

# **PHI SIGMA NEWS**

The Official Phi Sigma Newsletter

Fall 2022

## Fifth Annual Weigel Seminar

By: Caitlyn Kant

The Phi Sigma Executive Board is delighted to announce our fifth annual Weigel Seminar this Fall! The seminar is designed to emphasize professional development among students through interactions with an established research within the field of Biology. Students will have an opportunity to schedule a meeting with the seminar speaker on September 15th to interact and ask questions!

Our fifth annual Weigel seminar will be held on September 15th. This year our speaker is Dr. Robert O. Watson from Texas A&M University College of Medicine. Dr. Watson is an Assistant Professor of Microbial Pathogenesis and Immunology, and his talk entitles: "Holley Moley: How Host Membrane Perturbations Shape Innate Immune and Infection Outcomes"

# This years Wiegel Seminar Speaker: Dr. Robert O. Watson

"My lab is interested in the interface between intracellular bacterial pathogens and the hosts they infect. In particular, we study the notorious human pathogen, Mycobacterium tuberculosis, which remains a major global health threat. M. tuberculosis has evolved a variety of specific adaptations to not only survive but also replicate within the harsh environment inside a macrophage. We



want to understand the mechanisms by which M. tuberculosis is able to modulate the innate immune response to establish an infection as well as how the macrophage balances these responses in order to fight infection."

- Dr. Robert Watson.

#### **IMPORTANT DATES**

**FALL 2022** 

August 17

TA Welcome Week

August 22

Phi Sigma Membership Application Open

September 9

Membership Application Closes

September 15

Weigel Seminar

September 24

Fall Picnic

October 28

Spooky Trivia

December, TBD

Winter Potluck

#### SPRING 2023

March 24

Phi Sigma Research Symposium

More important dates to come!

2022 Grant Recipients

Mockford-Thompson

Olivia Brooks Gracious Donkor Piotr Klos

Weige

Bismark Acquah Brooke Allen Carol Kiam Assato Phil Avella Tope Awe Rachel Berg Olivia Brooks Austin Calhoun Rebecca Chicosky Mary Crompton Rachel DiSciullo Gracious Donkor Kate Evans Jaclyn Everly Christen Fairow Liza Gautam **Emily Harders** Piotr Klos Lauren Leischner Danny Marchiafaya Jack McKermitt Rajit Roy Logan Sauers

Phi Sigma thanks all of the faculty members & those who helped review

Ritika Shah

Sadia Sultana

### TA Welcome Week / Scavenger Hunt





Pictured above: TA Scavenger Hunt 2022

Current and new students joined together in teams and completed a scavenger hunt around campus. They went

By: Emily Harders

to important locations such as the mail room, fitness center, and BSC101 teaching classrooms. All teams were able to crack the code to finish the scavenger hunt and were rewarded with refreshments and a chance to

win a ticket to the Spring Banquet.

Don't miss out on our Fall Picnic taking place on Saturday, September 24tjh hosted at Dr. Craig Gatto's house again this year! Students and faculty will be able to socialize, enjoy food, play yard games, and enjoy the beautiful weather at our Fall Picnic.

### **Phi Sigma Professional Development Series**

By: Sadia Sultana

The Phi Sigma Professional Development Seminars are intended to improve professional skills of current graduate students. Thanks to previous Phi Sigma President Tony Breitenbach and present Phi Sigma Executive Board for working hard to get this lined-up. We hope to arrange one seminar per month, in which our faculty members will voluntarily cover different topics. We are delighted to announce that our first seminar was a BIG SUCCESS! In August 2022, Dr. Andres Vidal-Gadea ran a very interactive seminar on "How to write a CV/ Resume". Stay tuned for the upcoming seminars! And thank you to the faculty speakers for their support.

### Phi Sigma Mentorship Program

By: Rebecca Chicosky

Have you ever wanted to learn a new skill but did not know who to turn to? New to graduate school and not sure who to ask when you have a question? Graduate school can be scary, there's no bones about it! Therefore, it is so important for students to support each other and provide a welcoming and inclusive space. The Phi Sigma Mentorship Program is brand new for this year and in motion! In this program, individuals are paired or grouped into mentors and mentees who are traveling through graduate school together.

