



CELLULAR & MOLECULAR BIOLOGY NEWSLETTER

UNIVERSITY OF MICHIGAN

Winter 2021

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C. Bidlack

From the Director:

Dear CMB colleagues and well-wishers,

As we bounce back from a long and difficult year, I am proud of our community for the intent, strength, and dedication we have collectively shown in supporting each other and in making our program better. Our CMB community had a productive 6 months despite the odds, and I am excited to update you on new happenings and our plans for moving forward.

The CMB Annual Symposium was held on May 17th. I am grateful to the Symposium Committee for creatively setting up a virtual format that was efficient and engaging. This year's symposium featured a Myron Levine Keynote Lecture by Dr. Jodi Nunnari, Distinguished Professor and Department Chair of Molecular and Cellular Biology at UC Davis, and a virtual poster session featuring the latest research from our student community.



From the Director (continued):

I congratulate Ariel McShane for being awarded this year's Outstanding Student Service award, for going well beyond expectations in ensuring the success of events that are essential for maintaining the CMB community, including the CMB Fall retreat and student recruiting. I also congratulate the many CMB students who received recognitions, including Brandon Chen for the NSF GRFP and the DoD NDSEG fellowship, Ginette Balbin-Cuesta for the ASH Minority Graduate Award, Anna Michmerhuizen and Sumin Kim for Rackham Predoctoral Fellowships, and Haley Amemiya for the Lipschutz, Host and Smith Award honoring outstanding scholarship and interest in the success of women in the academic community.

The newly formed CMB DEI Task Force, which includes faculty, student, and staff representatives, has gained momentum. We held our first "DEI month" this April, coordinating several activities including an excellent workshop on implicit bias by the Rackham team on Professional and Academic Development and an outstanding seminar on the cost of diversity by Dr. Bil Clemons, Professor of Biochemistry from Caltech. The committee took the lead in surveying the climate of the program, and in suggesting clear action items that we are in the process of implementing to continue building an inclusive community.

This summer, CMB welcomed over 15 new students into the program. True to CMB's philosophy, our new students integrate a wide range of biomedical research, using cellular, molecular, genetic, structural, in vivo, bioinformatic, and engineering approaches to study fundamental problems in areas including development, cancer biology, microbiome, and neurobiology. Our admissions and the recruiting committees, with involvement from many CMB faculty and students, organized successful recruiting events in a difficult year. Our students continue to be inspirational in the investment they have shown in the success of CMB, including in the feedback they have provided to better the program.

We also officially welcomed Lauren Perl as our Program Administrator. Lauren has been an integral part of CMB for the last few years, and I look forward to working with Lauren in this lead role as we move CMB forward.

CMB is moving into our 50th Anniversary year. During this half a century, we have built an extensive and highly successful group of alumni. We are continually working to build and maintain close connections with our alumni. I would love to hear about the impact our alumni are making in the world. Please reach out to us via email or our social media outlets, including the newly minted and student-run @UMichCMB on Twitter. Tell us what's new, give us your suggestions, and help us in this effort.

With warm regards,



Manoj Puthenveedu, MBBS, PhD

“Our students continue to be inspirational in the investment they have shown in the success of CMB, including in the feedback they have provided to better the program.”

***-Manoj Puthenveedu,
CMB Director***

University of Michigan Emerges From COVID-19 Crisis

Chris Bidlack

Life is returning to normal at the University of Michigan and across Washtenaw County.

On May 14th, the Centers for Disease Control and Prevention announced that fully vaccinated Americans could put away their masks and resume nearly all the activities they had postponed for the past year and a half.

At the beginning of the year, however, a desperate race was underway to vaccinate Americans with the swiftly-developed Pfizer and Moderna vaccines. Michigan Medicine began inoculating community members in December. By New Year's Day, the Michigan Stadium was converted into a vaccination clinic. The push to vaccinate Ann Arbor residents was largely successful. At press time, Michigan Medicine had administered more than 136,000 doses of Pfizer and Moderna vaccines. The Washtenaw County Health Department reports that 57.4% of Washtenaw residents 16 and older completed the full vaccination series.

