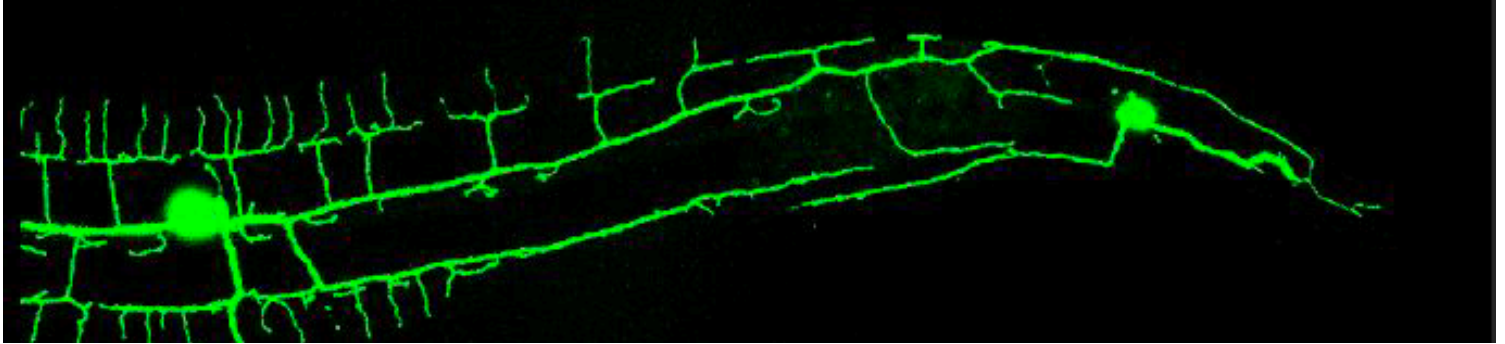


MOLECULAR BIOLOGY

NEWSLETTER

2025-2026



UPDATE FROM THE DEPARTMENT CHAIR

Dear Molecular Biology Alum of Colorado College,

We hope this newsletter finds you well, and you are enjoying your post-CC pursuits—whatever they may be! It's been nearly a decade since some of you have graduated and just a bit over a decade since the formation of the Department of Molecular Biology..., and a lot has happened in that time! In this newsletter, you'll meet some of our new department faculty and staff, hear from some alums and current students, and meet our department pets. We'd love to share your stories and accomplishments in future issues, so please be in touch. And don't be strangers—we'd love to see you on campus if you're in town!

Olivia Hatton

Chair, Department of Molecular Biology

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RESEARCH UPDATES: RECENT PUBLICATIONS & FACULTY SPOTLIGHTS



REVIEW ARTICLE | Full Access

Microsporidia: Pervasive natural pathogens of *Caenorhabditis elegans* and related nematodes

Spencer S. Gang, Vladimir Lažetić

First published: 03 May 2024 | <https://doi.org/10.1111/jeu.13027> | VIEW METRICS



mBio, 2022 Jan 11;13(1):e03443-21. doi: [10.1128/mbio.03443.21](https://doi.org/10.1128/mbio.03443.21)

An Antisense RNA Fine-Tunes Gene Expression of the Type II MazEF Toxin-Antitoxin System

Taylor Van Gundy^{1,2}, Edward Martin³, Jeremy Bono⁴, Olivia Hatton⁵, Meghan C Lybecker^{2,5,6*}

Editor: Pascale F Cossart⁷

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PMCID: PMC8749433 PMID: [35012340](https://pubmed.ncbi.nlm.nih.gov/35012340/)



G3 (Bethesda), 2025 Jun 16;15(8):jkaf139. doi: [10.1093/g3journal/jkaf139](https://doi.org/10.1093/g3journal/jkaf139)

Characterizing fatty acid oxidation genes in *Drosophila*

Juliana Geronazzo^{1,2*}, Abigail Heimer^{2,3}, Linnea Lindell³, Skye McCrimmon⁴, Clara Stormer⁵, Brooke Horvai⁶, Ian P. Johnson⁷, Tia M Peterson⁴, Jocelyn Zuckerman⁹, Anna I Scott^{10,11}, Meredith M Course^{12,7,3}

Editor: H Salz

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PMCID: PMC12341901 PMID: [40519079](https://pubmed.ncbi.nlm.nih.gov/40519079/)



G3 (Bethesda), 2021 Jun 18;11(8):jkab211. doi: [10.1093/g3journal/jkab211](https://doi.org/10.1093/g3journal/jkab211)

Genomic diversity, chromosomal rearrangements, and interspecies hybridization in the *Ogataea polymorpha* species complex

Sara J. Hanson^{1,2*}, Eoin Ó Cinnéide², Letal I. Salzberg³, Kenneth H Wolfe⁴, Jamie McGowan^{5,6}, David A Fitzpatrick^{7,8}, Kate Matlin⁹

Editor: J Berman

Author information | Article notes | Copyright and License information

PMCID: PMC8496258 PMID: [34849824](https://pubmed.ncbi.nlm.nih.gov/34849824/)

J Alzheimers Dis, 2025 Aug;106(3):903-910. doi: [10.1177/13872877251350112](https://doi.org/10.1177/13872877251350112). Epub 2025 Jun 16.

