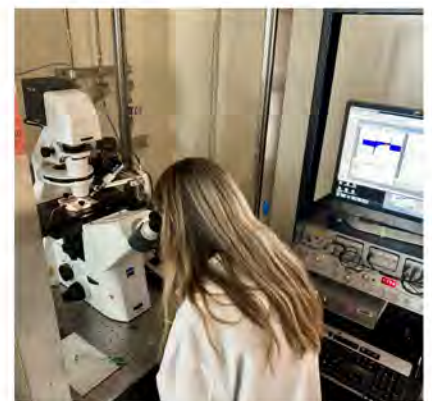
Some Techniques: Animal models, therapeutic evaluation

Robert Liu, PhD | <https://scholarblogs.emory.edu/liulab/>

Department: Biology, Emory College of Arts and Sciences

Research: Sensory processing, natural social interactions

Some Techniques: Behavioral paradigms, bioacoustics



find your next

rotation
lab!



James Zheng, PhD | <https://cellbio.emory.edu/lab/zheng/index.html>

Department: Cell Biology, School of Medicine

Research: Axon guidance, synapse formation, and neuronal degeneration and regeneration.

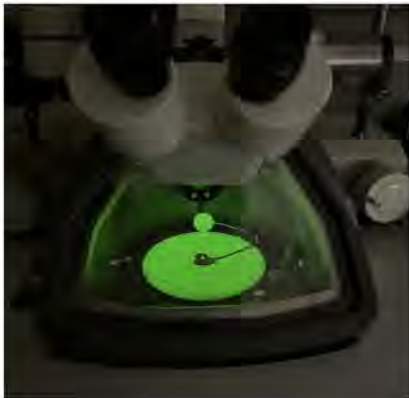
Some Techniques: Confocal imaging, cell culture

David Katz, PhD | <https://cellbio.emory.edu/katzlab/index.html>

Department: Cell Biology, School of Medicine

Research: Histone methylation regulation and defects in disease

Some Techniques: Single-cell sequencing, histology



Sanne van Rooij, PhD | <https://www.stressneurolab.com/>

Department: Psychiatry and Behavioral Sciences, School of Medicine

Research: Post-trauma resilience and recovery

Some Techniques: fMRI, TMS, EEG

Yun Wang, PhD | <https://med.emory.edu/directory/profile/?u=YWAN303>

Department: Biomedical Informatics, School of Medicine

Research: AI optimization for medical imaging analysis in fetuses and infants

Some Techniques: computational models, multi-omics datasets



In addition, the following PIs **may** be recruiting:

Anita Devineni, PhD

Chris Rodgers, PhD

Stephen Traynelis, PhD

Nicholas Varvel, PhD

Lisa Sudmeier, PhD



Research Roundup

Recent findings from our students



GIANNA VITELLI

Y2, BIREY LAB



In a recent pre-print from her post-bac lab, *Neural circuit mechanisms underlying context-specific halting in Drosophila*, Gianna and her former lab mates investigate the complex relationship between neurons facilitating and halting forward walking locomotion in *Drosophila*, with the goal of mapping the descending portions of this circuitry. Interestingly, Gianna and another lab member discovered that a major output of “walking” neurons in actually inhibitory upon “stop” neurons, suggesting that forward motor control in *Drosophila* is regulated through disinhibition. Additionally, she identifies two specific mechanisms of halting: “walk-OFF” and “brake”. While the “walk-OFF” mechanism involves GABAergic neurons inhibiting specific descending walking commands, the “brake” mechanism uses excitatory cholinergic neurons to actively stop movement by inhibiting walking commands and increasing joint resistance.

Gianna and her team’s use of the *Drosophila* connectome—a detailed 3D map of the *Drosophila* brain—is particularly exciting. This tool allowed her to explore the interconnections between every neuron, thus revealing how different walking and halting pathways are related. Additionally, she elevated her analysis with a computational modeling approach, where she simulated neuronal circuitry observed in the connectome through a leaky integrate-and-fire model. This allowed her to predict how the activation of specific neurons influenced other pathways. Her work also emphasizes the collaborative nature of science, with different team members investigating various aspects of motion, like turning, backward, stop, and forward motion. The deeper she delves into the connectome, the more evident it becomes that all these projects are interconnected. This work not only taught Gianna about “team science” yet it informed her interest in diverse brain modeling techniques that she now employs as a member of the Birey Lab in the Organoid Hub. We’re so proud of you, G!

Under the advisement of Drs. Jennifer Wong and Andrew Escayg, Katie James takes a novel approach to study Alzheimers disease (AD) using double-mutant genetic mouse models to investigate neuronal hyper-excitability in AD. She recognizes that the prospect of curing Alzheimer's disease is a “big question” with diverse perspectives in the field. However, she sees this overarching challenge as being made up of numerous smaller, focused questions that when answered, can gradually contribute to the larger goal of finding a cure. By specifically investigating the mechanisms of neuronal hyper-excitability, she is hopeful that her research will pave the way for incremental progress towards treating AD.

Additionally, Katie James is particularly hopeful that her work will not only provide insight into AD but will answer many questions asked by individuals living with epilepsy.

As someone who lives with a disability herself, Katie James finds great joy in the prospect of providing individuals with epilepsy more insight into how epilepsy may look in different life stages. This personalized, patient-forward approach drives Katie James’ passion for her work. This especially comes to fruition when she examines her stained images. Like pieces of a puzzle, her hard work breeding, slicing, and staining all comes together under the microscope in an exhilarating way. Katie James - your passion fuels us all. We can’t wait to see the outcomes of this work!

