



## Letter from the Director:

Dear CMB Community,

As we move into an exciting new phase for the CMB community, I am pleased to share several updates that reflect our collective commitment to innovation, student success, and a more connected program environment. Over the past months, our leadership team has been hard at work advancing initiatives that streamline our processes, enhance educational experiences, and strengthen engagement across our growing community of students, faculty, and alumni.

I am happy to share that Dr. Sethu Pitchiaya has expanded his leadership role and joined CMB as an Associate Director, bringing deep experience in admissions and student engagement. Sethu is noted as an outstanding mentor and has a strong track record of success in promoting the CMB program through his leadership in the Admissions Committee for the past several years. He is a strong fit to both lead the next phase of CMB recruitment and also build emphasis on the values of our CMB community.

This Fall, we piloted a new AI Ethics Workshop in partnership with Dr. Jody Platt and the Generative AI Task Force. The workshop introduced trainees to emerging issues in artificial intelligence, scientific integrity, and responsible research practices at an early data point where CMB students could help inform how AI ethics should be implemented across the graduate training ecosystem at Michigan Medicine. Early feedback has been

overwhelmingly positive, and we are exploring opportunities to integrate this content more broadly into PIBS 503 in the future.

To reduce administrative burden for students navigating key milestones, we also launched an automated Prelim Tracking System through InfoReady. This streamlined workflow replaces a series of manual back and forth email steps with a unified digital process, improving transparency and reducing confusion for both students and faculty committees. If successful, this system will serve as a model for future improvements across the program aimed at simplifying processes for students, so they can focus more on science.

Our annual CMB Retreat at the Kalamazoo/Kellogg Biological Station was a major success, providing an energizing space for scientific exchange, trainee presentations, and community building. I want to thank everyone who attended and contributed to making this retreat one of our most interactive and well-received events in recent years. On the governance side, the newly re-formed Access, Success and Engagement (ASE) Committee has begun meeting regularly to address student concerns, review policies, and strengthen communication loops across the program, and will be an incredibly important pillar of our program.

Finally, we continue to grow our external presence. We encourage all students and alumni to follow our revitalized LinkedIn page, where we are beginning to highlight accomplishments, publications, and career milestones. In November, Michigan Medicine also launched a completely redesigned website format that will have one website that is tailored to external audiences including

prospective students and faculty, plus alumni, and one that has detailed info and resources for current students and faculty. The goal of these platforms is to enhance student success and visibility, and I am hopeful that it will be leveraged by students to make meaningful connections that support their own independent career ambitions. We have an extremely strong and engaged alumni base in CMB (>425 graduates over the years, including myself) and I personally know many of the alumni that would love to strengthen their interactions with the current graduate students.

Thank you for everything you do to make CMB an exceptional training community. I look forward to building on this momentum together.

Sincerely,  
Chad Brenner  
CMB Director

P.S. Please see the [giving links](#) in this newsletter if you would like to help support current CMB students. 100% of donations go directly to support CMB students.

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## NEW CMB FACULTY:

### Chima Maduka



**What does your lab study?**

My lab investigates the immuno-metabolic vulnerabilities in the pathogenesis of heart attack and heart failure, which we strategically leverage to develop biomaterial-based platforms for

targeted drug delivery and novel therapies.

**What brought you to Michigan?**

Grad school first brought me to Michigan years ago, and it feels great to be back as a faculty member.

**Which biological process best describes you?**

Cardiac remodeling—the heart’s ability to adapt structurally and functionally to stress—reflects my personality.

### Jorge Ruas



**What does your lab study?**

My lab studies the health-promoting molecular mechanisms induced by physical exercise and how to activate them therapeutically in disease situations.

**What brought you to Michigan?**

The world-famous UofM reputation in translational research, the many opportunities for multidisciplinary collaboration within the University, and the opportunity to join the Dept. of Pharmacology and the Frankel Institute for Heart & Brain Health.

**Which biological process best describes you?**

Mitochondrial Respiration

### Jason Weinberg



**What does your lab study?** My laboratory is currently studying another important aspect of infection with adenoviruses and other DNA viruses - consequences of long-term persistence following the resolution of acute infection.