The pandemic, meanwhile, took a grim toll on lives and livelihoods. On February 22, President Joe Biden ordered all flags on federal property to be flown at half-mast to remember the 500,000 Americans who had died from COVID-19. By the end of May, the United States had suffered 590,000 fatalities, and more than 20,000 of those fatalities occurred in Michigan. The Washtenaw County Health Department confirmed that 288 residents died from laboratory-confirmed COVID-19 cases.



Alisha Spoelman (left), University of Michigan Class of '20, receives her vaccination at the Michigan Stadium on Jan. 21, 2021 (Photo Credit: C. Bidlack).

The University of Michigan outlined preventative measures in its Winter Term 2021 Plan to reduce viral transmission on campus. The University requested that undergraduate students stay home and attend classes virtually, if feasible, and nearly 90% of all classes took place online. In addition, students opting to live in University housing were required to take weekly COVID-19 tests. Any student found in violation of the 2021 Plan could face penalties including loss of their housing contract. Later in the semester, students who obtained proof of vaccination were exempted from weekly testing.

The University's actions paid off. By the end of April, COVID-19 cases on campus represented just 4 percent of the total cases in Washtenaw county, which was down from 27 percent in early March according to the University's COVID-19 dashboard. With a decline in coronavirus cases, the University allowed graduating seniors to attend commencement ceremonies in the Michigan Stadium on May 1. For the Fall 2021 semester, students returning to the University of Michigan will be required to show proof of COVID-19 vaccination.

Research at the University was also carried out under strict regulations. At the beginning of 2021, research labs affiliated with Michigan Medicine could only operate at 60 percent personnel capacity, and all researchers were required to wear masks while working. Any employees who could work from home were strongly encouraged to do so. As COVID-19 cases dropped, the research labs were allowed to operate at full capacity by April 1. Researchers must still maintain six feet of social distance and wear masks, but work life has largely resumed.

Meanwhile, the Cellular and Molecular Biology program operated virtually. The student seminar once again took place on Zoom in the Winter term. After a hiatus last year, the CMB 39th Annual Poster Symposium resumed on May 17 as a virtual conference. Student committees also continued to hold events virtually. The Diversity, Equity, and Inclusion (DEI) Task Force held its inaugural DEI month in April, which included virtual book discussions, implicit bias training, and other events. In addition, preliminary exams and thesis defenses took place virtually. As a result, 16 CMB students advanced to candidacy and 7 doctoral students defended their theses.

As for Ann Arbor, local businesses and activities are recovering from the pandemic. The State of Michigan awarded

(Continued on page 4)

(Coronavirus, Continued)

grants totaling \$55 million to Washtenaw county businesses, according to MLive reporting. In addition, local entrepreneur and former CEO of Espresso Royale, Dave Lin, started the COVID Rescue Fund to provide financial assistance to small business owners who were forced to close their doors. The Ann Arbor Arts Festival, which was cancelled last year, is scheduled to take place July 15-17 as restrictions on outdoor events are lifted.

Currently, scientists across the country are working to determine how long COVID-19 vaccine immunity lasts, and when booster shots will be required for new strains of the virus. For now, however, normalcy is returning. ■



The Michigan Stadium displays the total number of vaccines administered as of Jan. 21, 2021 (Photo Credit: C. Bidlack).

***“I personally think the cultural and academic environment at UM is one of its great strengths”
-Ariel McShane, 4th-year CMB Student***

CMB Recruitment Adapts to Virtual Format

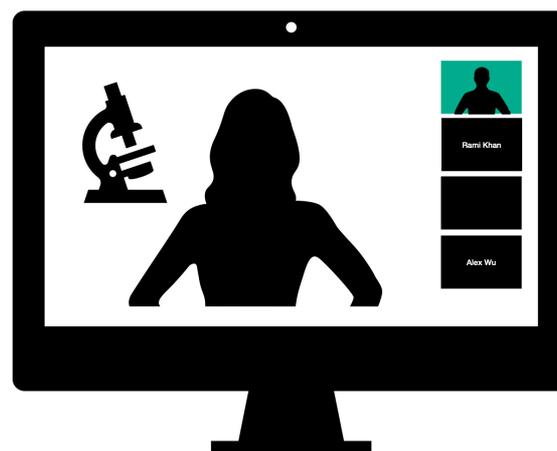
Sarah Connolly

Back in 2020, CMB’s recruitment was one of the last program events to take place before the COVID-19 shutdown. Prospective students were flown in from across the country to meet with faculty and current students and to get an idea of life in Ann Arbor. This year, recruitment took place virtually with interviews and other social activities happening over Zoom.