KATIE JAMES

Y2, WONG LAB

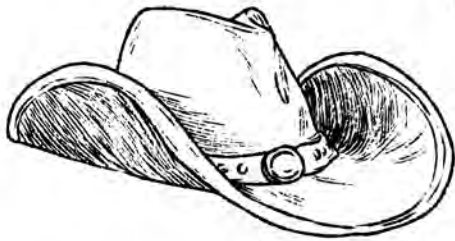


VANESSA BARRAGAN

Y3, GALVAN LAB



When thinking of Parkinson's disease, motor symptoms are usually the first to come to mind; however, Vanessa is particularly interested in the non-motor symptoms (NMS) frequently reported by individuals with Parkinson's disease. Specifically, her research delves into the intricacies of reward and effort modulated neurons in the sub-thalamic nucleus, seeking to unravel their role in NMS. Her project also explores cortical innervation patterns in the associative and limbic regions of the STN in both control and parkinsonian monkeys, hypothesizing a potential link to NMS. The most exciting aspect of Vanessa's work lies in the diverse methods she employs, from working with rhesus macaques to honing her skills in electrophysiology and immunohistochemistry. This hands-on experience fuels her enthusiasm, as she aspires to impart this knowledge and train others in these techniques. What drives Vanessa is not only her dedication to her research but also her dream of returning to her roots in Central California to educate undergrads about brain anatomy and function. She is particularly eager to apply for NIH or NSF-funded undergraduate training programs that aim to foster and sustain student interest in STEM research. Way to go, V!



In his recent first-authored reviewed pre-print, *Spinal V1 inhibitory interneuron clades differ in birthdate, projections to motoneurons and heterogeneity*, Andrew explores the the molecular and anatomical diversity of a group of spinal interneurons called "V1s." These interneurons are the source of over half of all inhibitory synapses on motoneuron cell bodies, making them a key part of the network that controls motor output. In this paper, Andrew and his collaborators show that the largest group of V1s, called "Foxp2-V1s," is itself diverse and can be divided into unique subtypes. Being able to classify and understand these subclasses of spinal interneurons is crucial for understanding neurodegenerative diseases like ALS, where entire networks of neurons are affected. Andrew was particularly excited about the project's rabies tracing experiments that revealed some Foxp2-V1s are likely Ia inhibitory interneurons. The use of genetic tools in targeting this type of neuron is incredible novel. "Additionally, I find it fascinating that we can use the rabies virus, which can cause devastating illness in its wild form, for something creative and useful.", Andrew elaborates. Incredibly, Andrew also wove together 10 years of data from former lab members for use in this project, teaching him the importance of meticulous data labelling and organization. Incredible work, Andrew! We're excited to read this when it's published soon!

ANDREW WORTHY

Y2, ALVAREZ LAB



GENEVIEVE CRAIG

Y2, FELGER LAB



Genevieve's project focuses on dopaminergic therapy as a way to treat anxiety symptoms in patients with high levels of chronic inflammation and major depressive disorder. This population of patients often struggles not only with co-occurrences of psychiatric disorders like anxiety and depression; they also are resistant to many of the treatments currently on the market. Her lab's work targets specific mechanisms of inflammation that impact the brain in order to alleviate some of the patients' symptoms. Each day in the lab, Genevieve is motivated by the prospect of contributing to something deeply impactful. After feeling somewhat disconnected from the direct impact of her previous animal research, she loves being a part of a super translational team that is truly focused on patient health. Additionally, her passion for her project is fueled by a personal connection to her work. Having dealt with her own anxiety disorder, Genevieve feels passionate about giving back to communities that have helped her throughout her journey. "I'm lucky that where we're at in science helped me, but there's so many people who have not yet received the help they want.", Genevieve states. "Research like what I'm doing now quite literally got me to where I am, so it feels nice to pay it forward!". We're so excited to see the future of this work, Gen! Way to slay.



EMMIE BANKS

Y4, ROWAN LAB

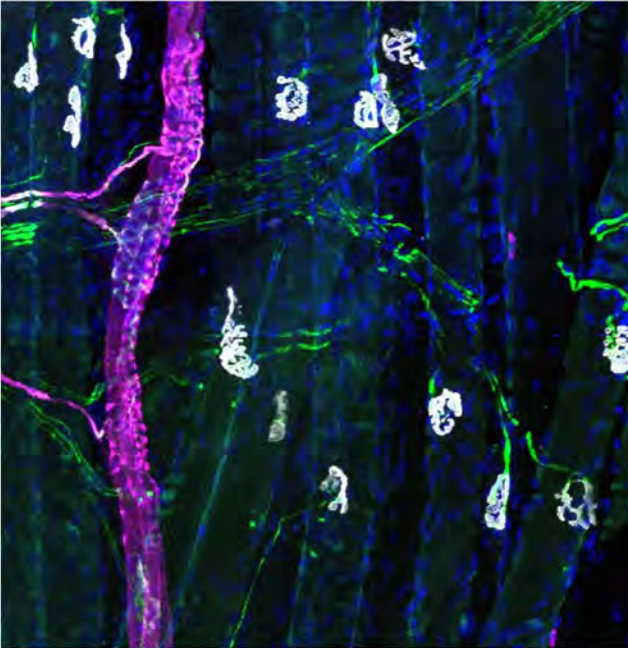
A recent pre-print from the Rowan Lab *Entorhinal cortex vulnerability to human APP expression promotes hyperexcitability and tau pathology*, first-authored by NGP alum Annie Goettemoeller, and co-authored by NGP students Emmie Banks, Kelly South Pham and Christina Ramelow, aims to unravel the mechanisms underlying circuit hyperexcitability, one of the early indicators of Alzheimer's disease. This work combines electrophysiology, proteomics, and histology, offering a comprehensive approach to the study. A key finding of this work suggests that introducing tau in an amyloidogenic model helps reduce circuit hyperexcitability, challenging the conventional view of tau solely as a pathological factor. This raises intriguing questions about whether the initial tau increase in Alzheimer's might initially serve as a protective, homeostatic response, with ongoing insults ultimately leading to neurodegeneration. Emmie's passion for research with potential translational impacts in neurodegenerative diseases fuels her ambition to identify promising druggable targets for her future career in the industry. Congrats on the pre-print and recent acceptance to *Nature Communications*, Ms. Editor-in-Chief!