We’re pairing mouse models with translational approaches using patient specimens to study ways in which virus persistence and reactivation shape outcomes of unrelated challenges, such as sepsis.

**What brought you to Michigan?** My wife and I moved to Michigan in 2000 because of an excellent training opportunity (my fellowship in Pediatric Infectious Diseases) that was near family. Opportunities and community at the University of Michigan, the wonderful town of Ann Arbor, and our family have kept us here since then.

**Which biological process best describes you?** I am best described by the immunoproteasome.

### Junior West



**What does your lab study?** Epithelial morphogenesis using murine models of breast cancer invasion and metastasis and mammary branching morphogenesis.

**What brought you to Michigan?** The excellent research, teaching, and training environment!

**Which biological process best describes you?**

Morphogenesis

### Xander Nuttle



**What does your lab study?**

My lab studies host-parasite coevolution in yeasts

**What brought you to Michigan?**

I was attracted to Michigan by the collaborative research community.

**Which biological process best describes you?**

Adaptation

## Ravi Allada



**What does your lab study?** The Allada Lab's principal goals are to identify the neuronal and molecular components of the sleep homeostat, to understand how those components cooperate to sense and control the sleep-wake state, and to reveal how molecular and neural homeostatic pathways impact brain function, health, and disease. Our strategy employs

genetic tools primarily in the fruit fly *Drosophila* to dissect, manipulate and monitor the homeostatic machinery. This approach builds on our research to understand the molecular basis of circadian (~24 hr) behavior which has revealed sleep mechanisms conserved between invertebrates and vertebrates and incorporates work in mice and humans.

**What brought you to Michigan?** I was drawn to Michigan by the outstanding interdisciplinary neuroscience and coming back to my alma mater.

**Which biological process best describes you?** As someone on the high energy side I believe I relate to oxidative phosphorylation!

## Michelle Hays



**What does your lab study?** We study how hosts and parasites shape each other's evolution. To be successful, organisms must adapt to both biotic and abiotic selection pressures. These stresses influence evolution at all scales: from ecosystems to disease progression.

We are working to understand how genetic backgrounds and external environments shape the evolutionary paths that cells use to adapt and defend themselves from parasites: including retrotransposons, viruses, competitor-secreted toxins, and parasitic plasmids.

**What brought you to Michigan?** Even though my lab studies genetic conflict, as a person I'm focused on good communication and building a supportive and kind community around me. My favorite parts of science are getting to be creative as an individual while also collaborating on projects as a team. I came to Michigan for the amazing and collaborative scientific community!

## Meredith Skiba



**What does your lab study?** My lab studies how cells sense and respond to chemical signals, focusing on G protein-coupled receptors (GPCRs). We combine molecular pharmacology, cellular biochemistry, and structural biology to understand how GPCRs recognize signals and convert

these messages into cellular responses. We are particularly interested in GPCRs that regulate aspects of reproductive biology to understand how signaling defects contribute to pregnancy-related diseases and infertility. We also specialize in antibody engineering, which helps us develop precise tools to enable our cell signaling studies.

**What brought you to Michigan?** I completed my PhD in the Biological Chemistry department here at Michigan. I was thrilled for the opportunity to return to Ann Arbor as a faculty member and rejoin a community that deeply values both innovative science and mentorship.

**Which biological process best describes you?** Protein folding. I love when things are organized. I even tried to color code my lab so that everything has its proper place and function!

## Jae Won Shin



**What does your lab study?** Our lab advances regenerative medicine by understanding and directing how cells build and remodel their microenvironments to repair injury, degeneration, and fibrosis. Using biomaterials, microtechnology, and physical biology, we design

instructive cellular niches, guide tissue remodeling, and study extracellular vesicles and particles to develop therapies that restore function in vital organs.

**What brought you to Michigan?** I was drawn to Michigan by the opportunity to join a large, collaborative community of scientists and engineers working in regenerative medicine.