Although recruitment was switched to a virtual format, CMB worked to retain the experience of past recruiting weekends. Ariel McShane, a 4th year student and member of the recruitment committee, noted that one of the biggest challenges of the virtual format was conveying a sense of the atmosphere at UM. “I personally think the cultural and academic environment at UM is one of its great strengths, and as such is something that we really tried to convey during our events and interactions with students, but of course this is not quite as easily done as experiencing it first hand,” said McShane.

The recruitment weekends began on Thursday, as interviewees were welcomed by PIBS and had their first faculty interviews. They then had a chance to interact with fellow recruits and current CMB students during a gathering on the online platform Sococo. On Friday, after the prospective students met with their remaining faculty interviewers, they attended CMB student-led social events featuring the online game, Among Us, and trivia. The weekend rounded out on Saturday with a poster session and student organization information fair.

Despite the challenges of a virtual recruitment, McShane received positive feedback from recruits saying that “they liked our approach to the recruitment weekend...the timing and the abundance of breaks between Zoom sessions was greatly appreciated.” Additionally, McShane felt that the virtual format increased accessibility for students. ■

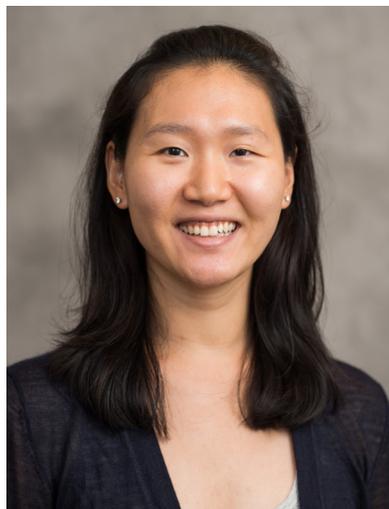


CMB DEI Task Force Gives Updates

Sumin Kim, Brandon Chen, Haley Amemiya

Following up from the Newsletter's profile article in the Fall semester, members of the CMB DEI Task Force write about their achievements and plans for the program.

The goal of the Cellular and Molecular Biology program DEI Task Force is to implement tangible, long-lasting commitments to improving diversity, equity and inclusion in the CMB community.



Sumin Kim



Brandon Chen



Haley Amemiya

To place DEI awareness at the forefront of the program, we worked with CMB leadership to require diversity statements for incoming faculty and updated the CMB Handbook to integrate a statement of commitment to DEI. We invited guest DEI speakers in CMB 850 and the CMB retreat to discuss structures of inequity in academia. We have built application resources for incoming students on the CMB website, and created a CMB twitter account which will highlight the diversity and achievements of the CMB student body and promote our Task Force's events.

As part of our continued efforts to pursue discussions on DEI topics and to better support the students, we designated April as the "CMB DEI Month". During our inaugural CMB DEI month, we planned weekly events, including offering free headshots and office supplies for students. We provided books focused on diversity and offered opportunities to engage in discussion. This year, the books we chose were Degrees of Difference (Kimberly McKee and Denise Delgado), Fatal Invention (Dorothy Roberts), Wolfpack (Abby Wombach), The Racial Healing Handbook (Anneliese Singh), Real Life (Brandon Taylor), and How to Be an Antiracist (Ibram X. Kendi). All of these books were purchased from Black Stone Bookstore, a local black-owned business. We also sought to provide program-wide training and discussions on topics related to DEI. In coordination with Rackham, we co-hosted an unconscious bias workshop. Our first CMB DEI month culminated in a seminar led by Dr. Bil Clemons, professor of biochemistry at the California Institute of Technology, to discuss lack of diversity in STEM in a historical context and jumpstart ongoing conversations on how to improve diversity and inclusion in academia, and more specifically, in our program.