taking a closer look: MICROSCOPY IN THE NEURO PROGRAM

"THE MIND-BODY CONNECTION: PROPRIOCEPTION"

WILLIAM MCCALLUM, Y3 [SOBER+ALVAREZ LABS](#)

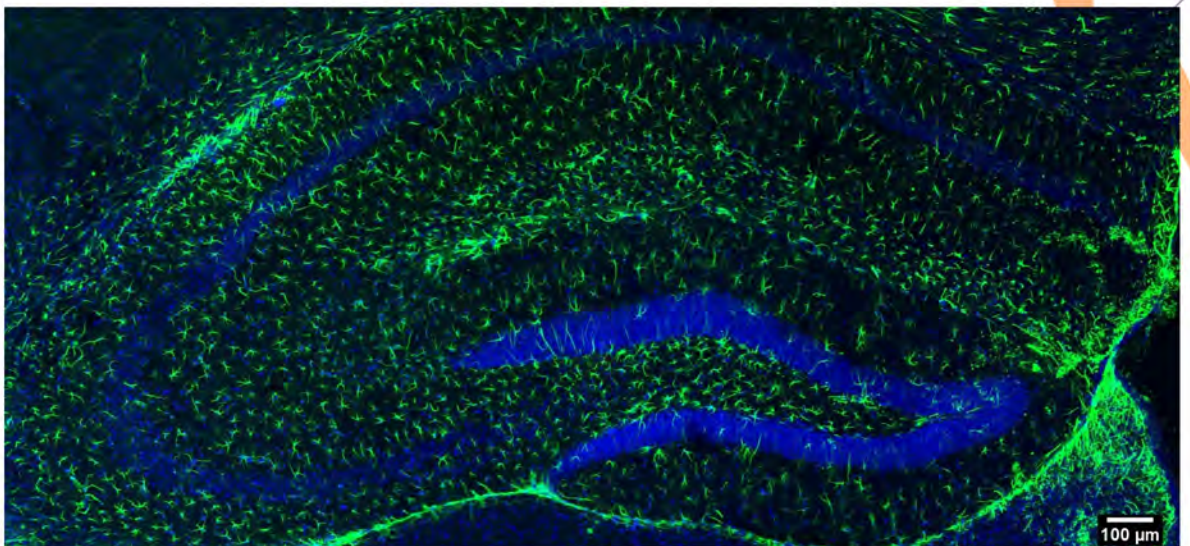


"Your spinal cord is listening to your muscle move - through the structure pictured here [at left], called a "muscle spindle fiber" (magenta), the nervous system can sense how much your muscles are stretching via the stretch sensitive neuron connecting the spinal cord to the muscle, called a "proprioceptive sensory neuron". Thus, every time your brain tells your spinal cord to contract your muscles through motoneuron axons (green) and contraction is initiated through their connections with muscle ("neuromuscular junctions", white), proprioceptive neurons can sense the resulting change in muscle length, and inform your brain about what actually happened at the level of the muscle during the resulting movement."

"STARGAZING IN THE HIPPOCAMPUS"

AMARTYA PRADHAN, Y2 [MARKOWITZ LAB](#)

"Shown is a mouse hippocampus that resembles a starry night sky, with each glowing star representing an astrocyte—a type of glial cell in the brain that regulates crucial neural processes. Despite their vital role, astrocytes are



often overlooked in neuroscience research. This microscope image not only reveals their intricate beauty but also underscores their abundance and significance in the brain."

SPRING/SUMMER 2024

EVENTS RECAP!



GIN BOBA HOUR!



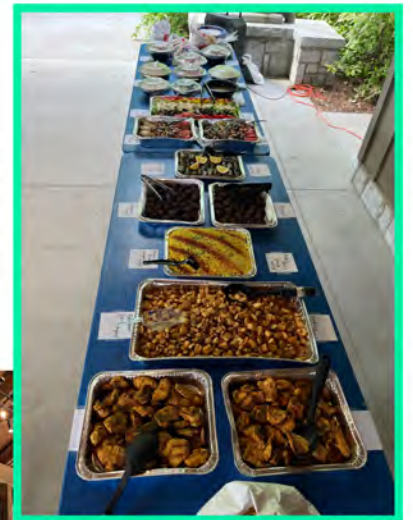
FIRST GIN LEADERSHIP MEETING FALL 2024



GIN MONTHLY COFFEE BREAKS



GIN + EWIN END-OF-YEAR CELEBRATION



NEURO PROGRAM AWARDS CEREMONY



FACTS + FACES



INTRODUCING A FEW OF OUR Y1s



ARANIS MUNIZ PEREZ

Fun Fact: I've had appendicitis twice.



ABIGAIL DRIGGERS

Fun Fact: I applied for the reality TV show "Survivor" the day I turned 18 and became eligible.



YEN-JU CHEN

Fun Fact: When I went to Vienna, I lost my room card and locked my roommate and me outside the hotel.



MARGARITA SISON

Fun Fact: My best friend used to bully me in 2nd grade by telling everyone I had "nerd germs"

FACTS + FACES



INTRODUCING A FEW OF OUR Y1s



XINYUAN (MAX) CAO

Fun Fact: In middle school, I went on a month-long wilderness hike with friends. We had to walk 15 miles every day!