Presence of Alzheimer's disease variants in circular RNA of *PSEN1* and *PSEN2*

Ian P Johnson¹, Tia M Peterson¹, Kathryn Gudsnuk², C Dirk Keene³, Thomas D Bird^{4, 5, 6, 7}, Suman Jayadev^{4, 5}, Paul N Valdmanis⁴, Meredith M Course¹

Affiliations + expand

PMID: 40518825 DOI: [10.1177/13872877251350112](https://doi.org/10.1177/13872877251350112)



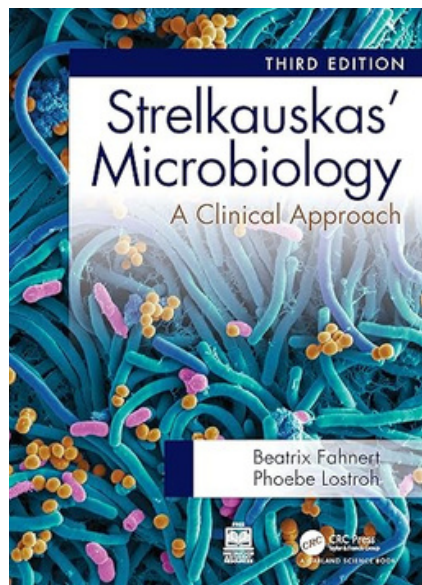
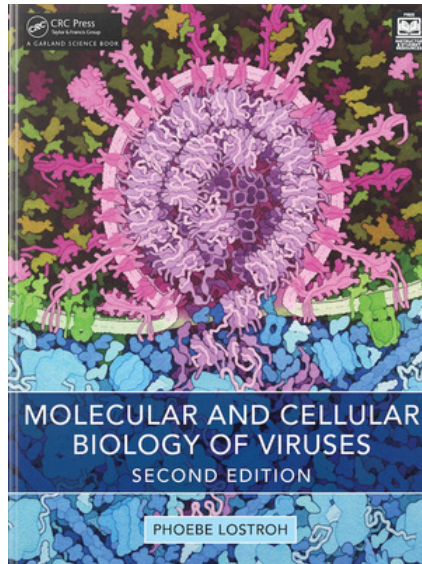
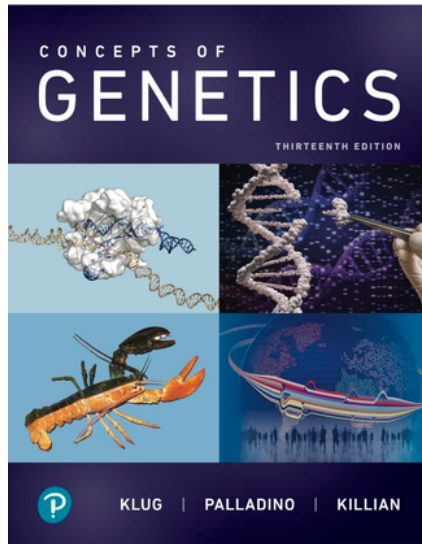
BMC Res Notes, 2021 Aug 14;14:311. doi: [10.1186/s13104-021-05730-5](https://doi.org/10.1186/s13104-021-05730-5)

CPB-3 and CGH-1 localize to motile particles within dendrites in *C. elegans* PVD sensory neurons

Kathrin Spendier^{1,2*}, Eugenia C Olesnick^{2,3*}, Daniel Forand², Margaret Wolf³, Darrell J Killian^{3,4*}

Author information | Article notes | Copyright and License information

PMCID: PMC8364092 PMID: [34391474](https://pubmed.ncbi.nlm.nih.gov/34391474/)



NEW FACES IN THE DEPARTMENT



Dr. Meredith Course joined us from the University of Washington in 2021. Her research focus involves identifying novel transcripts of *PSEN1* and *PSEN2* in circular RNAs from Alzheimer's disease.



Dr. Spencer Gang joined us in 2023 from UC San Diego. His research investigates innate immunity in pathogens to better understand host defense and infection-related stress tolerance in *C. elegans*.