We also designed and conducted a DEI climate survey to assess how students, faculty, and staff feel about the current environment within CMB. This survey was intended to identify areas that need improvement and to devise short- and long-term action items to be implemented in the CMB curriculum. The results of this survey revealed that while students and faculty feel respected in CMB, support for women—especially female students—and minorities are lacking. This survey and the resulting discussions among students helped us identify student support, community building, and transparency as critical areas that require urgent action. With this climate survey, we were able to engage in active discussions with CMB students and faculty to identify and prioritize focused areas for action: we worked with CMB students to brainstorm and formulate a list of short-, intermediate- and long-term actionable items, and expanded on this list based on discussions with faculty during the annual CMB Spring Symposium. We are currently working with CMB leadership to strengthen CMB's commitment to DEI and enforce these action items.

In coming years, we aim to facilitate continual discussions among students and faculty to help provide a safe space for everyone to share their stories and build a community. We plan to expand on the CMB DEI month programs, bring in more external speakers and workshops, and hold more frequent forums on the CMB DEI climate. In addition, we seek to encourage more faculty involvement; in order to ensure that tangible changes are made in the program, we need awareness and commitment from the entire CMB community in unison. It is our hope that the combined efforts of the CMB DEI Task Force and the broader CMB community will help build a diverse, equitable, and inclusive environment in CMB where different identities can be celebrated. ■

Student Profile: Jessica Waninger, PhD



This semester, we had the chance to catch up with Jessica Waninger after she defended her doctoral thesis. Jessica is a MSTP student who was co-mentored by Arul Chinnaiyan and John Tesmer.

Can you describe your path to earning your doctoral degree and some of your mentors along the way? My educational journey has been pretty unique, and there are a handful of people that deserve so much credit for helping me get to this point. The first person to play a major role in my educational development was someone by the name of Mrs. Patty. Adequate understanding of her role in my life requires some background.

At the age of 14 my mother abruptly removed me from school and moved us to Texas to join a fanatic religious group. They didn't believe in education, and I was never re-enrolled. I tried to teach myself and the other kids in the compound, but I met a lot of resistance and didn't make it much past the courses I was taking when I was originally taken out. After two years, we found a way to leave, but by that time, I was two years out of school and dealing with both my mom's and my own trauma. When I turned 16, I got a full-time job at Sonic to help pay for things at home and support myself. I was working 50-60 hours a week, and one of my managers at the time, Mrs. Patty, was the only person to ask why I was there all day every day. She saw my potential and told me I could do more with my life. Her encouragement led me to get my GED, and then I enrolled in school online at Kaplan University.

The second person that played a monumental role in my educational development was Dr. Ahmad Galaleldeen (we called him GD). I enrolled in his general biology class at random in the first senior year of my undergraduate degree. After our first exam, GD sat me down in his office and asked me what I was doing with my life. I was a college athlete at the time (cross country, triathlon, track & field) and didn't really have any plans for my future. That day in his office he told me I should get a Master's degree, and I laughed at the idea. I didn't think I was capable - after all, I didn't have a real high school diploma or ACT/SAT scores. Over time, GD steadily taught me to think bigger and believe in myself. The Master's degree became a PhD, and the PhD became an MD/PhD. He believed in me in a way that no one else in my life ever had and pushed me to reach my potential. He helped me apply for summer research positions, prepare for talks and poster sessions, and challenged me to not settle. He is a quintessential mentor, and I would not be here in the MSTP without him.

Other influential figures in my educational development were Dr. David Pinsky and Dr. Ron Koenig. The summer before my final senior year at St. Mary's University I did a summer pre-MSTP research program at Michigan in Dr. Pinsky's lab. During this time I learned a lot about what it meant to be an MD/PhD. Dr. Pinsky is very busy as one of the directors of the CVC at Michigan but he was never too busy to be a good mentor. At the end of my rotation, I sat down in his office, and he spent a few hours helping me tell my story in my personal statement for MSTP applications. In addition to Dr. Pinsky, I have so much gratitude for Dr. Ron Koenig, the former director of Michigan's MSTP. There were plenty of people that were better on paper than I was, but he gave me a chance to make a new future for myself.