CAITLIN FIX

Fun Fact: I went on a road trip out west this summer and had my lunch stolen by squirrels in two separate national parks



ZABDI HERRERA

Fun Fact: I like to make my own clothes! I used to hate it and was forced to learn when I was a kid—my mom is a fashion designer—but it eventually grew on me :)



PATILAPA SOMPOLPONG

Fun Fact: I was born 2 months premature and had to be incubated so I have been fighting since birth and continue to fight <3

FACTS + FACES



INTRODUCING A FEW OF OUR Y1s



ARYAMAN GALA

Fun Fact: I managed to go skydiving at age 10 despite being under the minimum weight requirement.



KAREEM CHAMBERS

Fun Fact: I am a dual citizen of my parents' and grandparents' country of Jamaica.



ENGILA KHAN

Fun Fact: When I was in Kindergarten, everyone was supposed to dress up as letters from the Letterland story. I had to dress up as Harry Hat Man, but misunderstood it as 'Hairy' Hat Man and dressed up as a guy with a long beard.



IZZY WITTEVEEN

Fun Fact: I just got married!



WHERE ARE THEY NOW?



Careers of our N'GP alumni



Dr. Nuri Jeong

Founder, Goals Unhindered

I am the founder of a coaching and corporate training company called Goals Unhindered, where I serve as an Executive Coach and Trainer. I have always been interested in doing my own thing. I love meeting people from all over and helping them leverage their unique perspectives to achieve their goals. Whether I work with individuals or teams, my focus is on seeing the familiar in new ways and creating impactful opportunities.

I work in the Science Policy Branch of the Office of Science Policy and Communication at the National Institute on Drug Abuse, which is part of the National Institutes of Health. I got to my current role in the federal government through the AAAS Science and Technology Policy Fellowship, an excellent program for people with advanced science degrees looking to learn more about working in policy.



Dr. Rachel Tillage

**Health Science Policy Analyst,
NIDA**



Dr. Drew Solyst

**Quantitative UX Researcher,
YouTube**

I first got into UX research by taking methods I used in my neuroscience research to quantify how viewers engage with media like ads, TV shows and sports games. Then I expanded my toolkit and now I mainly use surveys and logs analysis to understand user behavior at a large scale.



I'm the Academic Community Manager at the Good Food Institute. My current role blends the skills I pursued post-graduation, namely education and mentorship of students at all levels. My company is a nonprofit dedicated to supporting a sustainable, secure, and just protein supply, so I have the privilege of doing work I enjoy for a cause I believe in!

Dr. Nathan Ahlgrim
Academic Community Manager,
Good Food Institute

After graduate school, I started as a Scientific Program Analyst at NIMH. This was a great way to experience the extramural funding landscape within the government, and after about 2.5 years, I transitioned into a Program Officer role.



Dr. Erin King
Program Officer, NIMH



I joined the Medical Communications industry after having a conversation with one of my committee member's contacts. The role checks off many of my interests, including staying up-to-date with science/healthcare, mentoring others, and work-life balance. I also always gravitated towards the creativity of building slide decks during graduate school, and it's now part of my day-to-day job.

Dr. Ellen Woon
Medical Writer,
CMC Affinity

Around my fourth year of grad school, I decided that the academic life wasn't for me, but I still wanted to stay engaged with science and support the scientific ecosystem. Science policy seemed like a good fit for my skill set and interests, so I applied for the AAAS Science and Technology Policy fellowship after finishing my PhD and moved into a policy analyst role after about 18 months as an AAAS fellow.



Dr. Alynda Wood
Policy Analyst, NIH



Dr. Kate Roman
Manager, Kx Advisors:
a BGB Group Company

In my current role, I collaborate with pharmaceutical clients across medical affairs and commercial teams to tackle business challenges; I've worked on preclinical, clinical-stage, and marketed assets across therapeutics areas including neurology, oncology, immunology and rare diseases. After completing my PhD, I was motivated to work in life sciences consulting because it allowed me to leverage the scientific expertise I gained in graduate school whilst expanding my business acumen. Throughout graduate school, I pursued opportunities to learn about strategic business consulting and life sciences innovation: I enrolled in a STEM Entrepreneurship course offered through the Goizueta Business School, joined the Emory Biotech Consulting Club, completed internships with Bioclicity and the Emory Office of Technology Transfer, volunteered with Community Consulting Team - Atlanta, and competed in several case competitions.



**AAAS Science and Technology
Policy Fellowship**



Bioclicity Internship

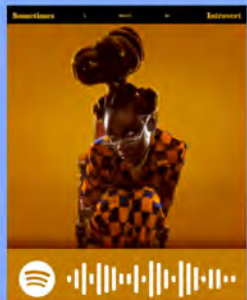
So... What's Everybody Listening to?



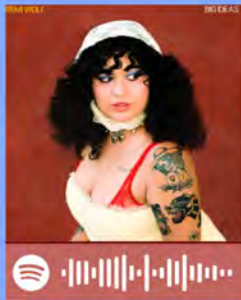
We have asked you all about what you like listening to while working in lab. Here we collected all your recommendations in a Spotify playlist that you can scan and listen to now!