**Which biological process best describes you?** I am best described by mechanotransduction.

## Program Update: Professional Development Program Made Official

*For the past two years, CMB has offered an alternative way for students to fulfill their teaching requirements by engaging in various biomedical professional development activities. This Professional Development program serves to offer students another way to gain the experience and hone the skills traditionally gained from serving as a GSI. The program was started as an experimental pilot in 2023 before being renewed in 2024 and then codified in 2025 as an official alternative to the GSI teaching requirement. Showcased here is an update on recent student experiences in professional development, highlighting their roles and motives.*

### What drew you to this group for the pilot program?

**Gabriel Jimenez Pagan:** Originally, I was interested in participating in Developing Future Biologists (DFB) as an instructor because I had met other Puerto Rican students in PIBS that had gone through and benefitted from this program as undergraduate students. I thought that this would be an amazing opportunity to help impact the lives of other Puerto Rican students who have very little resources to get experience in research and help motivate them to pursue careers in STEM. After learning more about the organization, I understood that my participation would likely make a larger impact on a wide variety of students all across the US and would also be of great benefit for my own career in STEM and science communication. Upon learning that this would count towards the career development program, I thought that this would be the best use of my time and efforts.

**Nick Rossiter:** My project was a summer internship at a biotech company in San Francisco, which was appealing to me for many reasons. The internship was an opportunity to be exposed to new aspects of biology, learn a host of new lab techniques, and become more familiar with state-of-the-art approaches for target development. In addition to the learning opportunities, I

also think taking a short break on my main thesis project to work on a distinct project was intellectually refreshing, and helped me reset from some of the scientific and mental ruts I found myself in after my third year. Finally, having the chance to spend my summer exploring SF and the surrounding areas was too good of an opportunity to turn down!

**Gillian Davidson:** I decided to join BioMed Focus for several important reasons. First, the program was established by a post-doctoral fellow in my lab, and I wanted to support my labmates' DEI initiatives. Second, I am deeply passionate about mentoring women and students from underrepresented backgrounds in STEM research. Finally, I was especially inspired by the fact that BioMed Focus works directly with high school students from under-resourced schools in the local area. As someone who would have loved an opportunity to apply to a program like BioMed Focus when I was in high school, I see this as a meaningful opportunity to give back and help support the next generation of scientists.

### What have you learned about leadership, communication, or teamwork through this experience?

**Gabriel:** For context, DFB is an organization that brings undergraduate students (including international students) from across the US and Puerto Rico to the University of Michigan for a week-long intensive short-course during the summer. As part of this course, they get hands-on lab experience with a variety of models and tools as well as lectures and career development workshops. As DFB is practically completely run by a small group of graduate students and postdocs, there is a lot of teamwork and communication that has to happen to plan the course. This last year I learned a lot about leadership, communication, and teamwork. This involved knowing when to ask for help and rely on others to get tasks done and when to take charge in other tasks, make myself available daily and weekly to communicate effectively with my fellow instructors, and leading certain activities for the course which involved a lot of planning and division of labor. I hope to get

better at these skills for my second year in the program and contribute to the effectiveness of our teamwork.

**Nick:** Starting on a project with clearly defined experimental goals/deliverables, as well as standard scientific framework and pool of literature between group members really helps to streamline the work. 12 weeks is a very short timeline for biological research, so having that foundation coming into the group helped quite a bit. During my internship, I had the chance to attend multiple group meetings across departments, which highlighted the importance of seeking out interdisciplinary groups, as I would often see the same project presented to multiple audiences garnering very different suggestions/feedback. All the expertise in the world won't produce efficient results if it remains siloed.

**Gillian:** Mentoring high school students has had a profound impact on my development as both a scientist and a graduate student. While leading research projects and setting team goals came more naturally—since the summer projects were extensions of my own thesis work—the experience of guiding younger students greatly improved my communication skills. Teaching high school students complex scientific research requires a great deal of patience, especially if you want to do it effectively. At the beginning of the program, we started by reviewing the basics of the central dogma. By the end of the summer, however, the students were able to confidently explain aspects of developmental metabolism to their families and friends. Seeing their growth was incredibly rewarding, and it deepened my passion for building collaborative research teams, making science accessible, and fostering an environment where ideas could be shared.

