

BPRI Events

Mark your calendars for the BPRI advisory meeting taking place on Wednesday, November 20th from 2:30 – 6pm.

Trainee Crash Courses:

Civil Discourse and Fostering Inclusion – October 10th

Managing Burnout and Holiday Stress – November 1st

Research Highlights

Over the summer, Sydney Millerwise (PhD student) and Tamir Lichaa (undergraduate researcher) collaborated with the USDA APHIS Rangeland Grasshopper and Mormon Cricket team to use their facilities take high res photos of field-collected *Schistocerca piceifrons*. They were able to confirm that solitary *Schistocerca piceifrons* indeed have a more curved pronotum, on average, than gregarious nymphs.

Bert Foquet noticed this trend during his PhD and suggested to Sydney that it would be an interesting morphology to quantify. Another great example of students leveraging BPRI connections!



Audelia Mehti (TAMU) will be defending her dissertation proposal on September 18th

BPRI Entsoc Presentations & Events

Sunday, November 10:

Britt Peterson: Impacts of phase, environment, and species on the microbiota in *Schistocerca* locusts from the Americas (9:30- 9:50am)

Neema John: How does marching affect locust carbohydrate and protein consumption? (9:36 - 9:48am)

Greg Sword: Cotton genotypes vary in foliar elicitation of plant defenses by fungal spores and subsequent effects on aphids (11:05 - 11:25am)

Arianne Cease: Nutritional ecology of solitary and gregarious Central American locusts, *Schistocerca piceifrons*, in Yucatán, Mexico (3:30 - 3:42pm)

Monday, November 11:

(good luck to all participating in the student competition!)

Audelia Mehti: To march or not to march: Quantifying patterns of collective movement across swarming and non-swarming *Schistocerca* species (9:48 - 10am)

Sydney Millerwise: Effect of population density and locust phase on viruses associated with Central American locusts, *Schistocerca piceifrons* (10:30 - 10:42am)

Vivian Peralta Santana: Mother knows best: Unraveling the transcriptome of female desert locust accessory gland after mating (11:18 - 11:30am)

Mehreen Tahir: High protein diet increases susceptibility of desert locust, *Schistocerca gregaria*, to *Metarhizium* biopesticide infection (11:18 - 11:30am)

Joseph Antwi: Investigating the role of *S. piceifrons piceifrons* gut bacteria in behavioral manifestations of locust phase shift (11:42 - 11:54am)

Tuesday, November 12:

Rick Overson: Impact through integration: A case study of the Global Locust Initiative and NSF-Behavioral Plasticity Research Institute (Poster)

Global Locust: Orthoptera Networking Event — Locust Plasticity and More! (4 - 5:30pm)

Wednesday, November 13:

Maeva Techer: Can cross-species temporal transcriptomic profiling pinpoint the molecular drivers of locust swarming? (9:30 - 9:42am)

Seema Rana: Investigating the molecular basis of melanism in desert locust, *Schistocerca gregaria* through transcriptome analysis (9:42 - 9:54am)

Barani Raman: Invariant odor recognition in an insect olfactory system (4:35 - 4:55pm)