Dr. Frederick Baker joined us in 2025 as the new Technical Director from Augusta University in Georgia. Dr. Baker received his PhD from Augusta University in Cellular Biology studying motor proteins.



Agnes Huang joined us in 2025 as the new Academic Administrative Assistant from Wilmington, North Carolina. She has an Exercise Science background and is pursuing an MBA.



Megan Bass '25 is the Molecular Biology Paraprofessional this year. Next, she will be pursuing a MSc in Applied Physiology, which she hopes will extend to a PhD in Molecular or Human Physiology.

ONWARD AND UPWARD: ALUMNI NEWS



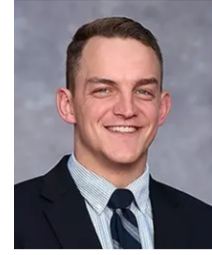
Ruby Lamb '23 is a second-year graduate student at the University of Washington Genetic Counseling Graduate Program.

In this program, Ruby has enjoyed the traditional medical genetics and counseling classes in addition to genetic counseling intern rotations in medical settings. After graduating, her focus will be geared toward research in genetic counseling supporting ethical and equitable medical genetics research.



Aidan Wells '24 moved to New York to pursue a PhD in Molecular Biology at New York University. After completing his first year in the

program, he joined the lab of Dr. Kris Gunsalus, which investigates RBP granules and small RNA pathways in a *C. elegans* germline. In his second year, Wells is using biochemical, *in vivo* genetics, and computational methods to address mechanistic questions central to the detailed workings of these pathways.



Sam Mathai '18 attended the University of Colorado Anschutz Medical School. After shadowing a surgeon at

Memorial North Hospital in Colorado Springs, Mathai fell in love with surgery. Currently, Mathai is completing his General Surgery residency at Rush University in Chicago. Mathai shared that he contributed a chapter on surgically relevant flatworms, roundworms, and flukes to a Parasitology textbook.

MEET OUR CURRENT STUDENTS



Ava Richey '28 is a sophomore MB major. Her favorite class is Immunology, and she is looking forward to taking Parasitology and a research block. Richey is pre-health with potential medical school plans.



Vanessa Perez '26 is a senior MB major. Her favorite class is Immunology, and she looks forward to presenting her senior thesis on MB day. Perez plans to continue pursuing biomedical research.



Edmund Davis '26 is a senior MB major. His favorite class is Parasitology and looks forward to MB Capstone. Davis plans to go to graduate school for education to be a high school biology teacher.

INTRODUCING OUR NEW LOGOS

This year, the department decided we wanted a new look to celebrate 10 years. We invited MB students, faculty, and staff to submit logos of what they believed best represented the department. Seven different logo designs were submitted across the department and voted on during the annual MB holiday potluck. The microscope, submitted by **Ava Richey '28**, will be represented on merchandise. The DNA strand, created by **Dr. Olivia Hatton**, represents the official departmental logo.





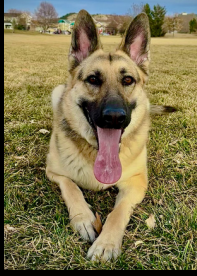
Baca Fall 2024

MB DEPARTMENT PET SPOTLIGHTS



This is **Luna**. She is 3 years old and loves to play frisbee.

This is **Missy**. She is 8.5 years old and is the Queen of side-eying.



This is **Bernie**. He is 9 years old and the colder it gets, the more he is outside.

This is **Willy**. He is 6 years old and is called "the Luis Suarez" of dog soccer.



This is **Suki**. She is 6 years old and is an immortal god.

This is **Louie**. He is 12 years old and is afraid of aluminum cans.



These are **Mercy, Spotty, Cass, and Rocket**. They are all 9 years old.

PLANNING FOR A NEW SCIENCE BUILDING AND RENOVATIONS

The classrooms, labs, and offices of the Department of Molecular Biology are housed within Olin Hall (built in 1961) and Barnes Science Center (built in 1988). Our alumni may have fond memories of classes and research projects in Olin or Barnes, yet may also recognize our need to plan for the future. We are tight on space due to growth in several departments, and our infrastructure is stressed by the demands of modern science equipment. To address our needs for the future, CC has started planning for a new science building and renovations of current science spaces.

Over the summer of 2025, several representatives from CC, including some of the MB faculty, visited other college campuses to look at recently built or renovated science buildings on those campuses and to discuss with architects what might work best for the project at CC.

We are excited to work with the architects to design flexible, efficient, and welcoming spaces that foster learning, research, collaboration, and community. We are currently completing the conceptual design phase of the project. Stay tuned for more updates!

If you are interested in staying connected, please reach out to us using the email, molbio@coloradocollege.edu. We would love to hear any life or career updates and adventures you have been up to!