Other recommendations:

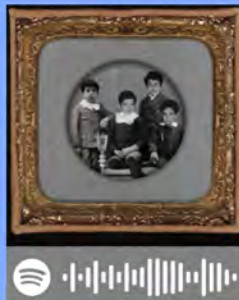
▶ ALBUMS



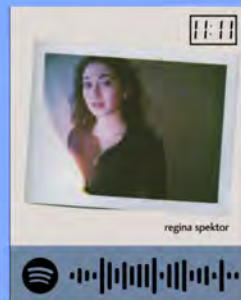
Little Simz
Sometimes I might be introvert



Remi Wolf
Big ideas



Mashrou' Leila
The Beirut School

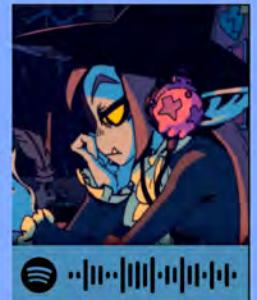


Regina Spektor
11:11

▶ PLAYLISTS



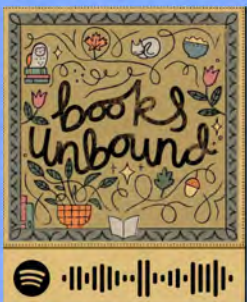
Reading the Martian



Lo-fi for Witches (Only)

▶ PODCASTS

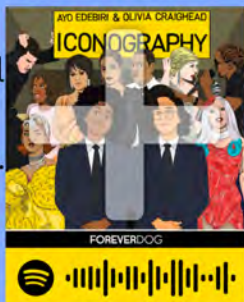
Books Unbound



An engaging podcast about all things reading and book culture. A great way to find your next read.

Hosts: Ariel Bissett and Raeleen Lemay

ICONOGRAPHY



A pop culture and comedy podcast that discusses iconic figures in a humorous and insightful way.

Hosts: Ayo Edebiri and Olivia Craighead

DISSECT



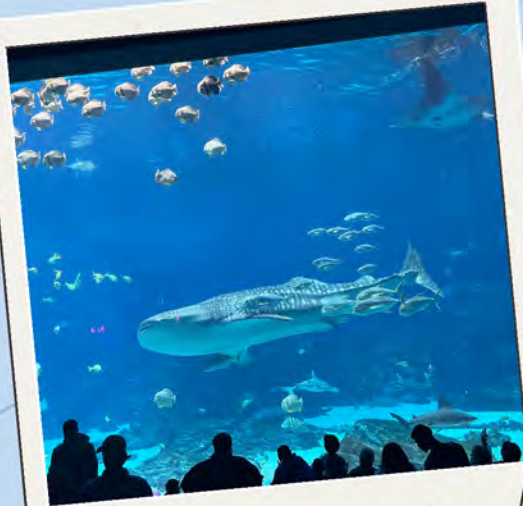
A music podcast that explores contemporary albums, the vision behind them, and their cultural impact.


Host: Cole Cuchna

Atlanta CLASSICS...


Bucket list for your first time in Atlanta or an itinerary for when your friends and family visit

