

# January 2024



Congratulations to the class of 2024E graduates in the Biology department!

Best of luck on your new beginnings!

### **Best wishes to Megan Wancura**

**Megan Wancura** finished their work in the department after close to a year as the Laboratory Technical Specialist. Megan will be joining the Hewitt Lab as a Senior Laboratory Technician. Thank you for your contributions to the department!

### Welcome Kelly Wallace and Kurt Miller



We recently welcomed **Kelly Wallace** as Assistant Professor in Biology and the Neuroscience program. Dr. Wallace is looking for student researchers for the spring semester and over the summer. You can read more about her research below and email <a href="mailto:kewallace@amherst.edu">kewallace@amherst.edu</a> if you are interested.

How does the social world we live in shape our actions, our brains, and our communities? To ask this question, my research explores the complex social lives of fish. Previously I have investigated the mating behavior of Central American guppies and the dominance hierarchies of African cichlids. At Amherst, the

Wallace Lab studies a species that has evolved through both natural and artificial selection: for centuries humans have bred Betta splendens (also known as the Siamese fighting fish) for a highly aggressive phenotype. How has this artificial adaptation in aggression "pulled" other behavioral, neural, and physiological traits, and at what cost?

We are also excited to welcome **Kurt Miller** to the Biology department. Kurt is joining us from Emory University as our new Laboratory Technical Specialist. Stop by B223 and say hello!

Welcome to Amherst Kelly and Kurt! We look forward to working with you both!

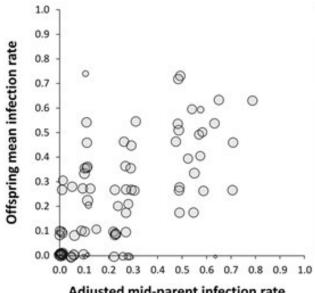
### **Updates from the Hood Lab**



**Dylan Dubay** has joined the **Hood lab** as a postbac. Dylan graduated from Goucher College in 2022 and brings knowledge about plant cultivation and botanical collections from work at the Arnold and Polly Hill Arboretums.

There is a new paper from the **Hood lab** in the journal Ecology and Evolution titled, "Quantitative disease resistance in wild Silene vulgaris to its endemic pathogen Microbotryum silenes-inflatae."

(https://onlinelibrary.wiley.com/doi/10.1002/ece3.10797)





Adjusted mid-parent infection rate

#### **New Publication from the Temeles Lab**

**Professor Ethan Temeles** published the following chapter in Cornell University's Birds of the World Online database:

Temeles, E. J. and P. Pyle 2024. Purple-throated Carib (Eulampis jugularis), version 2.0. In Birds of the World (C. Pott, Z. E. A. Buckmire, and S. M. Billerman, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. Retrieved from Birds of the World: https://birdsoftheworld.org/bow/species/putcar1/2.0

#### **New Publication from the Roche Lab**

**Professor John Roche** co-authored a paper with current and former Amherst students in the journal <u>Molecular and Cellular Neuroscience</u> titled, "The exocyst subunit Sec15 is critical for proper synaptic development and function at the *Drosophila* NMJ" (https://www.sciencedirect.com/science/article/pii/S1044743123001082).

#### **Annual Research Invitational**

On November 30th, the Biology DEI committee hosted the annual Research Invitational. This year, we collaborated with students and faculty in all STEM departments to discuss research available on-campus during the academic year and over the summer. Students also heard from Carolyn Margolin and Jess Martin to hear more about off-campus research opportunities and SURF. About 50-60 students attended the event, and we are excited to host the event again next year!

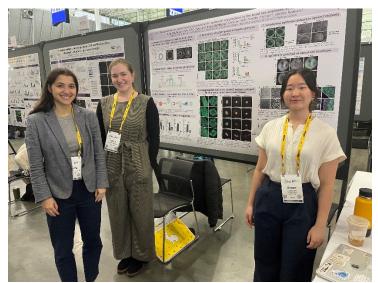




## **Updates from the Ragkousi Lab**

**Professor Katerina Ragkousi** published a review <u>paper</u> in BioEssays titled "Origin and Development of Primary Animal Epithelia". **Sophia Doerr '19** (BCBP) and **Phillip Zhou '24** (Biology and Math) are co-authors.

The Ragkousi lab attended the American Society for Cell Biology Conference in Boston in December 2023 with two posters.



Anna Postnikova, Grace Lee '24 and Amira Abdelghany '26 presented one poster titled "Discovery of cell surface proteins essential for epithelial organization in the basal sea anemone Nematostella vectensis".

Emily Kang '24 and Tavus
Atajanova '23 presented the
second poster titled "Investigating
the role of a conserved tumor
suppressor in the epithelia of the
basal sea anemone Nematostella
vectensis".



