

# PHI SIGMA NEWS



The Official Phi Sigma Newsletter

Fall 2020

## Third Annual Weigel Seminar

It is the pleasure of the 2020-2021 Phi Sigma executive board to host the third annual Weigel Seminar. The Weigel seminar series is a special event, as it gives Phi Sigma members a democratic opportunity to select the speaker. Earlier this semester, Phi Sigma members submitted a plethora of exceptional biologists and subsequently voted on this year's extraordinary researcher. This year's Weigel seminar will take place on **Thursday, November 19th**. Be on the look out for more details closer to the date as well as a potential meet and lunch over Zoom with a few graduate students.

## This Year's Weigel Seminar Speaker: Dr. Gaby Maimon

The speaker for our third annual Weigel Seminar is Dr. Gaby Maimon from The Rockefeller University. Dr. Maimon's lab seeks to better understand how brains form memories of different quantitative variables and how they guide behavior at multiple biological levels of organization. This work integrates everything from sub-cellular mechanisms to animal behavior using everyone's favorite study organism: *Drosophila melanogaster*. These fruit flies and their brains are being put to the test performing a wide range of navigational tasks which can better inform us to the underlying mechanisms of the human brain. You won't want to miss this retina rendering rendezvous when it comes to a Zoom near you on **Thursday, November 19th**.



### IMPORTANT DATES

#### FALL 2020

##### August 27

Travel Grant Deadline for the National Office (Check back next semester for more travel funding)

##### September 18

Phi Sigma Membership Applications due (Check back next semester for additional joining opportunities)

##### November 19th

3rd Annual Weigel Seminar

##### TBA (Late October)

Fall Scavenger hunt

##### TBA (End of the semester)

Winter is coming virtual get together

Please bear with us while we adapt to the changing times and check the Beta Lambda chapter of Phi Sigma Regginet page for more details about events and keep an eye out for announcements about information of future happenings and updates on planned events!

## 2020 Grant Award Recipients

### Mockford-Thompson

Logan Sauers  
Josselyn Gonzalez  
Elyse McCormick

### Weigel

Paige Farchmin  
Julia Martin  
Kate Evans  
Josselyn Gonzalez  
Trevor Rickerd  
Lisi Vink-Lainas  
Jaclyn Everly  
Kiley Hughs  
Jesse Smith  
Elyse McCormick  
Bryan Sierra – Rivera  
Rosario Marroquin-Flores  
Omid Zare-Mehrjerdi  
Daniel Goldberg  
Rachael DiSciullo  
Elliot Lusk  
Sadia Sultana  
Logan Sauers  
Tony Breitenback  
Whitney Green  
Liza Gautam  
Shana Border  
Maggie Demaegd

Phi Sigma thanks all the faculty members who helped review Mockford-Thompson applications. In addition, we would also like to thank **Drs. Dugas and Engelke** for serving as Co-chairs on the Mockford-Thompson review committee. Finally, we thank all those who helped to review Weigel applications.

# TA Welcome Week & Orientation

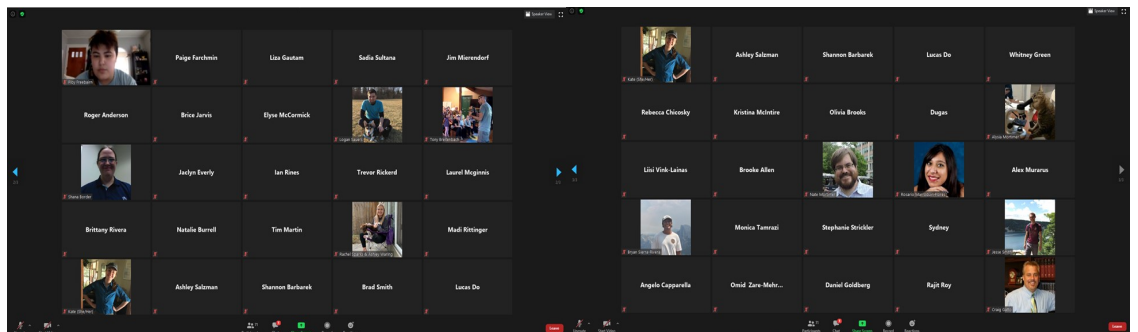
By: Elliot Lusk

From being spread out across a whole week to having one jam packed day of training, welcome week has taken a few different forms over the years, but none quite like this! This year, orientation was mostly virtual and held over two days. Thursday was utilized to get all the grad students on the same page with the morning session consisting of a welcome, Phi Sigma presentation, a safety talk, introduction to the Graduate TA union, and a talk about stress from the counseling center (check out the graduate student resource folder in Reggienet for some of these PowerPoints). The afternoon was chock full of break-out sessions led by faculty and current grad students aimed to expand and discuss crucial topics in grad students' lives.

