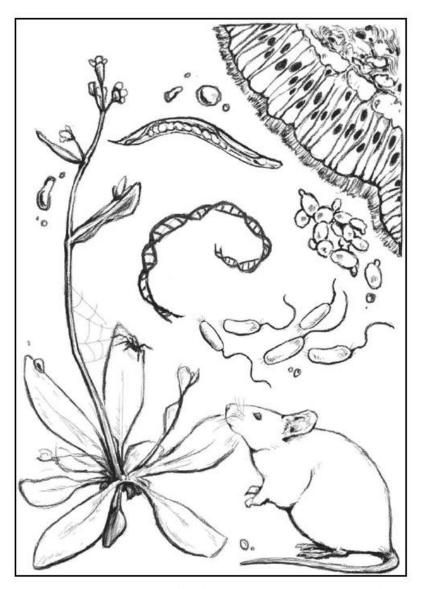
# UWM's Graduate Organization of Biological Sciences Presents: UWM Biological Sciences Research Symposium

## Program/Information Booklet

April 7<sup>th</sup>, 2023



# **BIOLOGICAL SCIENCES**

Image by: Alyssa Kline

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#### Acknowledgements

GOBS would like to thank all the volunteers that helped with the symposium including (but not limited to) faculty, staff, students, and post-docs who helped to judge presentations and set-up/clean-up the event. We thank the Biological Sciences Staff and UWM Event Services for helping plan this event. We would also like to thank BioScience LLC for their generous donation to fund the symposium. Lastly, we thank all of the presenters and attendees for making this symposium possible!

We'd also like to offer our congratulations and thanks to Alyssa Kline for designing the Bio Sci t-shirt and to Olivia Fallahee, Hailey Beaty, and Nicole Wicker for designing our Bio Sci stickers this year!

# UNIVERSITY of WISCONSIN MINIOR LANGUAGE

#### Schedule of Events

Time	Event
9:00 am	Check-in opens – can check-in at
	the Union Ballroom East (not
	mandatory before attending talks)
9:30 am	Doors open for talks – Lapham
	101, speakers upload their talks
	(via USB) and talk judges gather
	materials
9:45-11:00 am	Oral presentations – Lapham 101
11:30-12:30 pm	Lunch break - lunch available in
	Union Ballroom East
1:00-3:00 pm	Poster presentations - Union
	Ballroom East. Can set up posters
	anytime 9 am-12 pm. Poster judges
	gather materials at 1pm.
3:00 pm	Clean-up/tear-down
	(help is appreciated!)
4:00 pm	Colloquium – Lapham 160

# Schedule of Talks (Location: Lapham 101)

Presenters: bring your finalized PowerPoint to Lapham 101 at 9:30 am day of presentation. Talk length is scheduled for a 12-minute presentation and 3 minutes of Q&A.

Judges: pick up judging materials in Lapham 101 at 9:30 am.

Moderator: Claudia Rodriguez

Time	Talk information
9:45-10:00 am	Exploring the nuances of variation in female treefrog mate choice
	using personality traits
	Olivia Feagles* & Gerlinde Höbel
10:00-10:15 am	A novel protein is implicated in <i>C. elegans</i> FGFR signal transduction
	Claudia Rodriguez*, Nicole Wicker, Te-wen Lo, Cindy Voisine, Michael
	Stern, Claire de la Cova
10:15-10:30 am	Lsm Protein Scd6 Represses HAC1 mRNA Translation
	Cing Kiim*, Jagadeesh Uppala, Anish Chakraborty, Nicholas Reiter,
	David Frick, Madhusudan Dey
10:30-10:45 am	A novel level of eukaryotic AMPK regulation
	Vidhya Basak*, Marianna Orlova, Sergei Kuchin

### Poster Presentations Location: Union Ballroom East

Poster set-up: anytime between 9am-12pm, make sure to check-in first

Judges: pick up judging materials at 1pm at symposium check-in table

Poster number	Poster information
1	Using real-time biosensor to explore kinase activity in a migratory cell
	Nicole Wicker*, Claudia Rodriguez, Claire de la Cova
2	Using <i>C. elegans</i> to model the impact of mutations from Noonan
	Syndrome
	Fatemeh Cheraghi*, Robert Townley, Kennedy Stacy, Alexia Castillo,
	Claire C. de la Cova
3	Characterization of root hair development in fer-4 mutants of
	Arabidopsis thaliana
4	Amoo Ayosunkanmi* & Heather Owen
4	Understanding Tissue Stress During Brain Morphogenesis
	Gabriella C. Voit*, Elizabeth J. Falat, Emma Xiong, Jennifer H.
5	Gutzman  Zebrafish as a model system to understand the role of the myh genes
3	in development
	Laura A Rolfs*, Elizabeth J Falat, Jennifer H Gutzman
6	The Bipartite Element within HAC1 mRNA modulates its stability and
ŭ	translational efficiency in Saccharomyces cerevisiae
	Anish Chakraborty*, Kimberly Mayer, Leena Sathe, Abhijit
	Chakraborty, Madhusudhan Dey
7	Secondary Axon Projections caused by Mitochondrial Mutations in <i>C.</i>
	elegans
	James R Woods* & Christopher C Quinn
8	The Role of SHN-1 in Axon Termination
	Hailey G. Davis* & Christopher C. Quinn
9	Panic in their voices: Changes in social environment alter call
	strategies in Eastern Gray Treefrogs
	Alexander Sweet*, Olivia Feagles, Gerlinde Höbel
10	Monandrous Females Regain Sexual Receptivity and Produce Fewer
	Egg Masses After Short Copulations
	Ariel Noriega Rodriguez*, Lauren A Cirino, Sage DeLong, Camille
11	Desjonqueres, Rafael L. Rodriguez
11	Genomic regions responsible for Chronic Wasting Disease in cervids Chandika R G* & Emily Latch
12	A self-boosting signal type in an insect?
12	Gianna Noffsinger*, Ignacio Escalante, Jerald R. Kellner, Camille
	Desjonquères, Lauren A. Cirino, Ariel A. Noriega Rodriguez, Sage A.
	DeLong, and Rafael L. Rodriguez
	3, 2, 2, 2, 2, 3, 2, 3, 2, 3, 2, 3, 2, 3, 2, 3, 2, 3, 2, 3, 2, 3, 2, 3, 2, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3,