**What challenges did you face balancing this with your research responsibilities, and how did you manage them?**

**Gabriel:** I think the most challenging part of balancing my research and my participation in DFB was the time commitment. Although the workload is spread out pretty well throughout the year, there were still some months that required more effort. For example, we were

starting to review student applications at the same time as I was preparing for my preliminary exam. This meant I had to read ~40 applications and have multiple meetings to decide who we will be accepting while I was reading and preparing myself for my prelim within a few days. The course design just before the summer was also a very busy time that required more effort from all the instructors. What helped me manage everything was mainly organizing my time and understanding when to rely on the other instructors. Having clear deadlines and expectations also helped balance everything. Finally, I think motivation was also a big factor for me. I was very motivated because my goals aligned well with those of the organization and so I did what I could to manage my time and effort.

**Nick:** For me, there definitely wasn't enough time to devote significant effort towards my thesis project while at this internship. Expect to put down your Michigan research (including grant writing) if you pursue a full-time summer internship, as there just aren't enough hours in the day to do both effectively. You and your mentor should absolutely be on the same page and explicit in expectations for work while you're away.

**Gillian:** Mentoring students who have minimal experience in a research setting can be time-consuming and often took time away from my work. Thankfully, the BioMed Focus program supports mentors by covering fundamental lab techniques through its pipetting bootcamp, which proved extremely helpful. Balancing my own research with my mentoring responsibilities required careful organization and realistic scheduling. However, having motivated students who were eager to learn and conduct experiments made the process much smoother. The patience I invested early on—guiding them step by step through each protocol—ultimately paid off, as by the end these students were able to run experiments independently.

### What advice would you give to other students thinking about pursuing alternatives to GSI'ing?

**Gabriel:** The most important thing is to have early conversations with your mentor about your career interests and what you consider important for your preparation as a graduate student. Make sure that when you talk to them about the activity/organization/ internship you want to be part of as part of the pilot program, you are clear about how this will help you in your training and how you will work on it without impacting your research responsibilities.

**Nick:** If you want to do a biotech internship, make sure you and your PI are on the same page in terms of timing and expectations with your thesis work while you're gone. Apply early and often, as the field is only getting more competitive in the current climate. Positions usually start being posted in October on a rolling basis through February. Maximize your opportunities while you're working; learn about a different system for doing research, network with

scientists and other individuals in the company, and pick up some new skills!

**Gillian:** I'm grateful to CMB leadership for supporting the pilot program, which has given us the chance to explore new career pathways and alternative teaching experiences, such as mentoring through the BioMed Focus program. This type of hands-on, one-on-one guidance benefits both mentors and mentees, fostering skills and personal growth that can't be gained in a traditional classroom setting. Mentoring teenagers is especially rewarding—it's humbling to work alongside enthusiastic, honest, and curious young scientists! I encourage every grad student to take advantage of this program—it's a great way to get involved in mentorship or even apply for industry internships if that's something you're interested in. It's a unique opportunity for us as CMB students to really shape and personalize our academic journey. And on top of all that, these experiences can count toward your graduation requirements.

## Summer Picnic

**CMB and CDB** joined forces again to celebrate the beginning of a new school year and to welcome our new PIBS graduate students! During our summer picnic at Island Park, we enjoyed an afternoon of fun games, delicious food, and groovy music, creating an overall homey atmosphere.

This event also highlighted the **collaborative nature** between CMB and CDB within and outside of the lab space.



Thank you for coming out and making this event **come to life!**

## *CMB Retreat*

Our annual CMB Retreat was held in Kalamazoo and at Kellogg Biological Station. This year's Jessica Schwartz Keynote Lecture was presented by **Dr. Crislyn D'Souza-Schorey**. Dr. D'Souza-Schorey is a Morris Pollard Professor of Biological Sciences at the University of Notre Dame. She shared her group's exciting work on the ARF6 protein and its role in tumor-derived microvesicles. Many of the new faculty highlighted in this newsletter also gave exciting talks throughout the weekend.



CMB students and faculty participated in various activities, including **arts & crafts**, touring the **Kalamazoo Art Museum**, and visiting the **Airway Fun Center**. They also visited the Kellogg Biological Station, where students engaged in team building activities and explored the lake. A number of student awards were announced – see the next page for a list.