Our mentors make up experienced graduate students who have been through the wringer and are excited to share their skills, experiences, and advice to mentees. Our mentees make up anyone who wants a little extra assistance or who wants to learn a new skill! By being paired up with a mentor, they gain the opportunity to work one-on-one with someone who enhances their existing skills or helps to develop brand new ones! The Mentorship Program is a way for our graduate students, new or experienced, to gain new insight, new skills, or new friends all while being a part of Phi Sigma! We are so excited to see our own Biological Sciences population help one another and enhance academic and personal success!

### Meet the 2021-2021 Phi Sigma Executive Board



#### President: Sadia Sultana

Hello everyone! I am Sadia, fourth year PhD candidate of Molecular and Cellular Biology sequence at the School of Biological Sciences. After obtaining my bachelor and master's in Microbiology from the University of Dhaka, Bangladesh; I joined Dahl microbiology group for pursuing my PhD. Here, my research focuses to decipher pathogenic bacterial defense mechanisms against antimicrobial oxidants. My long-term career goal is to establish myself as an academic scientist with a research focus in bacterial pathogenesis. Beside the academic studies, I also involve in scientific leadership positions. I am the President of Phi Sigma Biological Society (Beta Lambda Chapter), copy editor of Graduate Women in Science's monthly newsletter and recently has been elected as co-chair of Gordon Research Seminar on Microbial Stress Response 2024.

#### Vice President: Ritika Shah

I am Ritika Shah, a second year (and hopefully, last) MS student at the Dahl Lab in the School of Biological Sciences. My work is focused on understanding the role of polyphosphate in the Pseudomonas aeruginosa-mediated killing of Staphylococcus aureus. I was born and raised in India where I completed my early education. I have a morbid fascination with true crime and everything that makes you question humanity. You'll usually find me having a meltdown over my experiments or talking about a new book that I just read. In my free time, I enjoy trying new food and going to new places.



#### **Treasurer: Christen Fairow**

Hey everyone! My name is Christen Fairow and I am the current Treasurer for Phi Sigma. I am a second-year master's student in the Vogel/Bowden labs. I am originally from the Champaign, Illinois area. I majored in biology and minored in chemistry at Eastern Illinois University in Charleston, Illinois from which I received my BS in 2015. From 2015 to 2018 I worked as a laboratory analyst at a couple of different laboratories and from 2018 to 2020 I worked as a deputy coroner for Champaign County. My research in the Vogel/Bowden labs focuses on understanding the immune systems of reptiles; specifically investigating the function of B cells in turtles using red-eared sliders as a model organism. My long-term career goal is to become a forensic scientist for a law enforcement agency. In my free time, I enjoy spending time with my family, hanging out with my three cats, attending punk and metal concerts, painting, collecting nail polish, creating nail art (fun manicures), and listening to true crime podcasts.

#### Secretary: Caitlyn Kant

Hello! I'm Caitlyn Kant and I am the current Secretary for Phi Sigma serving for a second term! I am majoring in Biology (PNB Sequence) and Psychology, and minoring in Chemistry and Cognitive Science. I am on the pre-med track; I currently work as a Cardiac Monitor Technician, and hope to go on to become a Cardiologist once I graduate from medical school. I am also serving as President for Mortar Board National Senior Honor Society and President for Psi Chi International Psychology Honor Society here on campus! I am currently doing research with Dr. Hitchcock in the Chemistry department on the Darunavir project, as well as Dr. Heidenreich in the Psychology department. In my free time I enjoy sleeping, reading, and being with my two

dogs (Raskis & Flair)!