What experiences before your time at University of Michigan helped prepare you for the MSTP program?

I didn't have the same level of clinical exposure that many applicants have, but I did have quite a bit of research experience. I decided to pursue an MSTP late in my undergraduate career, so with GD's guidance, I worked very hard to build my resume over a short time frame. Between the summer of 2013 and summer of 2014, I attended 5 conferences, submitted abstracts to various competitions across the country, did 2 summer research programs, and applied for 2 research fellowships to help fund my research during the academic year. All of these experiences really helped to prepare me for graduate school. I learned how to communicate science, plan and execute experiments independently, and troubleshoot problems when they arose.

Do you have any advice for current graduate students, or anyone thinking about graduate school, who might have similar life experiences to yours?

To current graduate students: Make sure to always advocate for yourself and surround yourself with people who will provide mentorship and advice. Graduate school is tough and can be difficult to navigate. It's always better to better to utilize the experience of those that have gone before you than suffer alone.

To others considering graduate school with similar life experiences: Don't let your past determine your future. It is so hard to believe that you can accomplish something that no one else around you (family, friends, etc.) has. I was the first person in my family to apply to medical school or complete a PhD, and it was challenging to do it on my own without an example to follow or support. It's really important to surround yourself with people that understand your goals and have walked the road before you because when things get hard (and they will), you need to have people to support you and help you continue to move forward. ■

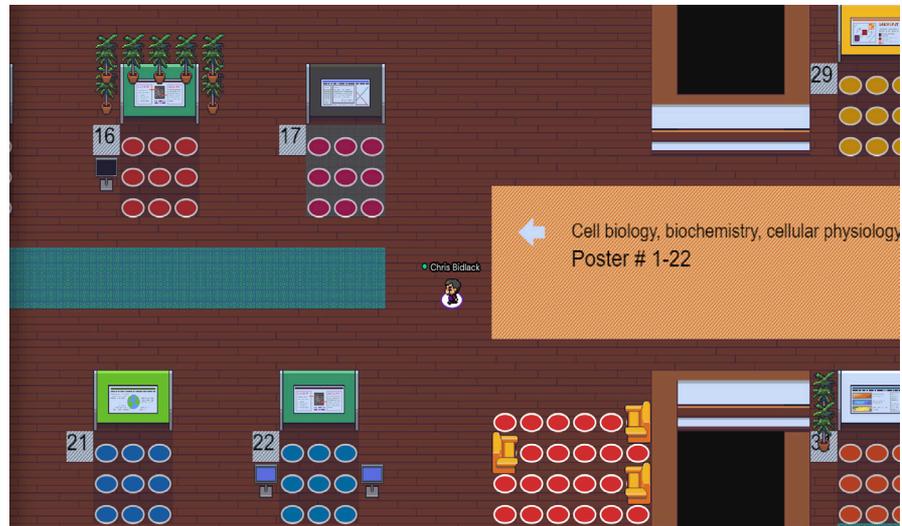
CMB Symposium Returns

Chris Bidlack

Nearly 60 presenters took part in the Cellular and Molecular Biology 39th Annual Symposium on May 17. The event returned after a hiatus last year but remained virtual due to COVID-19 restrictions.

“Planning a virtual symposium was certainly a challenge this year,” said Lauren Perl, CMB administrator. “Many people had some anxiety about the idea of presenting virtually, and I found myself answering a lot of nervous questions [from presenters],” she said.

“We chose a platform called Gather.Town, because it allowed people to use avatars to walk around a map of a poster hall,” she added. “You could either interact with posters, or walk up to a presenter’s or multiple people’s avatars, to open a Zoom video chat. We liked this program’s ability to simulate more of a social environment, rather than having people wait in Zoom breakout rooms with little ability to move around and chat.



The writer’s avatar explores the Gather.Town poster session (Photo Credit, C. Bidlack).

“Some people still found it difficult to find their posters, but then, that might be the case in an in-person situation anyway. Overall, it was clear that people were having some really good conversations, and generally found the 90’s video game-style interaction fun and engaging,” Perl said.

