

# NEWSLETTER

June 2024

*Created by the BPRI Trainee Leadership Council*

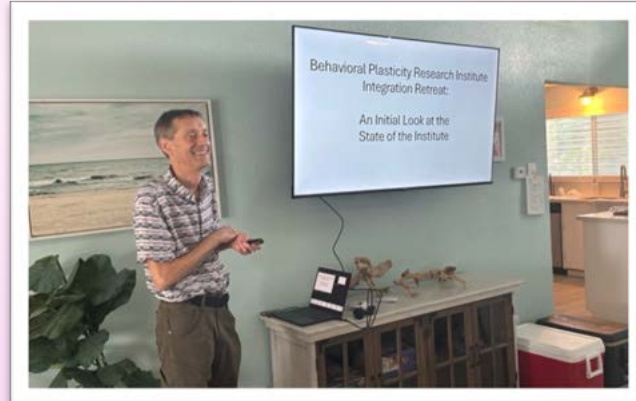
## Announcements:

- **BPRI integrated lab meeting** will resume Thursday **June 6, 2024** covering the recent Cambridge meeting
- The GLI is looking to hear from **trainees in the form of video clips** highlighting their research. Reach out to Mira Ries ([miraries@asu.edu](mailto:miraries@asu.edu)) with any questions
- If you haven't already, please participate in the **BPRI's annual Climate Survey** it should not take long to complete
- Updates and announcements for future newsletters can be submitted at any time by PIs, Trainees, or staff using **the google form**

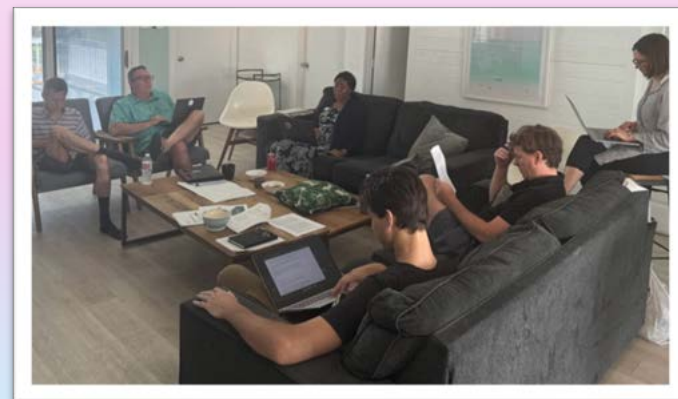
## **BPRI Members Swarm Europe & Texas:**

In the past couple of weeks many BPRI members have attended and presented their work at European conferences with PIs also having a retreat in Galveston, Texas and some BPRI students to soon visit Texas A&M

Chris Brennan & Spence Behmer presented their work on nutritional regulation at the **Bonn Nutritional Homeostasis Workshop in Germany**



The BPRI PIs had a retreat in **Galveston, TX** in which they got to discuss the past and future of the institute (and also go to the beach)



At the **Theo Murphy Meeting in Cambridge, England** the BPRI got to show its amazing work with presentations from Maeva Techer, Arianne Cease, Rick Overson, Spence Behmer, Barani Raman, Greg Sword, and Hojun Song covering a range of topics including transcriptomics, nutritional ecology, behaviour, and genetics

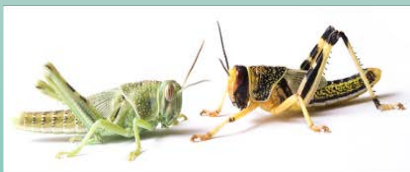


## Research Highlights

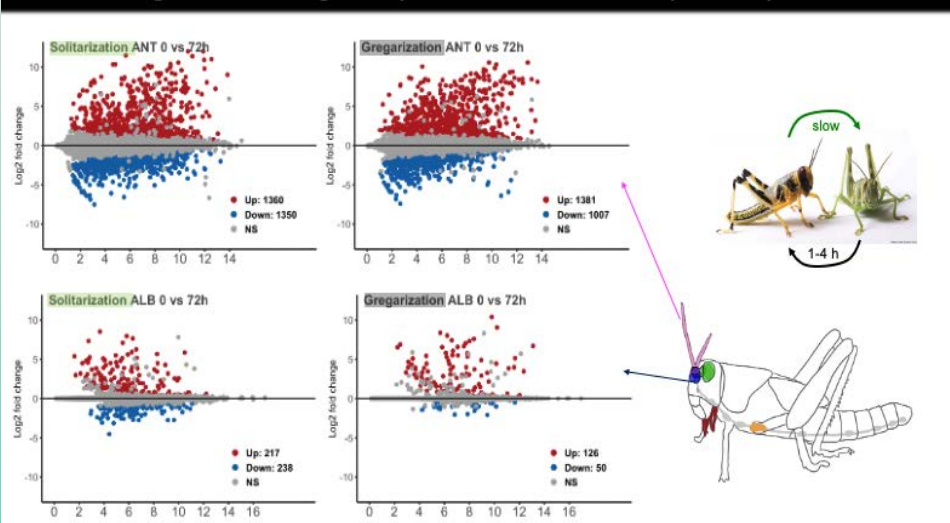
### Nymphal Growth in *Schistocerca* : A Time-Lapse



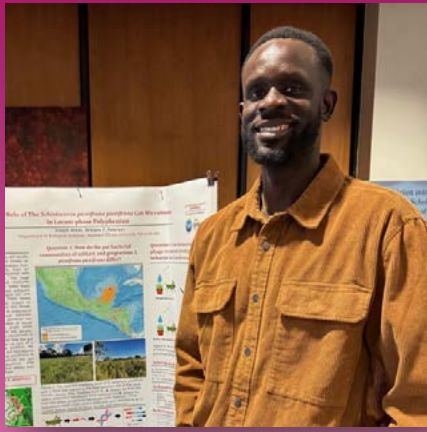
A new media resource showcasing the **daily development of nymphs** is now available for BPRI members and the locust community. This work, led by Maeva Techer and Brandon Woo from the Song Lab, is part of an ongoing project to develop standard methods for rearing and dissecting *Schistocerca* tissues for molecular studies.



### Tissues diverged in terms of gene expression and levels of response to phase transition



The time-course transcriptome analysis for *S. gregaria* has shown some interesting patterns as recently presented by Maeva. The Song Lab uncovered significant biological variability within the same density treatment, possibly due to individual social and personal experiences. Notably, gene expression shifts were observed after 8 hours in both phase transitions, with striking differences in extreme phenotypes (0 vs. 72h) during solitarization and gregarization across various tissues.



**Texas A&M is looking forward to hosting BPRI students David Bellini (BCM) and Joe Antwi (SIUE) the first week in June**

**The Sword Lab welcomes a PhD student, Eli, who will work closely with BPRI students during the summer doing transcriptomic research**

### **Upcoming Conferences and Trips:**

**Audélia Mechti will travel to the Max Planck Institute in Konstanz, Germany from June 17 – 28 to run collective movement experiments**

**Richard Dewell will attend the International Congress of Neuroethology conference from July 28 – August 2 in Berlin, Germany**

**Anna Childers, Vivian Peralta, and Maeva Techer will participate in the International Conference of Entomology from August 25 – 30 in Kyoto, Japan**