To ensure that our wonderful graduate students had enough brain food to partake in these extensive virtual trainings, Phi Sigma offered an all expense paid lunch at the Rock Restaurant the Friday of TA training. From falafel to gyros, graduate students enjoyed Normal's finest Mediterranean faire from the safety of their homes or under the guidance of the CDC.



Dr. Ben Sadd (Seen top middle) talks to students and faculty about the new graduate student life.



Biology graduate students and staff attending training. Look at those happy faces! .

## Welcome To Our New Biological Sciences Graduate Students of Fall 2020!

Brooke Allen (Mortimers)	Kasie Chappell (GSAL)
Emily Bernhard (Borowicz)	Lucas Do (GSAL)
Olivia Brooks (Dugas)	Marissa Hettinger (GSAL)
Austin Calhoun (Sadd)	Brittany Rivera (GSAL)
Rebecca Chicosky (Garris)	Michael Seby (GSAL)
Paige Farchmin (Sakaluk/Thompson)	Sydney Metternich (Byers)
Elise Le (Nate Mortimer)	Jim Mierendorf (Hammond)
Mackenzie Mason (Kirik)	Alex Murarus (Engelke)
Jack McKermitt (Sadd/Sakaluk)	Ciara Newman (Weitzel)

# Meet the 2020-2021 Phi Sigma Executive Board

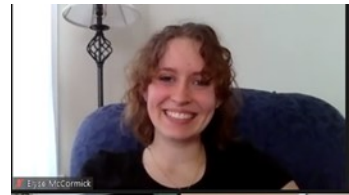
## **President: Austin C. Calhoun**



I am first year PhD student in Dr. Sadd's infectious disease ecology lab. I recently finished my master's degree here at ISU working on understanding how environmental stress influences host-parasite relationships. For this project, I experimentally investigated how a fungicide in combination with the microsporidian parasite *Nosema bombi* will alter tolerance and resistance to infection in the charismatic bumble bee. In my free time I enjoy building things with my hands (*contact me for pics of my poorly put-together projects*), recently joined a martial arts gym (*paused due to pandemic*), and also recently started getting into photography (*not very good yet*). For tips and tricks in carpentry and photography, ask literally anybody else because I'm not good at it yet. For all things Phi Sigma related, feel free to get ahold of me as we will be working very hard to make your member experience a great one this year!

## **Vice President: Elyse McCormick**

I am a second-year Masters student in the Sadd lab looking at how co-infection impacts bumble bee health. I got interested in bumble bee health working as a lab technician at Penn State, and want everyone to be as excited about our fuzzy friends as I am! I love getting out and exploring, and while COVID has changed that slightly, taking walks to go observe what's going on in nature is consistently exciting for me. Outside of science, I enjoy music, cooking, photography, embroidery, reading, and my many various house-plant children. As Vice President, I am excited to recruit new members, engage our existing members, and look for creative ways to discuss science during this pandemic.



## **Social Chair: Cassidy Kessinger**

I am a senior in the Neuroscience, Physiology and Behavior program. I am minoring in Chemistry and am also on the Premed track. I am a member of the Garris lab with a research focus in stimulant use disorders. I study dopamine signals in the rat brain in response to amphetamine and other drugs of abuse and use fast-scan cyclic voltammetry as a analysis technique. I am an undergrad teaching assistant in the chemistry department in CHE 112 and CHE 140. In my free time I like to binge watch Netflix/Disney Plus, read, listen to music, hike, or drink an insane amount of coffee. As social chair this year, I hope to bring a sense of normalcy and fun as college students and scientists in this trying time during a world pandemic.



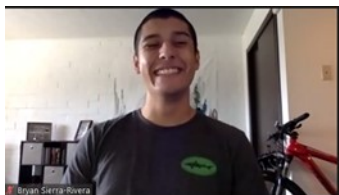
## **Treasurer: Omid Zare-Mehrjerdi**

I am a second year M.S student in the Kirik Lab with a research focus on cell-division plane orientation in plants. In specific, I study a sub-group of the TRM family of proteins involved in Pre-Prophase Band formation and cell-shape determination. This is also my first semester as a master's student in the Department of Mathematics. I began my undergraduate work at the University of Texas at Arlington and completed my B.S in Biological Sciences and Environmental Health at ISU in the spring of 2019. I spend my free time at home with my wife and dog watching movies, playing video games, and other pandemic-friendly activities. I am intrigued by the challenge of serving as Treasurer in the time of COVID-19.