The Myron Levine Keynote Lecturer, Dr. Jodi Nunnari of University of California, Davis, joined the symposium over Zoom. Dr. Nunnari discussed her research in mitochondrial structural biology and genomics to an audience of 158 researchers.

Symposium participants welcomed 14 new first-year students into the program, and recognized students who passed their preliminary exams or thesis defenses. In addition, 4th-year student Ariel McShane was awarded the Student Service Award for her contributions to the CMB program.

The CMB Diversity, Equity, and Inclusion Task Force also led a Zoom discussion which drew 167 students and faculty. Task force representatives Sumin Kim and Allyson Munneke presented climate survey findings from a recent poll sent to the CMB community. Kim and Munneke reported that most students and faculty feel valued and treated with respect. At the same time, many respondents indicated that support for underrepresented minorities and women is lacking. Participants broke into small groups to talk about this issue. ■

Winter/Spring CMB Thesis Defenses

Haley Amemiya (Peter Freddolino, mentor)
“Functional and Mechanistic Characterization of Heterochromatin-like Domains in Bacteria”

Jessica Waninger (Arul Chinnaiyan & John Tesmer, co-mentors)
“Targeting RAS and EGFR Driven Cancers”

Noah Steinfeld (Lois Weisman, mentor)
“Roles and Regulation of the Lipid Kinase, Vps34”

Elaine Liu (Andrew Lieberman, mentor)
“Mechanisms of Neurodegeneration in Niemann-Pick Type C Disease”

Andrew Valesano (Adam Lauring, mentor)
“Using intrahost genetic diversity to understand RNA virus evolution and transmission”

Brian McGrath (Stephanie Bielas, mentor)
“Histone H2A Mono-Ubiquitination in Neurodevelopmental Disorders: Molecular Insights from Rare Genetic Variants”

Hillary Warrington (Scott Leiser, mentor)
“Regulation of stress-induced longevity”

Getting to Know You New CMB Faculty (2020-21)



Janet Smith, PhD
Biological Chemistry
Biophysics
Center for Structural
Biology, UM LSI

Why did you decide to join the CMB Program? Our research is fundamentally molecular, but proteins live in cells, so our work touches on cell biology. I've been impressed with the CMB students I've encountered over the years and was pleased when Bob Fuller encouraged me to apply.

What are your research interests? We seek to understand how proteins carry out their biological functions at the molecular/atomic level by determining 3D structures and combining this information with biochemical and other assays of function. Projects include a virulence factor from flaviviruses, two host antiviral proteins, and - on a different topic - biosynthetic enzymes for bio-active natural products.

What is a fun fact about you? I'm a foodie! But since restaurants have been off-limits, I've rediscovered the pleasure of cooking.

What advice do you have for incoming graduate students? Figure out what science most excites you and go for it!

Why did you decide to join the CMB Program? The talented graduate students. CMB is the flagship, largest program of PIBS that I think attracts some of the most creative, passionate and hardworking graduate students in the biomedical sciences in the country. I want to work with these students so that they can push the edge of vision sciences and help devise new treatments for blindness.

What are your research interests? We study how the chemical modifications to chromatin and RNA regulate transcription during retinal development and disease, including in cancer.

What is a fun fact about you? As a physician-scientist, I care for patients with retinal vision in the clinic and operating room, and they inspire and motivate me to build a research team that can help us understand the origins of retinal disease and devise better treatments using regenerative medicine principles.

What advice do you have for incoming graduate students? Science is a marathon, not a sprint. It takes time and effort, both on the knowledge and technical side, to succeed and perseverance and ability to learn from mistakes are the most valuable skills in the field. Reading widely and being curious will keep you "coming back for more".



Rajesh Rao, MD
Ophthalmology and
Visual Sciences



**Yu Leo Lei, DDS,
PhD**
School of Dentistry
Department of
Otolaryngology-
Head and Neck
Surgery

Why did you decide to join the CMB Program? I would like to have an opportunity to interact with the amazing CMB students.