*Thank you to the CMB Retreat committee **Michael Cadigan and Bonje Obua** for organizing another amazing event!*



*\*Staring with intense admiration\**



# CMB AWARDS

CMB Student Service Awards:

*(top and bottom left)*

**Grace Aleck**

**Sonya Royzenblat**

CMB New Student Service

Awards:

*(continued left to right)*

**Danny Cruz**

**Doris Cruz Alonso**

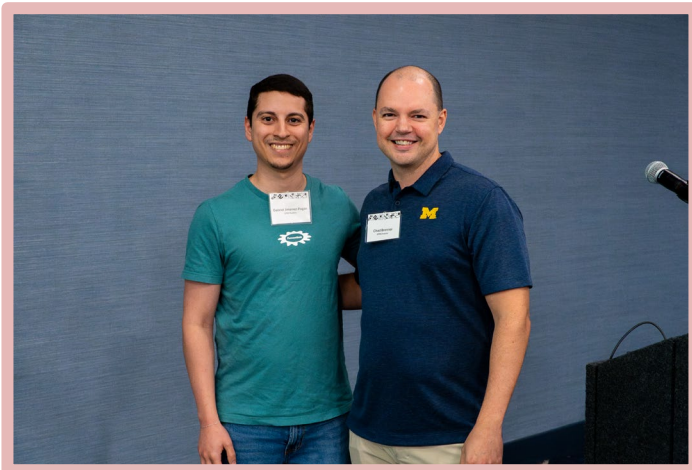
**Carea Mullin**



Rackham Regents

Fellowship:

**Gabriel Jiménez-Pagán**



Congratulations to all, and  
thank you for your service to  
the program!

## 2025 New Student Cohort

Please join us in welcoming our newest cohort of students.

### Caitlin Price (she/her)

Jason Weinberg Lab



**What do you study?** The role of viral persistence in sepsis pathogenesis.

**Your go-to cafe in A2 and order?** Comet Coffee; vanilla latte + croissant

**If you could have a model organism as a pet, what would it be? Why?** I would choose a bunny because they're cute and soft.

### Carea Mullin (she/her)

Rami Khoriaty Lab



**What do you study?** Hematology

**Your go-to cafe in A2 and order?** Angelos before they took it away!

**If you could have a model organism as a pet, what would it be? Why?** Mice. They remind me of my dogs.

### Chatitali Chitnis (she/her)

Jason Spence Lab



**What do you study?** The gut-brain axis in organoid models.

**Your go-to cafe in A2 and order?** Vertex; Anything!

**If you could have a model organism as a pet, what would it be? Why?** Zebrafish. They're so cool and can regenerate their hearts!

### Claudia Wang (she/her)

Lauren Surface Lab



**What do you study?** Molecular action of bisphosphonates in the jaw.

**Your go-to cafe in A2 and order?** Lowertown; cappuccino

**If you could have a model organism as a pet, what would it be? Why?** Axolotl cause then they can teach me their regeneration ways.

**Danny Cruz (he/him)**

Rami Khoriaty Lab



**What do you study?** Red blood cell development in the context of congenital anemias

**Your go-to cafe in A2 and order?** Soccotra; chai

**If you could have a model organism as a pet, what would it be? Why?** A frog. I think we could build a great Frog & Toad type of friendship.

**Rachel Dziekan (she/her)**

Michelle Hasting/Rachel Niederer Labs



**What do you study?** I study the use of antisense oligonucleotides to redirect translation in cystic fibrosis.

**Your go-to cafe in A2 and order?** Hyperion Coffee Co; iced Latte

**If you could have a model organism as a pet, what would it be? Why?** Immortalized human bronchial epithelial cells, because they form little clusters.

**Edwin Aguilar (he/him)**

Gregory Tall Lab



**What do you study?** Structural and functional mechanisms of prostacyclin receptor activation to understand platelet and vascular regulation.

**Your go-to cafe in A2 and order?** Starbucks

**If you could have a model organism as a pet, what would it be? Why?** Mouse - small and adaptable

**Erin Jenson (she/her)**

Kristen Verhey Lab



**What do you study?** The role of glutamylated microtubules in the mitotic spindle.

**Your go-to cafe in A2 and order?** Hyperion; any seasonal drink.

**If you could have a model organism as a pet, what would it be? Why?** A zebrafish to provide entertainment for my cat!

**Harrison Greenbaum** (he/him)

Yatrik Shah Lab



**What do you study?** Microtubule targeting agents as inducers of ER-Mitochondrial contacts

**Your go-to cafe in A2 and order?** Lowertown; Chai Tea!

**If you could have a model organism as a pet, what would it be? Why?** Zebrafish to remind me of my time in marine bio research!

