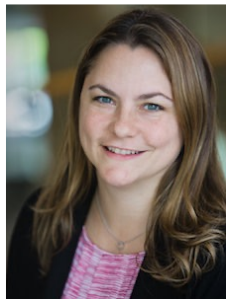




A message from our director, Dr. Christine Dunham:



Welcome to the incoming class of BCDB first year graduate students! We are excited to have you join our BCDB community and we look forward to your time in our program.

This year's incoming class brings fourteen PhD and two MD/PhD students from all over the US and around the world. We are proud that this group is one of the most diverse classes we have ever recruited to our community. These students additionally have a rich diversity in their research experiences, and participation in outreach and teaching. We are excited to have them in the BCDB program and we look forward to the amazing things they will accomplish at Emory.

I want to thank Jennifer Kwong and the Admissions Committee Members for their leadership in identifying the best and brightest graduate students for our program. Thanks to everyone involved for convincing these students that the BCDB program is the best place for them to grow as scientists. I wholeheartedly encourage all faculty to be involved in the Admissions process in the future as it is not only one of the most important missions of our graduate program, it is also an incredibly fulfilling opportunity to recruit such outstanding graduate students to BCDB.

As most of you know, I have been involved with BCDB in a variety of different roles since joining Emory. I became the Director of Graduate Studies (DGS) in 2020 during a difficult time for all of us. We have always had a strong community in BCDB and the COVID pandemic threaten to disrupt this. While it now looks like we are past the worst of the disruption caused by the pandemic, I look forward to coming together more often as a community as we previously did under the excellent leadership of many before me. I took over the Directorship of BCDB in 2021 from Mike Koval who did a great job in leading our program over the past 8 years. I know that both BCDB faculty and students are excited to come together again as a community starting with several social events organized by the BCDB Social Committee leaders Yasmin Ibrahim, Lexie Snyder, Heidi Ulrichs and Paul Zakutansky, the BCDB Retreat (August 27th-28th), and the BCDB Meet and Greet on August 31st. As always, we respect and are mindful of the different needs of our community in keeping safe from COVID, especially our faculty and students with young children or immunocompromised family members.

Our mission in the BCDB program is to be an inclusive community that trains the next generation of scientists to perform impactful research. Our research is centered on understanding the molecular basis of life, from fundamental biomolecular research to translational studies in an interdisciplinary environment. We acknowledge that this diversity and excellence in research is not mutually exclusive and, in fact, enriches our program. We excel at individualized advising and holistic mentoring that not only benefits the scientific community but also benefits society. We value scientific outreach and service to other communities and recognize the importance of teaching. I am proud to lead a program that values these attributes and I truly look forward to the 2022-2023 BCDB academic year.

Faculty Spotlight



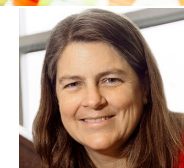
Gary Bassell, Ph.D. joined the Emory faculty in 2005 and has been chair of the Department of Cell Biology since 2015. Gary serves as the Scientific Director of the Emory Stem Cell Core and member of the Integrated Cellular Imaging Core's executive committee. Dr. Bassell's laboratory has major interests to elucidate cellular and molecular mechanisms of mRNA transport and local translation in neurons, and how these mechanisms go awry in neurological diseases. A particular area of expertise is live cell imaging of mRNA and kinesin motor dynamics. More recently, his lab has been active in the development of therapeutic strategies and to model genetic neurological disease using human patient iPSC derived neurons. Dr. Bassell has a strong commitment to mentorship, having trained and mentored numerous undergraduates, graduate students and postdoctoral fellows. Nine of his former postdoctoral fellows and/or graduate students are current faculty members in academia.



Hyojung Choo, Ph.D. joined the Emory faculty in 2017 as an Assistant Professor in the Department of Cell Biology. Choo's research focuses on the role of skeletal muscle stem cells that are required for normal function and maintenance. She uses neuromuscular animal models to study the role of stem cells for oral muscle pathophysiology, such as dysphagia and obstructive sleep apnea. Choo is an active member of BCDB where she has served as the Director of Diversity, Inclusion and Equity (DEI) of the BCDB Executive Committee since 2019 and as the co-Director of the Ethics Course. In both cases, Choo has made substantial contributions to DEI topics that have enriched our program.