What are your research interests? We study innate immune sensors. The main stake of cancer immunotherapy had focused on T-cells. However, we have found that oncogenes and oncogenic viruses can disable the innate immune sensing circuitry, which is the very first step of generating anti-tumor immunity. We examine the mechanisms underpinning the regulation of innate pattern recognition receptors and develop immune engineering approaches to prime cancers for T-cell-targeted immunotherapy.

What is a fun fact about you? I used to take a lot of pictures and watch many movies but have become hobby-less since I became a faculty member (but not fun-less though).

What advice do you have for incoming graduate students? Do not always try to pick a "safe" project, it may also mean it is not innovative enough.

Getting to Know You New CMB Faculty (2020-21)



**Goutham Narla, MD,
PhD**

Human Genetics
Division of Genetic
Medicine,
Department of
Medicine

Why did you decide to join the CMB Program? I decided to join the program because of the incredible breadth and depth of research being done by both trainees and faculty in CMB. Given that I'm a relatively new recruit here to the University of Michigan, being part of the CMB program has allowed me to form new collaborations and get to know other faculty members and trainees. I have really enjoyed the collaborative nature of the CMB faculty and also the attention and time spent mentoring and supporting our graduate students

What are your research interests? My research interests are in understanding the mechanisms of tumor suppressor gene inactivation in human cancer both by genetic and non genetic mechanisms and then to develop pharmaceutically tractable ways to reactivate these tumor suppressor proteins therapeutically. Specifically, my research laboratory focuses on the study of the serine/threonine tumor suppressor phosphatase PP2A and its role in human cancer. We have developed a unique series of small molecule activators of this phosphatase and have demonstrated across a series of preclinical models significant anti-cancer activity.

What is a fun fact about you? I love to cook and eat at great restaurants. I have eaten to date at 18 Michelin 3 star restaurants around the world, and I am always trying to recreate my favorite dishes from those restaurants at home.

What advice do you have for incoming graduate students? Find a research question that you are passionate about and then fully immerse yourself in that project and let the data guide your direction. It makes research that more fun and fulfilling.

Why did you decide to join the CMB Program? I joined the CMB Program to have more interaction with graduate students, as I have a passion for mentorship and training the next generation of scientists. I also appreciated having a large community of students and faculty for interaction about scientific ideas, and to develop potential collaboration.

What are your research interests? My lab studies the genes and developmental pathways that lead to inherited eye disorders and syndromes associated with eye defects. We use a combination of genomic sequencing and mouse and cell culture models to define new genetic causes for glaucoma, refractive disorders, congenital cataracts, and inherited retinal diseases. Our work then seeks to define the function of a subset of these genes in ocular development and disease.

What is a fun fact about you? I'm an avid tennis player, and play in competitive USTA leagues around Ann Arbor.

What advice do you have for incoming graduate students? My advice for incoming graduate students is to keep an open mind regarding research projects and ideas, and don't be afraid to take risks. I would also recommend to not be shy to ask for help and feedback from colleagues and faculty; everyone at UM is exceptionally open and happy to help.



**Lev Prasov, MD,
PhD**

Human Genetics
Ophthalmology
and Visual
Sciences

Getting to Know You New CMB Faculty (2020-21)



Stephanie Moon, PhD

Human Genetics
Center of RNA
Biomedicine

Why did you decide to join the CMB Program? I was excited to join the CMB Program because of the breadth of diverse and interdisciplinary research represented in the group. It is a great way to connect with trainees and faculty from many different departments that are all interested in addressing research problems in molecular and cellular biology.

What are your research interests? We study how RNA is regulated when human cells experience stress conditions in healthy and diseased contexts. We are focused on identifying how changes in RNA regulation could drive neurodevelopmental and neurodegenerative disorders using cell culture model systems.

What is a fun fact about you? I ate lunch next to André 3000 at the Atlanta airport.

What advice do you have for incoming graduate students? I would advise graduate students to make an effort to develop connections with other labs and PIs throughout their training. Developing an informal network can help you when you need advice, professional/career development resources, and inspire new collaborations that can be really beneficial for your research.

Why did you decide to join the CMB Program? I rejoined CMB in 2020 when Dylan Bartikofsky, a CMB student (now alumnus), joined my lab.