**James George**

Arul Chinnaiyan Lab



**What do you study?** Application of artificial intelligence to cancer biology.

**Your go-to cafe in A2 and order?** Coco's; boba tea

**If you could have a model organism as a pet, what would it be? Why?** Nematode. They're pretty compact.

**Jordan Currie** (he/him)

Chad Brenner Lab



**What do you study?** Cell-free nucleic acids in head and neck cancer as potential biomarkers for disease detection.

**Your go-to cafe in A2 and order?** Vertex; pour over

**If you could have a model organism as a pet, what would it be? Why?** Yeast! A sourdough starter would be a great pet and will get along with my dog.

**Tadas Sereiva**

Jorge Ruas Lab



**What do you study?** Prevention of skeletal muscle atrophy.

**Your go-to cafe in A2 and order?** Hyperion

**If you could have a model organism as a pet, what would it be? Why?** Axolotl

**Mikoto Kobayashi** (he/him)

Arul Chinnaiyan Lab



**What do you study?** Tumor intrinsic immune modulation of RAS driven cancers

**Your go-to cafe in A2 and order?** Yoon's Bakery; Americano and mocha

**If you could have a model organism as a pet, what would it be? Why?** Axolotl. I've heard that they are studied in the context of regeneration.

**Doris Cruz Alonso**

Chelsey Spriggs Lab

**Karan Smith**

Lydia Freddolino Lab

**Welcome to CMB!***About CMB Alumni: Recent Graduates*

**Chris Pineda** (defended June 27, 2025) studied the role of keratin 17 in Rac1-mediated DNA damage response in keratinocytes in Dr. Pierre Coulombe's lab. He served on the CMB admission committee for several years and was awarded CMB student achievement and service awards during his graduate career. He now manages an institutional proteomics core in Fort Smith, Arkansas.

**Jeffrey Knupp** (defended May 24, 2024) studied how the endoplasmic reticulum promotes autophagy with insights illuminating basic human disease mechanisms in Dr. Billy Tsai's lab. During his graduate career, he published 3 first co-author papers and collaborated with other labs for additional 3 publications. He is currently a postdoctoral fellow in Dr. Ryan Baldridge's lab.

**1. What drew you into CMB and your thesis lab?****Chris Pineda:**

My journey to the University of Michigan's Program in Biomedical Sciences (PIBS) and the Cell and Molecular Biology (CMB) program began with proactive networking and excellent recommendations. Through the Student Enrichment Office at San Francisco State University (SFSU), I was introduced to representatives from various PhD programs across the country.

Program Selection: PIBS stood out for its compelling presentations, which highlighted both excellent science and the community in Ann Arbor. I also leveraged my network, speaking with previous peers and friends at U-M about their PhD experiences. Mentors at SFSU strongly suggested many U-M faculty, many of whom were affiliated

with CMB. Given the outstanding faculty recommendations and the long list of affiliated researchers performing exemplary research, I chose to apply to PIBS and the CMB program.

Interview Experience: Ultimately, PIBS and CMB offered the best interview experience among all the programs I visited. The hosts, recruiting graduate students, and even graduates not on the recruitment committee were welcoming and supportive, maintaining contact until I accepted my offer. Meeting faculty, including Dr. Ben Allen, Dr. Billy Tsai, Dr. Keith Duncan, Dr. Laura Buttitta, Dr. Ann Miller, Dr. Ken Cadigan, and Dr. Pierre Coulombe, solidified my feeling of support.

Thesis Lab Choice: I selected Dr. Pierre Coulombe's lab for my thesis due to our excellent interview, his exciting research, and the welcoming atmosphere provided by his current lab members.

