



THE MESSENGER RNA

Department of Molecular Biology Newsletter | Fall 2017



The 2016-17 Block 4 MB497 Senior Capstone class celebrates the end of the block with an Ugly Holiday Sweater Party

Congratulations Class of 2017!

We celebrated the graduation of 28 molecular biologists: Cheryn Aouaj, Terrell Blei, Caroline Boyd (*Mary Alice Hamilton Award*), Annie Brewster, Chris Chavez, Karen Chui, Miles Cooper, Kaitlyn DiMarco, Emily Doderer, John Dugas, Clay Elliott, Lindsey Erb, Mariko Foecke (*Laboratory Award*), Dana Gornick, Jenna Hanson, Jay Hartman, Freida Krier, Salley Lee, Billy Lundberg, Jenna Murray, Julia Rogers, Jordan Rudman, Aiden Shumway, Lydia Tobin, Maggie Turner (*Laboratory Award*), Audrey Wang, Sally Zimmermann, Avukile Zoya.

After graduation, our newly minted molecular biologists are off to, among other things, join labs at the Food & Drug Administration and Northwestern University, attend medical school or law school, and work with AmeriCorps. Special congratulations to Princeton in Africa Fellow Avukile Zoya and Princeton in Asia Fellow Miles Cooper!

About The New Department

The Department of Molecular Biology formed in 2014 when the Biology Department was reorganized into two separate departments. As part of the reorganization, three new tenure-track faculty have been hired in the past two years: Jennifer Garcia (PhD in Genetics, University of California, San Francisco), Sara Hanson (PhD in Genetics, University of Iowa), and Olivia Hatton (PhD in Immunology, Stanford University). In 2017-2018, Phoebe Lostroh is returning from a year-long sabbatical, Ralph Bertrand is gone fishin' on a half-year sabbatical, and Darrell Killian is serving as chair. Visit the CC website for more about our research interests.



New Faculty Members (from left to right): Olivia Hatton, Jennifer Garcia, Sara Hanson



Darrell Killian chats with summer research students Dahao Feng and David Eik at our Molecular Biology Summer BBQ



The Langstroh Lab, Summer 2016
Back: Phoebe Lostroh, Rico Tenente, Kenn Crossley, & Kristine Lang (Physics).
Front: Ben Reynolds, Sara Worsham, Caroline Boyd, Saúl Maravilla

In The Upcoming Year

- Our Lab Coordinator Delaine Winkelblech and our Service Coordinator Kelley Mathers help us ensure all runs smoothly!
- Caroline Boyd ('17) was hired to help with lab course preparations.
- Mariko Foecke ('17) was hired as our paraprofessional.
- Jeremy Roop (CC '06, PhD from Berkeley) teaches MB201 in Block 3
- Professor David Bentley from CU Anschutz will be teaching a 400-level course on transcription in Block 5
- Adrienne Stefanski (PhD from CU Anschutz) teaches MB131 in Block 6

2016-2017: The Year in Brief

It's been a busy year! Here are some of the highlights:

- Jennifer Garcia and Sara Hanson joined the department.
- Olivia Hatton traveled to the University of Chicago with students from her lab, Phoebe Lostroh's lab, and Darrell Killian's lab to present their research at the Midstates Consortium for Math and Science Undergraduate Research Symposium.
- Our paraprofessional Serena Younes was accepted into Anesthesiologist Assistant school (good luck!).
- The 2016-2017 seminar series included visits from Meghan Lybecker (University of Colorado, Colorado Springs), Carolyn Decker (University of Colorado, Boulder), Max Boeck (Regis University), and Sarit Smolikove (University of Iowa).
- Mengyi Cao, (CC '11; PhD from Wisconsin) gave the keynote talk at Molecular Biology Day: "An enemy or an ally? Lrp-dependent 'face switching' in the symbiotic bacterium *Xenorhabdus nematophila*". Ten students also presented their thesis research.
- Fourteen students stayed around for research during the summer of 2017. We spent our Wednesday mornings alternating between journal clubs and research-in-progress talks, and took an early day off to enjoy a sunny summer BBQ at Jennifer Garcia's house.



Students visit Chicago to present their research at the Midstates Consortium for Math and Science Undergraduate Research Symposium in Fall 2016.

Recent Publications from Faculty & Students

Ralph Bertrand published 5 articles with his collaborators, including "Mayans: a Y chromosome perspective" in the *European Journal of Human Genetics*.

Ralph Bertrand and colleagues also published the book "Genomes, Evolution, and Culture: Past, Present, and Future of Humankind" from Wiley and Sons.

Sara Hanson published 3 articles with her collaborators, including "An evolutionary perspective on yeast mating-type switching" in *Genetics*.

Olivia Hatton published 2 articles with her collaborators, including "Identifying Specificity Groups in the T Cell Receptor Repertoire" in *Nature*.

Darrell Killian contributed "Special Topics in Modern Genetics 2: Emerging Roles of RNA" to the 9th Edition of *Essentials of Genetics* from Pearson Publishing.

Phoebe Lostroh, Kristine Lang (Physics), and their student collaborators had 2 articles published, including "The role of core and accessory type IV pilus genes in natural transformation and twitching motility in the bacterium *Acinetobacter baylyi*" in *PLoS ONE*.

Alumni News

Wouldn't this newsletter be even better if it had updates from your college friends? Please write to us and let us know how you are doing so we can share your news with everyone who reads the newsletter. Published recently? Genome-edited an elephant to become a woolly mammoth? Living in a new city? Climbed a new mountain? Finished PA school? New job/baby/spouse/pet? Growing champion melons? We all want to know!

Email us at mbio.news@coloradocollege.edu with your update or throwback photo, name, and graduation year.

Newsletter not enough? Join the Friends of Molecular Biology at Colorado College Facebook group! Email Phoebe at plostroh@coloradocollege.edu for more information.



Throwback! Nguyen Nguyen, Mengyi Cao, Amber Dornbusch, Phoebe Lostroh, & Branden Petrun trip to the Rocky Mountain ASM Branch Meeting at the University of Wyoming