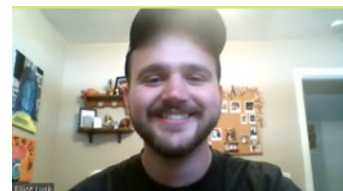
## **Business Manager: Bryan Sierra – Rivera**

I am a second year M.S student in Dr. Ben Sadd's Infectious Disease Ecology lab investigating the role of host responses in the colonization specificity of a bumble bee gut symbiont. Outside of lab, I enjoy staying relatively active either hiking, slack lining, or bike riding while I enjoy drawing, crafting, and hanging out with my ball python Monty on a calmer day. I look forward to being part of the Phi Sigma executive board and working with everyone to have a great year.



## **Secretary: Elliot Lusk**

I am a Master's student starting my second year in Dr. Casto's Integrative Avian Biology lab studying the effects of developmental stressors on bird song learning and production. Besides teaching virtual Ecology labs and counting mites I love working on my scooters, antiquing, and spoiling my kitten rotten. I am very excited to provide you with the hottest news and I am giddy at the thought of producing next year's Boobologist.



# Phi Sigma Cookbook: Call for Recipes

Phi Sigma would like to celebrate the different cultural and regional backgrounds of both students and faculty at ISU, and what better way to do that than through food? The executive board is planning a Phi Sigma cookbook, where students and faculty alike can submit their favorite regional, cultural, or hometown recipes. From this list, we will pick a recipe each week and potentially hold a Zoom social to discuss the cooking successes/mishaps, and learn from one another through food. One would not have to submit a recipe to participate in eating, cooking, or Zooming and we hope to collect all of these in an accessible place where everyone can enjoy them.

Stay tuned in the coming weeks for more information and how you can submit your recipe!

## External Grant Announcement

Phi Sigma would like to continue the tradition of giving back to our local scientific community, especially that of K-12 educators. It is our pleasure to announce that we are reaching out and accepting applications of teachers, administrators, and program leaders in McLean County looking to engage students in biological sciences. This grant can be used to fund anything from field trips, buy classroom supplies, or help support guest speakers as long it helps inspire our local future biologists. We love seeing all of the creative ways community members enrich the education of young minds and can't wait to see what applicants submit this year.

## A Letter From Our Advisors

By: **Martin Engelke**

It makes me happy to observe young scientists organizing themselves to find ways to promote their careers, support each other, socialize, and have some fun doing this. The student-run organization Phi Sigma allows them to do just that. Matt Dugas and I have the pleasure of serving as Phi Sigma faculty advisors for the coming year. Matt brings his experience from the previous year, while I have dived in as a newbie. Matt told me that our jobs as advisors will be simple - listen carefully, admire the students at work, and tell them when it is time to finish up.

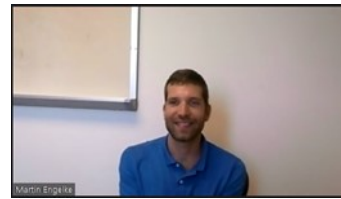
As for so many other aspects of life, COVID19 has also put its strain on student organizations. During the couple of board meetings that Phi Sigma has already held in this academic year, it was a pleasure to see with what enthusiasm and creativity the board has met each challenge. In times like this, student organizations are more important than ever. They help students retain some feeling of togetherness and support. Phi Sigma is scheduling many exciting and socially engaging activities for the coming months, and it seems that wise old owl Matt will be right that our roles as advisors will be quite enjoyable. We are both looking forward to a fun and productive year with Phi Sigma.

P.S. -before I forget- to keep the lives of the advisors as simple as promised, all criticism concerning this letter, and really everything else, should be directed to Dr. Paitz (Seems mysterious? Simply the bitter pill previous advisors have to swallow for having had such a blast).



Matthew Dugas

I am an assistant professor of ecology, and in my third year at ISU. I completed my Ph.D. in 2010 at the University of Oklahoma, and held post-doctoral positions at Tulane University, Case Western Reserve University, and Murray State. I study the evolution of communication, in particular between offspring and parents, and work with a variety of vertebrates.



Martin Engelke

I started as an Assistant Professor of Cell Physiology at ISU in August 2019. Originally trained as a biochemist, I switched fields a bit and completed a PhD in Virology/Cell biology at the University of Zurich and then moved to the University of Michigan for a postdoc. My lab studies how the function and regulation of molecular motor proteins facilitates cellular organization and homeostasis.

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