

††Jacob LaFond

Education

- 2017 – 2021 M. S., Biology
University of Central Florida
Thesis: Invasive bullfrogs maintain high levels of immune gene diversity despite elevated *Bd* infection relative to native populations
Adviser: Dr. Anna Savage
GPA: 3.4
- 2008; 2012 – 2016 B.S., Biology
Brigham Young University-Idaho
GPA: 3.66

Professional Appointments

- 2021 – Present **Lab Coordinator and Instructor** at University of Tampa
- 2018 – 2021 **Instructor of Record** for Evolutionary Biology Laboratory at University of Central Florida
- 2017 – 2018 **Graduate Teaching Assistant** for General Biology II Laboratory at University of Central Florida
- 2016 – 2017 **Adjunct instructor** for Introduction to Biology I Laboratory at Brigham Young University-Idaho

Publications

- LaFond, J.**, Martin, K.R., Dahn, H., Richmond, J.Q., Murphy, R.W., Rollinson, N., & Savage, A.E. (2022). Invasive bullfrogs maintain MHC polymorphism including alleles associated with chytrid fungal infection. *Integrative and Comparative Biology*
- Kamath, A., Herrmann, N. C., Gotanda, K. M., Shim, K. C., **LaFond, J.**, Cottone, G., Falkner, H., Campbell, T.S. & Stuart, Y. E. (2020). Character displacement in the midst of background evolution in island populations of Anolis lizards: A spatiotemporal perspective. *Evolution*. 74: 2250-2264

Grants and Awards

- University of Tampa Office of Undergraduate Research & Inquiry grant 2023 (\$6981.96)
- University of Tampa Summer Undergraduate Research Fellowship 2023 (\$6,493.02)
- University of Tampa Summer Undergraduate Research Fellowship 2022 (\$6,493.23)
- University of Central Florida Boyd Lyon Memorial Travel Award, Fall 2019 (\$300)
- University of Central Florida Department of Biology Travel Grant, Fall 2019 (\$250)
- University of Central Florida Department of Biology Travel Grant, Fall 2018 (\$250)

Posters and Oral Presentations

- 2023 Rachel Ryweck*, Madison Harman, Carrie De Jesus, Sam Wisely, Christina Romagosa, & **Jacob LaFond** “Identifying a Cryptic Invasive Species of Toad from the Genus *Rhinella*” Fall 2023 S.U.R.F Symposium, University of Tampa, Tampa, FL (poster presentation)
- 2023 Michael Garvey, **Jacob LaFond**, Madison Harman, Carrie De Jesus, Sam Wisely, Christina Romagosa “Comparing variation in diet, parasitoid load, and morphometrics between invasive cane toad (*Rhinella marina*) populations in central and southern Florida” Joint Meeting of Ichthyologists and Herpetologists Annual Meeting, Norfolk, VA (oral presentation)
- 2022 **Jacob LaFond** “Invasive Bullfrogs Maintain MHC Polymorphism Including Alleles Associated with Chytrid Fungal Infection” Biology Department Seminar, University of Tampa, Tampa, FL (oral presentation)
- 2022 Michael Garvey*, Madison Harman, Carrie De Jesus, , Sam Wisely, Christina Romagosa, & **Jacob LaFond**. “The Ecological Impacts of Invasive Cane Toads (*Rhinella marina*) on Native Florida Species.” Fall 2022 S.U.R.F Symposium, University of Tampa, Tampa, FL (poster presentation)
- 2022 **Jacob LaFond**, Hollis Dahn, Katherine Martin, Jonathan Richmond, Bob Murphy, Njal Rollinson, & Anna Savage. “Using mitochondrial data to track invasion history of the American bullfrog (*Rana catesbeiana*) in Western North America.” Southeastern Partners in Amphibian and Reptile Conservation Annual Meeting, online due to COVID-19 (oral presentation)
- 2022 A.E. Savage, **J.C. LaFond**, K. R. Martin. “Metabarcoding for population immunogenetics: quantifying relationships between MHC polymorphisms and disease susceptibility in invasive and native amphibian populations.” In Symposium 3: DNA metabarcoding across disciplines: sequencing our way to greater understanding across scales of biological organization. Society for Integrative and Comparative Biology annual meeting, Phoenix, AZ
- 2021 **Jacob LaFond**, Hollis Dahn, Katherine Martin, Jonathan Richmond, Bob Murphy, Njal Rollinson, & Anna Savage. “Invasive bullfrogs maintain high levels of immune gene diversity despite elevated *Bd* infection relative to native populations.” Wildlife Animal Disease Virology Lab Palooza Annual Meeting, online due to COVID-19 (oral presentation)
- 2021 **Jacob LaFond**, Hollis Dahn, Katherine Martin, Jonathan Richmond, Bob Murphy, Njal Rollinson, & Anna Savage. “Invasive bullfrogs maintain high levels of immune gene diversity despite elevated *Bd* infection relative to native populations.” Joint Meeting of Ichthyologists and Herpetologists Annual Meeting, online due to COVID-19 (oral presentation)