- 13 A genetic approach to species identification for Wisconsin's three Microtus species

  Madeline Opie\* & Emily Latch
- 14 Monitoring kelp forests in decline: Development of novel eDNA techniques to quantify densities of kelp seed-banks in healthy and disturbed habitats

  Natalie Plant\*, Lauran Liggan, Filipe Alberto
  - Animal Personality: Evidence of boldness-shyness in Gray Treefrogs
- Olivia Fallahee\*, Olivia Feagles, Gerlinde Höbel

  How do vibrational signals differ when red milkweed beetles interact during contests and copulation?
  - Sage DeLong\*, Ariel Rodriguez, Camille Desjonquères, Rafael Rodriguez, and Lauren Cirino
- Females in a duetting insect use spontaneous signals to re-establish communication with males, but not against wind noise Sara Seidita\* & Rafael Rodriguez
- 18 Black and Yellow Aposematic Fellow: Evidence for selective aposematism and unpalatability in the Nearctic Gray Tree Frog (*Hyla versicolor*)
  - Joseph S. Cannizzaro IV\* & Gerlinde Hobel
- Synthesis and Biological Evaluation of Novel Benzodiazepines for the Oral Treatment of Asthma
  Sarah Swartwout\*, Daniel Webb, Michelle Meyer, Anika Tylek, Leggy Arnold
- Investigating the Role of Hse1's SRC Homology 3 (SH3) Domain In the Activation of UPR Regulation Protein Ire1
  Alexa Oviedo\*, Kimberly Mayer, Jagadeesh K Uppala, Madhusudan Dev
- 21 Phage Resistance in Mucoid Bacteria Chloe Skinner\*, Harleen Tawatia, Dr. Alita R. Burmeister
- Novel Link between Ire1 and MAPK SIt2 Pathways via Transcription Factor RIm1 in Yeast Saccharomyces cerevisiae
  Kimberly Mayer\*, Jagadeesh K Uppala, Cing Kiim, Madhusudan Dey
- A putative polysaccharide biosynthesis operon is involved in the nodulation of Mimosa pudica by *Paraburkholderia phymatum*Shashini U. Welmillage\*, Gyaneshwar Prasad
- Analysis of Nod factor mutants of Rhizobia IRBG-74 and effect on nodule formation in *Sesbania cannabina*Sonali Shedge\* & Gyaneshwar Prasad

#### **List of Participants**

Cell and Molecular Biology

Microbiology

Amoo Ayosunkanmi – poster #3

Vidhya Basak – talk

Anish Chakraborty – poster #6

Sonali Chandrakant Shedge – poster

#24

Fatima Cheraghi – poster #2

Cing Kiim – talk

Hailey Davis – poster #8

Laura Rolfs – poster #5

Kimberly Mayer – poster #22

Gabriella Voit – poster #4

Alexa Oviedo – poster #20

Nicole Wicker – poster #1

Chloe Skinner – poster #21

James Woods – poster #7

Shashini Uthpala Welmillage –

poster #23

Claudia Rodriguez – talk

Judges

Ecology, Evolution, and Behavior

Mark McBride – talks

Joseph S. Cannizzaro – poster #18

Lauren Cirino – talks

Sage DeLong – poster #16

Gerlinde Höbel – grad EEB posters

Olivia Fallahee – poster #15

Sonia Bardy – grad micro posters

Olivia Feagles – talk

Alita Burmeister – grad micro

Gianna Noffsinger – poster #12

posters

Madeline Opie – poster #13

Tamjid Chowdhury – grad CMB

posters

Natalie Plant – poster #14

Peter Dunn – grad EEB posters

Chandika Rani Ganesh Babu – poster #11

Alyssa Kline – undergrad micro

posters

Ariel Rodriguez – poster #10

Alexander Sweet – poster #9

Drew Little – undergrad EEB posters

Sara Seidita – poster #17

Chong Lor – undergrad micro

posters

Medicinal Chemistry

Heather Owen – grad CMB posters

Kane Stratman – undergrad EEB

posters

Sarah Swartwout – poster #19

## **GOBS Board**

Drew Little

Madi Rittinger

Claudia Rodriguez

Kane Stratman