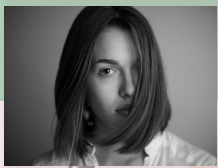


Chris Neufeldt, Ph.D. joined Emory in 2021 as an Assistant Professor in the Department of Microbiology & Immunology. His research focuses on understanding how virus infection manipulates host cells to enable virus replication and limit immune responses using integrated imaging techniques including electron microscopy and super-resolution light microscopy in combination with a range of molecular virology and cell biology tools. For positive-strand RNA viruses such as flaviviruses and coronaviruses, this involves reorganization of cellular membranes to create virus-induced organelles that compartmentalize virus genome replication and new virus particle formation. His research program is aimed at providing insights into how viruses engage and manipulate ER membranes, as well as uncovering novel cellular functions of the ER membrane net.



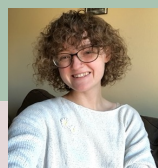
Congratulations to Dr. Anita Corbett on starting her new position as Senior Associate Dean for Research Emory College of Arts and Sciences (ECAS). Thank you for your service as BCDB's DGS!

Get to know our first years



GiGi Arias

Hometown: Atlanta, GA
Undergraduate institution: Jacksonville University
Spirit animal: Frogs- they are moisturized, glowing and growing, definitely the cutest squishes on the planet.
What are your research interests? Really anything protein or signaling cascade-related. Neuroscience has caught my attention recently (thanks to the Huberman Lab podcast). I love being a part of projects that people are passionate about!



Megan Hinrichsen

Hometown: Spencer, IA
Undergraduate institution: University of West Florida
Fun fact: I have never seen Star Wars.
Favorite thing about Atlanta: The parks and the aquarium!
Research interests: Structure of biological components (protein, mRNA)



Dory Fawwal

Hometown: Birmingham, AL
Undergraduate institution: Auburn University
Fun Fact: I did competitive Irish dancing and competed a few times in the National competition for North America!
Research interests: Broadly, I'm interested in biomedical development, but more specifically drug development/interactions and human medicine/disease treatment!



Cameron Russell

Hometown: Crowley, LA
Undergraduate institution: University of Michigan
Spirit Animal: A manatee, because it goes with the flow and isn't afraid to make a fool of itself.
Research interests: I'm interested in the structural biology of studying disease mechanisms and developing drug targets.



Ian Pyne

Hometown: Tolland, CT
Undergraduate institution: Duke University
Why did you choose Emory's BCDB program? I chose BCDB specifically because of the strong sense of community I got when touring there in the spring.
Research interests: My research interests are biochemical and structural in nature.



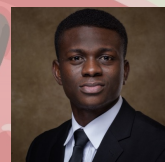
Sudipta Biswas

Hometown: Bhubaneswar, India
Undergraduate institution: National Institute of Science Education and Research(NISER), India
Fun Fact: If given a chance I could be your professional photographer for insta! But don't blame me if they turn out bad sometimes.
Research interests: Cytoskeletal dynamics. Proteins related to cytoskeletal dynamics, architecture and maintenance



Yessica Lopez Valdez

Hometown: Dalton, GA
Undergraduate institution: Berea College
Favorite thing about Atlanta: The copious amounts of food choices!
Research Interests: I am interested in antibiotic resistance bacteria research, as well as, molecular mechanisms of diseases like Alzheimer's or other pathogens.



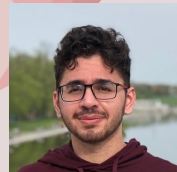
Enoch Ayamga

Hometown: Bolgatanga, Ghana
Undergraduate institution: University of Cape Coast, Ghana
Why did you choose Emory's BCDB program:
 Two reasons: 1. The faculty, scientific/academic infrastructure, and the location (in that order)
 2. Because they chose me and made me an offer that was simply irresistible.
Research interests: Biochemistry, Structural Biology, Antibiotics, Drug development



Don Eaford

Hometown: Blakely, GA
Undergraduate institution: Fayetteville State University
Spirit animal: Tiger : courageous, strong willed and ambitious
What are your research interests? I have a broad research interest in biochemistry and genetics. More specifically, cell regulation/signaling as well as gene expression.



Mohamed Barmada

Hometown: Austin, TX
Undergraduate institution: University of Pennsylvania
Favorite thing about Atlanta: Trae Young of the Atlanta Hawks.
Research interests: I'm interested in research involving studies of macromolecular interactions and how those interactions lead to cellular processes.