- 2021 **Jacob LaFond**, Hollis Dahn, Jonathan Richmond, Bob Murphy, Njal Rollinson, & Anna Savage. "Invasive bullfrogs maintain high prevalence of *Bd* infection despite elevated *Bd* infection relative to native populations." Southeast Partners in Amphibian and Reptile Conservation Annual Meeting, online due to COVID-19 (oral presentation)
- 2020 **J.C. LaFond**, A.E. Savage. "MHC diversity in *Rana yavapaiensis*: A 12-year comparison of immunogenetic variation in the presence of *Bd*." Southeast Partners in Reptile and Amphibian Conservation Annual Meeting, Nauvoo, AL (poster presentation)
- 2019 **J.C. LaFond**, A.E. Savage. "Temporal MHC variation in lowland leopard frogs (*Rana yavapaiensis*) in response to fungal pathogen." University of Central Florida Genomics and Bioinformatics Cluster Open House, Orlando, FL (poster presentation)
- 2019 **J.C. LaFond**, A.E. Savage. "Why won't Bullfrogs Die? A Study of Host Tolerance to Deadly Fungal Pathogen." Society for Integrative and Comparative Biology annual meeting, Tampa, FL (poster presentation)
- 2018 N. Christodoulides, J. Konvalina, **J.C. LaFond**, A. E. Savage. "In the Zone: Utilizing Transcriptomic Data to Predict Basking Behavior Classification in Reptile and Amphibian Species." Graduate Research Forum, University of Central Florida, Orlando, FL (poster presentation)
- 2018 **Jacob LaFond**, A.E. Savage. "Population immunogenetics of fire and frogs across species and time." Genomics and Bioinformatics Cluster Open House, University of Central Florida, Orlando, FL (poster presentation)

*Undergraduate presenter

Media & Outreach

- Lena Malpeli, **Catching Cryptid Cane Toads** University of Tampa homepage feature. Published October 05, 2023. <https://www.ut.edu/news-and-ut-life/catching-cryptic-cane-toads-->

Skills & Experience

Fieldwork

- Herpetofauna surveying
- Burrow scoping
- Pit trapping
- Dip netting
- Minnow trapping
- Drift fence assembly and trapping
- Lasso pole lizard capture
- GPS navigation

- Radio telemetry
- Toe and fin clipping
- Experience driving 4wd and manual vehicles
- Experience trailering and operating motorboats

Molecular Biology

- Gel electrophoresis
- PCR
- qPCR
- Cell culturing
- DNA extraction
- Preparing samples for Illumina MiSeq Sequencing
- Preparing samples for Sanger Sequencing
- PCR primer design
- Illumina MiSeq adapter & primer design

Data analysis

- R
- Microsoft Office
- MEGA
- DNAsp
- FSTAT
- Geneious

Certifications & Awards

- CPR Certified
- Eagle Scout

References

Dr. Anna Savage: Anna.Savage@ucf.edu; 407-823-4504

Dr. Eric Hoffman: Eric.hoffman@ucf.edu; 407-823-4007

Dr. John Zenger: zengerj@byui.edu; 208-496-4632