## Meet the 2021-2021 Phi Sigma Executive Board

### Business & Bookstore Manager: Gracious Donkor

My name is Gracious Donkor and I am the current Business Manager for Phi Sigma. I was born and raised in Ghana, West Africa, where I earned my Bachelor's in Biomedical Science. Through a weird combination of fate and a zest for new experiences, I ended up almost 10,000 miles away at ISU where I am currently pursuing my MS in biotechnology. My research interests are in host-pathogen relationships and microbial pathogenesis. I have an unhealthy addiction to old music, fantasy novels and cookbooks. I intend on pursuing a PhD in Molecular Microbiology/ Biomedical Science and work in a position where I can combine research and teaching. I hope to dedicate the rest of my time (if there's any left) on STEM nonprofit work in economically challenged regions. I hope to change the world someday with stories but maybe

#### Social Events Chair: Emily Harders

Hello, my name is Emily Harders, I am a second-year master's student in Ryan Paitz's lab, and Phi Sigma's Social Chair for 2022-2023! A little bit about myself, I earned my B.S. degree in 2020 from Creighton University in Omaha, Nebraska where I majored in biology and researched how male crickets respond to long-term parasitism. My undergraduate research got me interested in the interaction between two organisms with competing interests. This, along with my fascination for endocrinology and reproduction led me to be interested in maternal stress effects and focus my master's research on how early embryos metabolize and respond to glucocorticoids, a maternal stress hormone. When I'm not playing with eggs, I enjoy cooking with friends, riding my motorcycle, reading romance novels, traveling, and planning fun social events for Phi Sigma!



### Membership and Recruitment Chair: Rebecca Chicosky

Hello! I am Rebecca Chicosky and I'm a 3rd year Master's student in the Garris Lab. I majored in Biopsychology at McKendree University and received my B.S. in 2020 where I researched stigma, gender, and dehumanization in psychology. My research now at ISU looks at substance use disorder by using a technique called fast-scan cyclic voltammetry to view dopamine signals in the rat brain pre and post amphetamine administration. When I am not slicing up rat brains, I am playing video games, reading trashy romance novels, or embroidering my latest project! I am so thrilled to be your Membership Chair for 2022-2023!

#### Faculty Advisor: 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 in Cell Biology. My lab studies how the function and regulation of molecular motor proteins facilitates cellular organization and homeostasis.



#### Pirmin Nietlisbach

I joined ISU as Assistant Professor of Evolutionary Biology in fall 2020. After completing my PhD at the University of Zurich, Switzerland, in 2015, I worked as a postdoctoral researcher at the University of Zurich and then the University of British Columbia in Vancouver, Canada. I study general questions in evolutionary biology, with a special focus on understanding the genetic consequences of inbreeding and life in small populations. In my lab, we study wild populations of song sparrows, deermice and house wrens.

### **New Graduate Students**

Abu Abdullah (Kirik) Aalimah Akinosho (Vidal-Gadea)

Debajjyoti Basu (Floyd) Avery Dart (Nietlisbach)

Erin Estes (Dugas) Adina Fazyl (Vidal-Gadea)

Parham Jazireian (Vidal-Gadea) Arjuman Lima (Sedbrook)

Gabirela Mendoza-Rangel (Kirik) Farimah Mohammadi (Engelke)

Shifat Niha (Vidal-Gadea) Laura Rengifo (Sadd/Sakaluk)

Anindita Saha (Floyd) Mason Sanford (Stein)

Sabiha Sultana (Sedbrook) Sumaiya (Edwards)

Patrick Tawiah (Dahl) Hannah Warfel (Paitz)

Clinton Warren (Bowden/Paitz)

### A Letter from Our Advisors

By Pirmin Nietlisbach

Martin Engelke and I enjoyed serving as faculty advisor for Phi Sigma during the past academic year and look forward to continuing in this role during the upcoming year. Phi Sigma organized many great events in the past and many more are planned for the future. The events organized by Phi Sigma contribute significantly to a sense of community in our School of Biological Sciences and help new students to meet peers, faculty and staff early on. It is great to see how this studentrun organization fulfills such an important role in our School. The first couple of meetings with the new board have shown that also this year Phi Sigma is led by an enthusiastic, motivated and hard-working board. We look forward to future meetings and events and thank Phi Sigma for their invaluable service to our biology community.







### Contact Us

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