Nasab Ghazal

Hometown: Beirut, Lebanon
Undergraduate institution: Lebanese University
Fun Fact: I grew up in a village and my parents had chickens.
What is your favorite thing about Atlanta? Lovely weather in the fall and spring.
Research interests: Mitochondrial dysfunction and apoptotic pathways



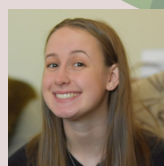
Shuristeen Joubert

Hometown: Albuquerque, NM
Undergraduate institution: University of New Mexico
Spirit Animal: Slow Loris- It is the only primate with venom. They eat rice balls but could kill you.
Why did you choose Emory's BCDB program? For the love the students and faculty not only had for the program but each other.
Research interests: The mechanisms of cell division, and flies lol



Brandon Wehmiller

Hometown: Bedford, IN
Undergraduate institution: Indiana University - Bloomington
Why did you choose Emory's BCDB program? I chose Emory's BCDB program due to the support that the faculty and students presented during the recruiting process. The facilities are top-notch and the research being performed peaked my interests.
Research interests: My research interests lie within the biomedical field.



Anna Williams

Hometown: Raleigh, NC
Undergraduate institution: East Carolina University
Spirit animal: An otter, they are inherently curious which is something I relate to and love being in the water.
Research interests: I am really interested in cell signaling, cell cycle regulation, intracellular transport, stem cell biology, and tumor growth.



Anthony Gacasan
 MD/PhD student

Hometown: Austin, Texas
Undergraduate institution: Texas A&M University
What is your spirit animal? The Elephants because they're strong, smart, and family oriented.
Why did you choose Emory's BCDB program? Because of the faculty, the training, and great reviews from my peers and mentors.
Research interests: The Gut Microbiome, Metabolomics, and chronic GI diseases.



Chieme Ohanele
 MD/PhD student

Hometown: El Dorado Hills, CA
Undergraduate institution: University of Pennsylvania
What is your favorite thing about Atlanta? I love being able to find new things to do in my free time! From Cascade to the Starlight drive in, there is so much to learn and love about the city!
Research interests: I am interested in mechanistic cellular biology with applications to human health and disease

Recent BCDB Publications

- * Congrats to BCDB student Sarah Strassler (Conn Lab) on her first author review published in *JBC!* [Tied up in knots: Untangling substrate recognition by the SPOUT methyltransferases](#). Strassler SE, Bowles IE, Dey D, Jackman JE, Conn GL. Journal of Biological Chemistry. 2022:102393. Epub 2022/08/22. doi: 10.1016/j.jbc.2022.102393. PubMed PMID: 35988649.
- * Congrats to BCDB student Paul Zakutansky (Feng Lab) on his first author review published in *Cells!* [The Long Non-Coding RNA GOMAFU in Schizophrenia: Function, Disease Risk, and Beyond](#). Zakutansky PM, Feng Y. Cells. 2022;11(12). doi: 10.3390/cells11121949. PMID: 35741078.
- * Congrats to BCDB student Lee Cato (Ortlund Lab) on his first author paper published in *J Med Chem!* [Differential Modulation of Nuclear Receptor LRH-1 through Targeting Buried and Surface Regions of the Binding Pocket](#). Cato ML, Cornelison JL, Spurlin RM, Courouble VV, Patel AB, Flynn AR, Johnson AM, Okafor CD, Frank F, D'Agostino EH, Griffin PR, Jui NT, Ortlund EA. Journal of medicinal chemistry. 2022;65(9):6888-902. Epub 2022/05/04. doi: 10.1021/acs.jmedchem.2c00235. PubMed PMID: 35503419.
- * Congrats to BCDB student Monica Cortez (Melikian Lab) on her first author paper published in *Rhizosphere Biology!* [Quorum Sensing in the Rhizosphere](#). Cortez M, Handy D, Headlee A, Montanez C, Pryor S, Cutshaw K, Vanselow K, Perez A, Weissman J, Ziegler E, Wheeler B, Palmer A. Quorum Sensing in the Rhizosphere. In: Horwitz BA, Mukherjee PK, editors. Microbial Cross-talk in the Rhizosphere. Singapore: Springer Nature Singapore; 2022. p. 99-134.
- * Congrats to BCDB student Liz Dreggors-Walker (Ghalei Lab) on her first author paper published in *JBC!* [Studies of mutations of assembly factor Hit 1 in budding yeast suggest translation defects as the molecular basis for PEHO syndrome](#). Dreggors-Walker RE, Cohen LN, Khoshnevis S, Marchand V, Motorin Y, Ghalei H. Journal of Biological Chemistry. 2022:102261. Epub 2022/07/18. doi: 10.1016/j.jbc.2022.102261. PubMed PMID: 35843310.
- * Congrats to BCDB student Kate Hutchinson (Reines Lab) on her first author paper published in *Curr Genet!* [Nab3 nuclear granule accumulation is driven by respiratory capacity](#). Hutchinson KM, Hunn JC, Reines D. 2022. Epub 2022/08/04. doi: 10.1007/s00294-022-01248-w. PubMed PMID: 35922525.
- * Congrats to BCDB student Hannah Hrnir (Gracz Lab) on her first author review published in *Gastro Hep Advances!* [Cellular and transcriptional heterogeneity in the intrahepatic biliary epithelium](#). Hrnir HR, Gracz AD. Gastro Hep Advances. 2022. doi: 10.1016/j.gastha.2022.07.015.
- * Congrats to BCDB student Sara Sagadiev (Melikian Lab) on her middle author paper published in *iScience!* [C910 chemical compound inhibits the trafficking of several bacterial AB toxins with cross-protection against influenza virus](#). Wu Y, Mahtal N, Paillares E, Swistak L, Sagadiev S, Acharya M, Demeret C, Werf SV, Guivel-Benhassine F, Schwartz O, Petracchini S, Mettouchi A, Caramelle L, Couvineau P, Thai R, Barbe P, Keck M, Brodin P, Machelart A, Sencio V, Trottein F, Sachse M, Chicanne G, Payrastre B, Ville F, Kreis V, Popoff MR, Johannes L, Cintrat JC, Barbier J, Gillet D, Lemichez E. iScience. 2022;25(7):104537. Epub 2022/07/01. doi: 10.1016/j.isci.2022.104537. PubMed PMID: 35769882; PMCID: PMC9234246.