### **Jeffrey Knupp:**

Before I started graduate school at Michigan, I was a research technician here. Because I was on campus, it was suggested to me that I attend the student seminars for the departments that I was considering joining to see what it would be like as a student and how the departments operated. I went to CMB 850 a couple of times, and I was very impressed with the student speakers and the questions that the students asked. I also liked the size of the program and how you could join virtually any research community through CMB. Another big draw was the CMB training grant.

I joined my thesis lab for two major reasons. One was that I loved the environment and the culture of the lab. The postdocs and other graduate students were extremely supportive and helpful to me. On top of that, my PI was extremely present in the lab and made a big effort to connect with students, which I enjoyed. A second reason I joined the lab is that there was a crystal-clear project in place for me. Through conversations I had with my PI as a rotation student, I had a definitive map of what I was going to study, why it was what needed to be done, and how we were going to do it.

### **2. What was the best part of graduate school?**

**CP:** The most rewarding aspects of graduate school were the community and the opportunities for program development.

Community and Support: I made wonderful friendships that provided both academic and unlimited personal support throughout my PhD, truly serving as a family away from home. This strong sense of community was vital for navigating the rigor of the program.

Program Engagement: CMB offered numerous opportunities to actively improve the student experience and the program itself. Key examples include allowing student representation on the CMB Graduate Admissions, continued support of the Access, Success and Engagement (ASE) Task Force, and the establishment of the Professional Development Program.

**JK:** To me, the best part was the support and infrastructure that is all dedicated to you as a trainee. When you're in graduate school, there are so many people who have your best interest in mind. Your mentor, thesis committee, and program advisors are all on the hook to make sure that you're successful. This is a lot different than when you're an undergrad, research technician, or even as a postdoc. As an undergraduate and research technician, I always felt like a sort of intruder who was begging to enter the space, but in graduate school I felt the velvet rope was opened. Graduate student support is an area where I feel PIBS really excels. For most of us, graduate school is the last time that you'll have that level of support system. After that, you're (rightfully) expected to forge your own way and become independent.

### **3. What was the biggest challenge you faced in graduate school?**

**CP:** The most significant challenge I navigated was overcoming imposter syndrome. As a non-traditional and first-generation student, I had to actively push past the intrusive thoughts that questioned my belonging daily. Fortunately, with consistent support from my friends, the Office of Graduate and Postdoctoral Studies (OGPS), and my mentors, I was able to manage this challenge every day until I successfully defended my thesis.

**JK:** An easy answer is the COVID-19 pandemic. Just a few weeks after I finished my prelim, finally able to put that behind me and begin working only on my research project as PhD candidate, our labs got shut down. After the labs were slowly reopened, we worked in a shift system at odd hours to decrease occupancy for at least another year. Not having the time available to me and having less contact with people in my lab was difficult.

If we're excluding COVID, another challenge was trying to balance family life with work. I became a parent during my 5th year of graduate school. This is where I was extremely lucky to have the support of my advisor, lab, and program. I know people who have left graduate school because of family responsibility, and so I feel lucky that I was in a lab environment that was flexible and understanding of the challenges of having young kids and holding a job.

#### **4. How did you decide on what to do after graduate school?**

**CP:** My career decision was directly shaped by the leadership and professional development opportunities I embraced within the CMB program.

Career Exploration: Serving as one of the first students on the admissions committee, co-chairing the ASE committee with Amanda Orosco, and engaging in the Professional Development program introduced me to the critical areas of research administration and student support.

Future Plans: These experiences revealed a passion for both fields, and I plan to pursue a career that allows me to combine research administration and student support.

**JK:** I don't have a great answer here, but I just knew that I wanted to keep doing what I was doing, but in a new setting with a new research question as a postdoc. Basically, I just enjoy everything about what we do as scientists, and I knew that I would regret if I didn't at least try to go the academia route. I knew that I liked what I was doing because I never looked at the clock. Days would fly by for me, working late didn't feel like working late, and I was just in a good place.

I did talk to my advisor about it, and he gave me advice about where to apply and what to look for in a postdoc lab and mentor. My thesis committee also asked me at every meeting about what my plans were, which forced me to think about and have an answer for them.