TOURISTY

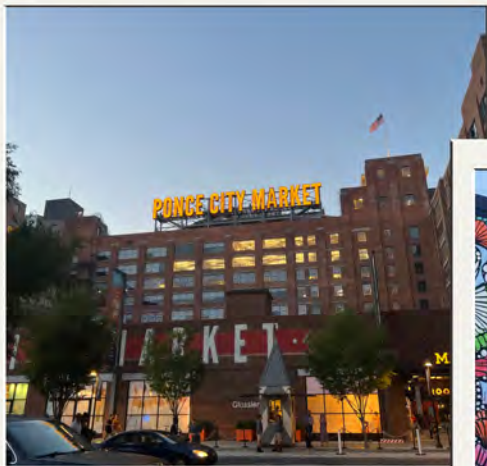



 Georgia Aquarium



 World of Coca-Cola

ACTIVITIES




 Ponce City Market




Atlanta Botanical Garden



 Chattahoochee Food Works




 Atlanta United game

FOOD




 Buford Highway




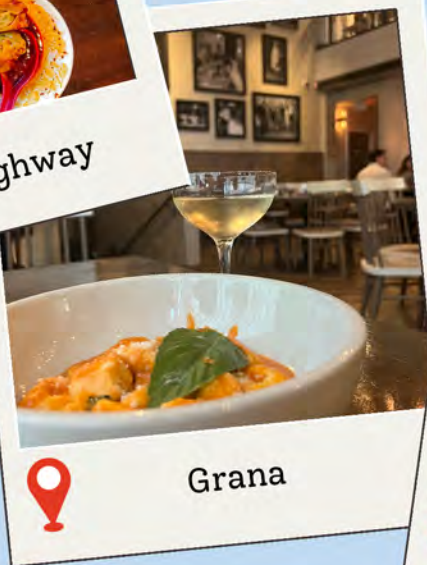
 Antico Pizza
Napoletana




 The Varsity




 Delbar




 Grana




 Murphy's




 Jinya Ramen

DRINKS




 Little Spirit



 S.O.S Tiki Bar

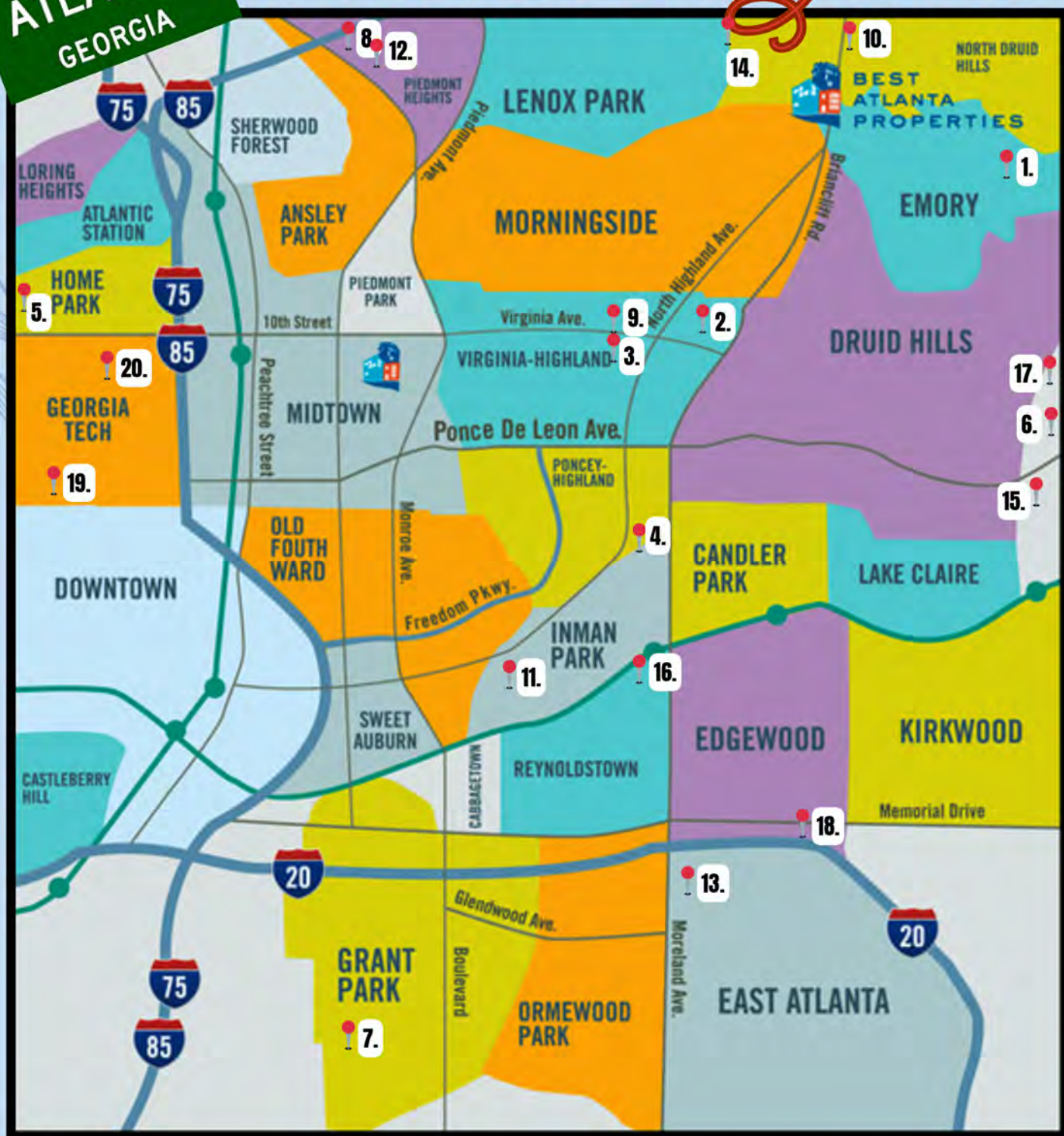


 Sweetwater Brewing
Company

...VERSUS

Hidden gems

WELCOME TO
ATLANTA
GEORGIA



COFFEE

- 1. Cafe Chocolaté
- 2. Ash Coffee
- 3. Press and Grind
- 4. Aurora Coffee

DRINKS

- 5. Postino Wine Bar
- 6. Lost Druid Brewery
- 7. Elsewhere Brewing

FOOD

- 8. The Buttery
- 9. La Tavola
- 10. Desta
- 11. Lotta Frutta
- 12. The Daily Chew
- 13. Gaja Korean Bar

STORES

- 14. Lost and Found Thrift
- 15. Charis Bookstore
- 16. Acapella Books
- 17. Last Chance Thrift

MISC.

- 18. Dekalb memorial disc golf course
- 19. PATH parkway
- 20. Goat Farm Arts Center

2024 firsts!

“For the first time this year I surprised my family by flying home (mostly in secret) for my sister's engagement! It was the perfect day and we are so excited for her to marry her best friend.

It is also our family's first wedding so we are having a lot of fun preparing for the big day!”

Katie James



Betty Bekele



“This year, I got the opportunity to travel to Europe for the first time to attend and present at the 14th International Myotonic Dystrophy Consortium meeting (IDMC ‘14) in Nijmegen, Netherlands. The conference was filled with lots of networking opportunities and a guided tour of the city. This opportunity also allowed me to travel to other European cities like Amsterdam and Paris, which was super fun!!”

Leila May Pascual



“This year, I started going to Critical Mass bike rides around Atlanta. Once a month, hundreds of bicyclists (skaters, scooters) take over the streets of Atlanta and take a slow, scenic 10-15 mile joyride around town. Great way to get to know the city, meet new people, and just all around a good time.”

“This summer in San Francisco I rode in a fully autonomous vehicle for the first time. It’s called Waymo and honestly it was a better, more polite driver than most people!”

Emmie Banks



Meow Match Up

Can you match these pets to their owners?

Check your answers on the last page of this magazine!



CURRENT EVENT

STATE OF THE UNION: THE LATEST ON EMORYUNITE!



To remind you where we left off last time, after Emory University graduate students voted in favor of unionization on November 28th, 2023, EmoryUnite! was preparing for negotiations between the bargaining committee and representatives from the Emory administration.

Currently, negotiations to reach a formal contract are underway. A tentative agreement has already been reached regarding union representation, which includes abilities to hold meetings and conduct union business, allow access of union reps to University spaces, and provide orientation for new members. Topics like parking, stipends, and benefits are underway. Also of note, in July EmoryUnite! reiterated demands to the University regarding the graduate student-workers who were arrested on the Emory Quad in April 2024.

In addition, EmoryUnite! will be holding another membership card drive this Fall 2024 semester to solicit membership from incoming Y1s of Laney Graduate School. If you are a Y2+ you can also still sign a card to become an official union member. Go to emoryunite.org for more information!



Want to stay up-to-date on contract negotiations?

Check out EmoryUnite!'s centralized document to track bargaining topics and progress (credit to organizers at Duke for the model):



WEINGARTEN RIGHTS



You have the right to have a Union representative present at any investigatory meeting that could lead to disciplinary action.

