Kelly Lin Wuthrich
PhD Candidate | Florida International University
(518) 210-8501
KellyLWuthrich@gmail.com

EDUCATION

PhD Candidate in Biology Fall 2021-Present
Florida International University, Miami, FL, USA.

MS Biological Sciences Spring 2025
Department of Biological Sciences, Florida International University, Miami, FL, USA.

BS Biological Sciences, *Cum Laude*, *with Honors in Biological Sciences* Spring 2021
Biological Sciences Department; Binghamton University. Binghamton, NY, USA.

Advanced Regents Diploma June 2017
Guilderland High School, Guilderland Center, NY, USA.

RESEARCH EXPERIENCE

Research Assistant, Cox Lab Fall 2021-Present
Florida International University, Biological Sciences Dept.

Graduate Research Fellow
Smithsonian Tropical Research Institute, Gamboa, Panama Summer 2022, 2023, 2024

Field Research Assistant June-July 2021
Las Cruces Biological Field Station, Costa Rica

Research Assistant, Swierk Lab September 2019-May 2021
Binghamton University, Biological Sciences Dept.

Ecotoxicology Intern May 2019-August 2019
NYS Department of Environmental Conservation

PUBLICATIONS

Publications in review/in prep
2025

11) Metz, M., **K. L. Wuthrich**, L. Swierk. Visual ecology of *Anolis aquaticus*: How color patterns serve dual functions in predator avoidance and social signaling. *In prep*.

10) Lopez, Y. F. T., M. Alcivar, K. A. Alujević, L. Bakewell, J. D. Curlis, A. Gonzalez, N. D. Gripshover, S. Gulati, R. Pirani, N. Ratia, D. Romero, **K. L. Wuthrich**, C. L. Cox, M. L. Logan, W. O. McMillan, S. S. Fontaine, C. E. Williams. Host and environmental drivers of gut microbiome variation in wild *Anolis* lizards. *Molecular Ecology*. *In Review.*

9) **Wuthrich, K. L.*,** Fontaine S. S.*, C. Alfonso, K. Alujević, L. Bakewell, J. Keller, Y. López-Tacoaman, N. Ponce, A. Vivas, C. E. Williams, W. O. McMillan, C. L. Cox, M. L. Logan. Gut microbiome composition and diversity are associated with heat tolerance plasticity in a tropical lizard. *Ecological and Evolutionary Physiology. In Review.*
*Authors contributed equally to this work.

Peer-Reviewed Articles

2025

8) Cox, C. L., **K. L. Wuthrich**, D., Aloudeh, S. J. Baker, A. G. Climo, A. F. Gross, C. W. Kizer, Z. Korff, O. Melendez, V. Y. Silva, A. M. Spans, G.R. Thilenius, I.T. Clifton, A. K. Chung. Plasticity and regional heterothermy of upper thermal tolerance in the ringneck snake. *Journal of Thermal Biology.* 135:104354. https://doi.org/10.1016/j.jtherbio.2025.104354

7) Bakewell L., C. Alfonso, K. A. Alujević, S. S. Fontaine, J. Keller, Y. F. Lopez-Tacoaman, N. E. Ponce Chilan, A. Vivas, C. E. Williams, **K. L. Wuthrich**, W. O. McMillan, M. L. Logan, C. L. Cox. Higher parasite load is associated with lower heat tolerance in a tropical lizard. *Journal of Experimental Biology*. 228(18): jeb250580. https://doi.org/10.1242/jeb.250580

6) **Wuthrich K. L.**, L. Swierk. Color-changing signals are independent of social interactions, but correlate with body condition in an *Anolis* lizard. *Biological Journal of the Linnean Society. Biological Journal of the Linnean Society*. 146(2): blaf075. https://doi.org/10.1093/biolinnean/blaf075

5) **Wuthrich K. L.**, A. K. Chung, A Rosso, W. O. McMillan, M. L. Logan, C. L. Cox. Beating the heat: a lowland tropical lizard expresses heat shock protein networks in response to acute thermal stress. *Integrative and Comparative Biology.* 65(4): 1109-1120. https://doi.org/10.1093/icb/icaf057

2024

4) Alujević K, L. Bakewell, I. Clifton, C. L. Cox, L. O. Frishkoff, E. J. Gangloff, G. Garcia-Costoya, M. E. Gifford, M. Glenwinkel, S. Gulati, A. Head, M. Miles, C. Pettit, C.M. Watson, **K. L. Wuthrich**, M. L. Logan. 3D printed models are an accurate, cost-effective, and reproducible tool for quantifying terrestrial thermal environments. *Journal of Thermal Biology*. 119, 103762. https://doi.org/10.1016/j.jtherbio.2023.103762

2022

3) **Wuthrich K. L.**, A. Nagel, L. Swierk. Rapid body color change provides lizards with facultative crypsis in the eyes of their avian predators. *The American Naturalist.* 199: 277-290. https://doi.org/10.1086/717678

2) **Wuthrich K. L.**, D. Stock, J. Talavera, B. Putman, L. Swierk. Sexual signal conspicuity is correlated with tail autotomy in an anoline lizard. *Current Zoology*. https://doi.org/10.1093/cz/zoab064

2021

Other Peer-Reviewed Contributions

1) **Wuthrich K.L.**, L Swierk. 2021. *Anolis aquaticus* (= *Norops aquaticus*) (Water Anole). Dewlap coloration. *Herpetological Review.* 52: 401-402.