#### **5. Do you have any advice for current CMB students (all years)?**

**CP:** My advice centers on embracing your role as a trainee, building your network, and maximizing your opportunities:

Embrace Trainee Status: Remember that you are a trainee. Your time here is meant for you to learn from your mentors without penalty in a timely fashion and in a safe environment on how the system works and how to succeed in your future career.

Build Your Support System: Prioritize mental health, make friends and seek additional mentors to cultivate a large, reliable support system. Never hesitate to reach out to your support system to push your research forward and maintain a positive PhD experience.

Maximize Opportunities: Take full advantage of all the opportunities that CMB and the University of Michigan have to offer such as outreach and professional development to ensure you have the most successful and enriching [experience].

**JK:** I would just say that choosing your thesis lab is the only really important decision that you need to make. This is why the PIBS program spends so much time advising everyone about rotations during the first year. Who you work for is very important and choosing the best mentor for you is the best way to ensure your future success, even beyond graduate school. Having an advisor that is responsive and supportive during your time in their lab will also inform how they'll be in the future when you need to ask for letters of support (which unfortunately seems to never end). As a postdoc, your graduate advisor's reputation is important for you and can open doors and opportunities. ■

## *Science Outreach and Communication in CMB*

CMB students have a strong tradition of prioritizing science outreach and communication. In this edition, we're highlighting some of the activities that demonstrate our students' work on connecting research with broad audiences.

This summer's student-led journal club dedicated time to this theme. Discussions included scientific misinformation and how to combat it, and "STEM outreach: how it looks, how it helps, and how you can get involved." The latter session was contributed by Jacob Horn, one of several CMB graduate student instructors for *Developing Future Biologists* (DFB), a program that teaches undergrads fundamental concepts in developmental biology. We asked Gabriel Jiménez-Pagán, another DFB instructor, about what made him interested in working with the group.

*"I first heard about DFB from fellow Puerto Rican students in my PIBS cohort. When I heard about the impact the organization and the short-course had on their preparation as scientists, I knew this was something I wanted to be a part of. As someone who benefited from underrepresented research programs like Research Initiative for Scientific Enhancement (RISE), which unfortunately got cancelled together with other similar programs, I wanted to pay this forward and have an impact on this population of future*

*scientists. Especially now in the political and economic climate we are in, programs like these are more important than ever.*

*After helping run the course this last summer alongside an amazing team of instructors, I feel like I was able to make a difference in the preparation of a diverse and unique group of students as well as my own preparation as a scientist. My last year as an instructor for DFB will come with new challenges, including teaching a new set of instructors and students and improving upon last-year's workshop, but I am excited to continue impacting as many people as I can through DFB and other programs after I'm done."*

### **Did you miss summer journal club?**

Here's a selection of outreach and engagement papers we discussed between the biology:

- [Missing Voices: Examining How Misinformation-Susceptible Individuals From Underrepresented Communities Engage, Perceive, and Combat Science Misinformation.](#)
- [Mitigating Health and Science Misinformation: A Scoping Review of Literature from 2017 to 2022.](#)
- [Constructing STEM Mentorship Pathways to Empower Students in Low-Socioeconomic Communities.](#)

Rocio Cisneros, a third year in CMB, is on the board of *MiSciWriters*, a science writing collective that highlights research and scientific topics for public audiences. *"I became involved with MiSciWriters because I saw an opportunity to broaden our science communication efforts to a global audience, particularly in Latin America, by increasing access to our work for individuals who may not speak English but are highly engaged in scientific research emerging from U.S. institutions. I also viewed MiSciWriters as a platform to strengthen connections between researchers and U of M students through accessible scientific communication. This experience has allowed me to learn the technical process of editing and revising blogs for diverse audiences while gaining a deeper appreciation for the breadth, richness, and interdisciplinary nature of the research conducted within our university."*

Increasing the accessibility of our communications is part of the curriculum as well. This fall, students in PHARM 502

worked with members of the Michigan Medicine Department of Communication (authors of [Health Lab](#)), focusing on writing and speaking for lay audiences. These practical workshops provided students with additional experience in translating complex scientific concepts for the broader community.

Whether through mentoring the next generation of scientists or contributing accessible science writing for the public, our students continue to champion science access for all. ■

### Acknowledgements

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## Recent Publications

Explore some recent CMB Student scientific work:

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