What are Weingarten Rights?

- Supervisors (e.g. faculty) must allow you to speak with a Union representative **before** and **during** any meeting that could lead to discipline or termination of employment.
- Supervisors are not required to inform you of this right, you must ask for it.
- Your Union representative will be a witness and ensure that proper procedures are followed.

If you would like to provide any feedback on the process thus far or any of the topics under negotiation, email EmoryUnite at: emoryunite@gmail.com

Our Path to Unionizing Emory Graduate Workers



NGP DEI Committee

SPRING 2024 PROGRESS REPORT

Interested in
joining?
Scan here!



Our Mission

The Diversity, Equity, and Inclusion (DEI) Committee is designed to integrate the principles of **diversity, equity, inclusion, accessibility, and justice** into the NGP curriculum, policies, and culture. We aim to promote an environment that will **support the success and well-being of NGP students, faculty, staff, and affiliates.**

Advocacy

Promoting Inclusive Language in IBS 514

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.

Events - Spring 2024

DEI Seminar & Panel on Mentorship

We hosted *Dr. Angeline Dukes* for a seminar focused on navigating academia and fostering supportive mentorship. After the seminar, a Q&A-style panel allowed students to ask questions related to mentorship and DEI.

Graduate student-focused workshop on taxes with Dr. Carolina Mendoza Cavazos

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.

Journal Club with Aziz Elbasheir

Aziz presented the article, "Moral Injury, Race-Related Stress, and PTSD in a Trauma-Exposed Black Population," followed by a thought-provoking student discussion on the complexities of moral injury and its impact on Black communities.

Black in Neuro Week Keynote Address Watch Along

In collaboration with *Dr. Chris Rodgers*, we hosted an in-person "watch along" and discussion of the BINW 2024 keynote address, where *Dr. Joseph Kamtchum Tatuene* discussed biomarkers and racial disparities in stroke.

Meet the team

Co-Chairs



Saahj Gosrani



Camille Trautman

Internal Affairs



Ary Wiggins-Gamble

Accountability



Aziz Elbasheir



Eli Chlan



Mari Rocha



Hadassah Mendez-Vazquez

Events



Trinidi Prochaska



Maxine Robinette



Genevieve Craig



Katie James

Accessibility

Resources & Outreach

Heritage Month Resource Lists

Shared resource lists featuring neuroscience, Emory, and Atlanta-specific programming for Hispanic Heritage Month and Native American Heritage Month.

View full
progress report



View our resource
documents



ATLANTA WITHOUT A CAR

If you are someone who does not have a car, or if you simply want to use your car less and are curious how to navigate the city, here is a quick guide on how to navigate public transit, and the resources you need to be aware of!

First off, ATL does have public transportation - It is definitely far from the best in the world, but you can make it work for you! It is called **MARTA**, short for Metropolitan Atlanta Rapid Transit Authority. It has multiple bus routes, trains, and a street car.



There are a couple buses that pass by Emory and can take you to cool spots! For example, **Route 36**, connects downtown Decatur station and Midtown station, with multiple stops at Emory and Virginia Highlands. This is a great route to take if you want to check out Decatur square, or Midtown and everything else in between. On the other hand, **Route 6**, can take you straight to Inman park and little five points, with stops along Briarcliff road and Emory.



Most people use the train to get to the Airport or to get to the stadium, farm state arena, and other spots in downtown ATL. This can save you money, time spent in traffic, or the headache of finding parking. You can use the **MARTA On The Go** app to track the buses and trains, and check your Breezecard balance. Train fare, similar to bus fares, is 2.5\$ for a one-way trip, however if you are an Emory student who does not pay for campus parking, you are eligible to apply for a **free 20 rides MARTA Breezecard** from the Emory office of transportation and parking services. All you need to do is fill out a request form that you can find by looking the **Smart Commute Program Application**.



Alternatively, you can use Emory shuttles themselves to get to a lot of places around the city! **CCTMA** for instance can take you straight to Decatur station, and the **EUHM** route can drop you off at midtown and downtown ATL. The **Georgia Tech shuttle** is also a great way to get to Midtown station. For some shopping, you can take the **EDH** route with stops at Publix, Walmart, and Whole foods. In addition, the **Toco Hill** route also runs every Sunday and can take you to the toco hill shopping center. You can download the app **Passio GO!** to track the shuttles, and you can get a look at the routes and their schedules on the following website: <https://transportation.emory.edu/shuttles>



AtlantaBeltline



The Atlanta beltline is also a fantastic resource for walking, biking, and exploring the city. There are multiple trails that connect different neighborhoods and are a great way to check out street art, shops, and food and drink spots. For instance, the **Eastside Trail** connects Piedmont Park through Inman Park, Old Fourth Ward, and Reynoldstown, with plenty of access to parks, restaurants, and art installations. You can find the trails on the website <https://beltline.org/visit/>

If you are on instagram or tiktok, you can follow these accounts full of tips for people who are carless in metro ATL!



Summer Adventures and Internships

Curious about what students in the program have been doing? Here's a look into what their summer looked like!