GRANTS AND FELLOWSHIPS

SICB Broadening Participation Travel Award- $500.00 January, 2026
FIU UGS Dissertation Fellowship- $20,416.66 Spring-Summer, 2026
FIU CASE Travel Award- $200 Winter, 2024
FIU Graduate Student Travel Award- $1,500 ($500/year) Winter, 2023, 2024, 2025
Lewis and Clark Grant- $5,000 Summer, 2024
Smithsonian Tropical Research Institute Fellow Summer 2022, 2023, 2024
NSF Graduate Research Fellowship *Honorable Mention* Spring, 2023
Graduate Research Assistantship- $120,000 ($30,000/year) August 2021-Fall, 2025
Summer Scholars and Artists Fellowship- $3,500 Spring-Summer, 2020

HONORS

Best Lightning Talk (2nd) at FIU Biosymposium February 8th, 2025
Best Oral Presentation (2nd) at FIU Biosymposium February 3rd, 2024
Undergraduate Honors Thesis Spring 2021

PRESENTATIONS

Society for Integrative and Comparative Biology 2026 Conference *Planned: January 4th, 2026*
"Genome-wide transcriptomic and methylomic patterns in response to acute thermal stress in a lizard"
*Accepted in **Ecology and Evolution Best Student Presentation Huey Award** session.*

FIU Biosymposium February 8th, 2025
"Phenotypic plasticity in the circadian rhythm of heat tolerance and its basis in gene expression"

Society for Integrative and Comparative Biology 2025 Conference January 4th, 2025
"Phenotypic plasticity in the circadian rhythm of heat tolerance and its basis in gene expression"
Selected as a complementary presentation to Symposium: "Identifying the Physiological Mechanisms that Underlie Phenotypic Responses to Rapid Environmental Change".

BCI Centennial Symposium June 19th, 2024
"A thermoconforming forest lizard alters heat-shock protein network expression in response to acute thermal stress", Lighting Talk.

FIU Biosymposium February 3rd, 2024
"A thermoconforming forest lizard alters heat-shock protein network expression in response to acute thermal stress", Contributed Talk.

Society for Integrative and Comparative Biology 2024 Conference January 3rd, 2024
"A thermoconforming forest lizard alters heat-shock protein network expression in response to acute thermal stress", Contributed Talk.

FIU Biosymposium February 11th, 2023
"Transient heat waves induce a rapid and reversible increase in thermal tolerance in a thermoconforming lizard", Contributed Talk.

Society for Integrative and Comparative Biology 2023 Conference January 3rd, 2023
"Transient heat waves induce a rapid and reversible increase in thermal tolerance in a thermoconforming lizard", Contributed Talk.

Society for Integrative and Comparative Biology 2022 Conference January 6th, 2022
"Rapid body color change provides lizards with facultative crypsis in the eyes of their avian predators", Contributed Talk.

Binghamton University Research Days April 30th, 2021
"Rapid body color change provides lizards with facultative crypsis in the eyes of their avian predators", Poster Presentation.

Binghamton University Biology Graduate Student Organization Symposium February 6th, 2021
"Rapid body color change provides lizards with facultative crypsis in the eyes of their avian predators", Flash Talk.

Animal Behavior Society Annual Conference July 28th-30th, 2020
"The Role of Rapid Body Color Change in *Anolis aquaticus* (Water Anole) Anti-predator Strategy", Oral Presentation.

INVITED JOURNAL PEER REVIEW

Journal of Herpetology, Behavioral Ecology and Sociobiology, Amphibia and Reptilia, Phyllomedusa, Journal of Thermal Biology, *Journal of Comparative Biochemistry and Physiology Part A*

TEACHING EXPERIENCE

Graduate Teaching Assistant
Florida International University, Biological Sciences Dept.
BSC 2981: QBIC Journal Club, Biology I Fall 2025
BSC 2922: QBIC Journal Club, Biology II Spring 2022
BSC 2011L: *General Biology II Laboratory* Fall 2021

Undergraduate Teaching Assistant
Binghamton University, Biological Sciences Dept.
BIOL 371: Zoology Spring 2020, 2021
BIOL 355: Ecology Fall 2020
Invited Guest Lecturer: *BIOL 355* November 17, 2020
- *Conservation Biology*

Invited Guest Lecturer: *BIOL 355* November 9, 2021
- *Predation and Herbivory*

MEDIA AND OUTREACH

FIU News: "Do you know anoles? They're having a moment"
https://news.fiu.edu/2025/female-water-anoles-step-into-the-spotlight

Invited Lecture: Our Lady of Lourdes Academy, Miami FL
Lectured for three AP biology classes about thermal biology, fieldwork, and women in science.

News for Kids: "Florida's Cold Weather Brings Falling Iguanas"
Photo credit
https://newsforkids.net/articles/2022/02/02/floridas-cold-weather-brings-falling-iguanas/

REFERENCES

Dr. Christian Cox
Associate Professor, Florida International University
PhD Advisor
Email: ccox@fiu.edu

Dr. Heather Bracken-Grissom
Associate Professor, Florida International University
PhD Committee Member
Email: hbracken@fiu.edu

Dr. Lindsey Swierk
Assistant Professor, Binghamton University, State University of New York
Undergraduate Advisor and PhD Committee Member
Email: lswierk@binghamton.edu