What are your research interests? My laboratory is interested in enterotropic viruses (specifically norovirus, astrovirus, SARS-CoV-2) and the mechanisms of virus – host interactions using a combination of cell culture, intestinal organoids and mouse models. Our goal is to perform comparative studies between murine norovirus and human norovirus to better understand similarities and differences between these closely related viruses. In addition, we study human astroviruses and SARS-CoV-2 to identify features common among viruses infecting the gastrointestinal tract. Our long-term goal is to identify conserved features important during enteric virus infections, including new drug targets that may lead to the development of effective prevention and control strategies for these highly prevalent viruses that cause gastroenteritis.

What is a fun fact about you? I have now reached the point in my life where I have lived half of it in Germany/East Germany and the other in the US.

What advice do you have for incoming graduate students? It is never too early to start building connections with different people from all levels and frequently reach out to that network of peers, mentors, advocates, etc. during your career.



Christiane Wobus, PhD

Microbiology and
Immunology

Additional new CMB faculty (2020-21): **Gabriel Corfas** (Kresge Hearing Research Institute, Department of Otolaryngology-Head and Neck Surgery); **Morgan DeSantis** (Molecular, Cellular, and Developmental Biology); **Indika Rajapakse** (Computational Medicine and Bioinformatics, Biomedical Engineering, Department of Mathematics, LSI, Michigan Institute for Data Sciences)

Congratulations!

CMB Student Service Award (Winter):

Ariel McShane (mentor: Mats Ljungman)

CMB Student Service Award (Fall):

Rosa Menjivar (mentor: Marina Pasca Di Magliano)

Haley Amemiya (mentor: Peter Freddolino)

Rackham Predoctoral Fellowship:

Anna Michmerhuizen (mentor: Corey Spears)

Sumin Kim (mentors: William Dauer, Sami Barmada)

NSF Graduate Research Fellowship:

Brandon Chen (mentors: Yatrack Shah, Costas Lyssiotis)

2021 National Defense Science and Engineering Graduate Fellowship:

Brandon Chen (mentors: Yatrack Shah, Costas Lyssiotis)

Lipschutz, Ayers Host and Olcott Smith Award:

Haley Amemiya (mentor: Peter Freddolino)

American Society in Hematology

Minority Hematology Graduate Award:

Ginette Balbin-Cuesta (mentor: Rami Khoriaty)

Advanced to Candidacy

Brandon Chen

mentors: Yatrack Shah,
Costas Lyssiotis

Sarah Connolly

mentor: Melanie Ohi

Margaret Durdan

mentors: Megan Weivoda,
Evan Keller

James Haggerty-Skeans

mentor: Sriram Venneti

Maha Hamed

mentor: Mara Duncan

Evie Henry

mentor: Scott Pletcher

Wesley Huang

mentor: Yatrik Shah

Harihar Mohan

mentor: Henry Paulson

Matt Pun

mentor: Sriram Venneti

Brynne Raines

mentor: Goutham Narla

Charles Ryan

mentor: Stephanie Bielas

Shannon Miller

mentor: Peter Todd

Melissa Seman

mentors: Kaushik Ragunathan,
Sundeep Kalantry

Katy Speckhart

mentor: Billy Tsai

Angela Tuckowski

mentor: Scott Leiser

Gunseli Wallace

mentor: Gabriel Corfas

Joined CMB

Ruth Azaria

mentor: Megan Weivoda

Sam Collie

mentor: Carole Parent

Adele Correia

mentor: Andrew Lieberman

Najia Elkahlah

mentor: Josie Clowney

Carina Elvira

mentor: Paul Jenkins

Jacqueline Forson

mentor: Ryan Baldrige

Jordan Machlin

mentor: Arielle Shikanov

Charles Nino

mentor: Corey Speers

Amanda Orosco

mentor: Pierre Coulombe

Kendall Perkins

mentor: Paul Jenkins

Narges Pourmandi

mentor: Costas Lyssiotis

Sonya Royzenblat

mentor: Peter Freddolino

Madeline Shay

mentor: Nicole Koropatkin

Nicholas Vangos

mentor: Michael Cianfrocco

Jonathan Williams

mentor: Jayakrishnan
Nandakumar

Josephine Wu

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