A CONFERENCE IN MERANO, ITALY

Yasmine Bassil, Borich Lab

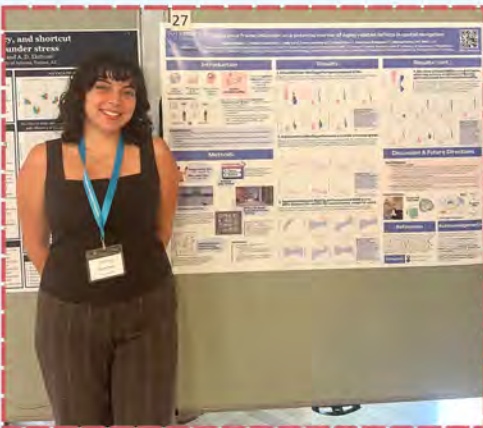
This past summer, Yasmine went to the **2024 iNAV Symposium**, an interdisciplinary spatial navigation conference, which took place this year in *Merano, Italy*. This symposium focused on answering the following question: "how does the brain know where it is, where it is going, and how to get from one place to the other?". A question that is very relevant to her research, which characterizes behavioral and neurological markers of aging-related spatial navigation deficits. This was a unique conference for Yasmine to attend, as it was very specific to the particular cognitive process that she studies. She was able to present her poster and receive feedback on it, which will help guide the next steps of her research. If anyone else is studying navigation behavior or spatial cognition, this is definitely the place to be!

“

One main takeaway that I have from this conference (and many other scientific conferences), is that attendees mostly come from a few select countries, which tend to be Western nations or nations in the Global North. This obvious difference in access for the majority of the world only reinvigorated my passions to help create international neuroscience research infrastructure that extends opportunities to scientists in non-Western nations and those in the Global South. After completing my PhD, I plan to work on such initiatives, likely through an organizing body similar to the International Brain Research Organization.

”

Before the iNAV symposium, Yasmine spent some time exploring northern Italy, taking a ferry around Lake Como and visiting a few different small towns. Her favorite part was visiting the waterfall in Nesso and jumping off of the bridge (Ponte della Civera) into the lake!



MOLECULAR NEUROSCIENCE COURSE IN COLD SPRING HARBOR LAB

Nardos Kebede, Sloan Lab

Over the summer, Nardos spent some time at Cold Spring Harbor Laboratory (CSHL), where she took the *Advanced Techniques in Molecular Neuroscience* course. She learnt about this opportunity through her PI, Dr. Steven Sloan, who took the course himself when he was in grad school and encouraged her to apply. Throughout the 2 weeks course, Nardos was exposed to multiple molecular techniques from molecular cloning to nuclei isolations and protein analyses. Each day also included 1-2 lectures from esteemed researchers who shared their science and their career journeys.



“*What made the experience truly special were the other students in the course. There were students at various stages of their graduate or postdoc career, and it was truly wonderful and so much fun spending those two weeks together, learning from one another. The faculty organizers were also so committed to the course and would be with us from the lab to the bar.***”**

Coming back from the course, Nardos feels more excited about her project and confident in my ability to start new techniques in lab. She is also happy for all the connections she's made. Nardos highly recommends the course to anyone interested in taking a step away from lab to get exposure to new ideas and ways of thinking, get advice from really smart people, and learn about the really cool advances in neuroscience!

SUMMER INTERNSHIP IN THE BAY AREA

Emmie Banks, Rowan Lab



Emmie is spending her summer interning at Genentech in California. In her internship, she gets to design and perform experiments, in order to provide data that informs early drug discovery in the central nervous system. At the end of this internship, she will be presenting a poster on her work and will be co-author on a manuscript. She came across this opportunity simply by browsing the internet! She was interested in pursuing it both because she wanted to confirm that a career as a scientist in industry was right for her and to expand her skillset and expertise in neurodegenerative disease research. To Emmie, this experience is truly unique because she gets to work on multiple neurodegenerative diseases, which gives her a breadth of knowledge that she appreciates.

“*I would definitely recommend the experience. It is easy to get lost in your dissertation research sometimes, and this experience really helped me put everything back in perspective, so I feel I can return to finish out my PhD with fresh eyes and more preparation.***”**

SCIENTIFIC & FAMILY CONFERENCE

Arvin Sarkissian, Birey Lab

Earlier this summer, Arvin has been able to attend a conference closely related to his research, which focuses on characterizing brain organoid models of CACNA1A-related epilepsy. Throughout the year, he meets monthly with other researchers studying this relatively rare patient population through the CACNA1A Patient Foundation, a non-profit



founded by parents of affected children. The nonprofit has just started holding yearly meetings where researchers meet in person to discuss collaborations and update each other on clinically relevant findings—so he was invited to attend! The goal of the conference was to facilitate research meetings between scientists and clinicians working with CACNA1A patient populations, who suffer from ataxias, epilepsy, and migraine disorders, among other symptoms.

Over two days, 30–40 researchers engaged in interdisciplinary science discussions for more than 12 hours, through presentations, debates, and discussions. Just as importantly, actual patients and affected families were invited to the second day of the conference. They learned directly about their rare disorder from clinicians and scientists and participated in crucial on-site clinical data and sample collection. For Arvin, he has never seen such tight-knit collaboration and communication between scientists, clinicians, industry partners, and patients.

“ I have been to larger conferences like Society for Neuroscience—but it's so unique to **attend a niche conference** where everyone in the room is studying the same gene. Although this kind of gene-specific or patient population-focused may not be as applicable to everyone's projects, I would encourage other students to find similarly tailored, specific experiences that prioritize depth over breadth. ”

While he always felt some abstract sense of impact from his work, speaking with a parent of a child struggling with debilitating epilepsy at this conference felt like a turning point. In academia, it is easy to get lost in priorities like publishing, impact factor, and other CV-focused metrics as markers of success. It is also easy to feel like research is far from making an impact. But his conversations and exposure to actual patients and family members was a sobering reminder of why we fund and start this kind of research in the first place.

THANKS FOR READING!



See you next time at NS
Recruitment in 2025!



Answers to 'Meow Matchup':
Will and Lulu
Katie James and Whopper
Genevieve and Margaret
Janhavi and Kenny
Emmie and Ghost
Kelly and Jelly, Nala, and Doug
Iran and Butters
Ali and Rocket
Alicia and Devi
Katelyn and Toothless and Charlie