Scientific Conferences: Tips for selecting and preparing to attend

Selecting the right conference

Many labs have established a common line-up of conferences to attend. It is always a good idea to ask your PI and lab members for suggestions of conferences they have enjoyed in the past.

To find conferences try these helpful links:

- * [Federation of American Societies for Experiment Biology \(FASEB\)](#)
- * [Gordon Research Conferences](#)

Sharing our research with our local research community is important! Emory offers some great local conferences including:

- * [DSAC Student Research Symposium](#)
- * [UGA-Winship Summit](#)

Funding your trip

Conferences can be costly due to registration fees, travel, and housing costs. To ameliorate these costs several resources are available for trainees:

- * Many conferences provide financial support for trainee lodging and travel – applications for these funds are often due several months in advance.
- * If you are on a T32 – plan FAR IN ADVANCE which conference you will attend. Attendance must occur while on the T32 for your trip to be covered by T32 professional development support funds (PDS).
- * LGS guarantees students [\\$2500 of PDS](#) and additional competitive PDS funds.

Poster printing

- * [Emory Document Services](#)
 - * Takes 48-72hrs if the document is received by 2pm
- * [FedEx Office Print & Ship Center](#)
 - * Next day or same day if order is placed before noon

Recent Fellowship Awardees

- * Congrats to First Year Student Dory Fawwal who was awarded a Woodruff Fellowship!
- * Congrats to First Year Students Gigi Arias, Don Eaford, Shuristeen Joubert, and Yessica Lopez Valdez who were awarded Centennial Scholars Fellowships!
- * Congrats to First Year Students Mohamed Barmada and Megan Hinrichsen were awarded Laney Graduate Student Fellowships!
- * Congrats to Carly Lancaster (Corbett and Moberg Labs) who was awarded a NIH NRSA F31 Fellowship!
- * Congrats to Hannah Hrnir (Gracz Lab) who was awarded a NIH NRSA F31 Fellowship!
- * Congrats to Lexi Snyder (Sarafianos Lab) who was awarded a NIH NRSA F31 Fellowship!
- * Congrats to Dariana Torres Rivera (Melikian Lab) who was awarded a NIH NRSA F31 Fellowship!
- * Congrats to Will McFadden (Sarafianos Lab) who was awarded an Achievement Rewards for College Scientists (ARCS) Fellowship!

Acknowledgements: This newsletter was written and compiled by Dr. Bo Liang, Paul Zakutansky, and Hannah Hrnir.