Kristen Martinet

Curriculum Vitae

PROFESSIONAL APPOINTMENTS

2024 - Present Postdoctoral Researcher, University of Arizona, College of Information Science

Summer 2024 Postdoctoral Researcher, University of Idaho, Polymorphic Games Studio

EDUCATION

2024 PhD, Bioinformatics and Computational Biology

University of Idaho, Moscow, Idaho Advisor: Luke Harmon

2018 BS, Biology Honors Program

Minor: Computer Science

Florida Southern College, Lakeland, Florida

RESEARCH INTERESTS

Incorporating biological concepts into video games, evolution, bioinformatics, phylogenetic comparative methods, and island biogeography

PUBLICATIONS

- 1. **Martinet, K.M.**, Román-Palacios, C., & Harmon, L.J. 2025. SSARP: An R Package for Easily Creating Species- and Speciation- Area Relationships Using Web Databases. *bioRxiv*. 2024.12.31.630948; doi: https://doi.org/10.1101/2024.12.31.630948
- 2. **Martinet, K.M.** & Harmon, L.J. 2024. Delimiting the rare, endangered and actively speciating. *Molecular Ecology Resources.* 24(3): e13938
- 3. Stemle, L.R., **Martinet, K.M.**, & Langford, G.J. 2020. Natural History Traits and Ecology of the Striped Mud Turtle in a Florida Wetland. *Southeastern Naturalist.* 19(3): 511-523
- 4. Stemle, L.R., **Martinet, K.M.**, & Langford, G.J. 2019. Spatial Ecology of the Striped Mud Turtle, *Kinosternon baurii*, in a Restored Florida Wetland. *Herpetological Review*. 50(4): 695-698

THESES

1. **Martinet**, **K.M.** 2024. Video Games and Web Databases as Novel Computational Tools for Understanding Biodiversity. University of Idaho ProQuest Dissertations & Theses. Available from: https://www.proquest.com/docview/3058590063?pq-origsite=primo

2. Martinet, K.M. 2017. A Comparative Analysis of the Commensal Diversity of Two Gopher Tortoise (*Gopherus polyphemus*) Populations in Central Florida. B.S. Thesis, Florida Southern College. Available from: http://hdl.handle.net/11416/395

IN PREPARATION AND SUBMITTED

- 1. **Martinet, K.M.**, Juhn, M.S., Boucher, F.C., Harmon, L.J., Revell, L.J., Foerster, S.I.A., Shultz, A.J., Burns, K., & Alfaro, M.E. (In Revision). A Wrapped Brownian Motion Model for Traits on a Circular Scale. In revision for *Systematic Biology*.
- 2. Alam, M.N.U., Basava, K., Chitransh, A., Fattah, H.M.A., Garcia-Verdugo, H., Lo, S-H., Lohchab, T., **Martinet, K.M.**, Román-Palacios, C., Salazar, J.C., & Van Boxel, D. (In Review). Machine learning in biological research: key algorithms, applications, and future directions. Submitted to *Nature Methods*.
- 3. **Martinet, K.M.**, Dace, B., Harmon, L.J., Pearson, S., Wischnowski, J., Wright, L.R., Soule, T., & Robison, B.D. (In Prep.). Is Evolution Predictable? Experiments in an Evolutionary Video Game. Target journal *American Naturalist*.
- 4. **Martinet, K.M.** & Harmon, L.J. (In Prep.). Non-Native Species Impact Species-Area Relationships for Lizard Genera *Anolis, Phelsuma*, and *Emoia* on Islands. Target journal *Journal of Biogeography*.

SOFTWARE

- 1. **2025** SSARP (Species-/Speciation-Area Relationship Projector) R Package. Available on GitHub: https://github.com/kmartinet/SSARP
- 2. **2023** Arbor: Analytics Over the Tree of Life a collection of web applications for phylogenetic comparative methods. Available from: http://arbor.knowledgevis.com:9080/
- 3. **2020** Evolvy Bugs: Pew Pew! an unreleased video game in which enemies evolve and experience mate selection. Available from GitHub upon request for private repository access.

FUNDING & AWARDS (TOTAL FUNDING: \$106,386)

- 1. **2024** Best Poster Presentation, Arizona Postdoctoral Research Conference, Tucson, Arizona (\$50)
- 2. **2023** Paul Joyce Memorial BCB Fellowship Award, University of Idaho (\$2500)
- 3. **2022** College of Science Travel Award for Galápagos Field Work, University of Idaho (\$1500)
- 3. 2022 GPSA Travel Award for Evolution Conference, University of Idaho (\$700)

- 4. **2021** Bioinformatics and Computational Biology Fellowship, University of Idaho (\$33,447)
- 3. **2021** GPSA Travel Award for IBS Conference, University of Idaho (Declined) (\$900)
- 5. **2020** Lauren Ancel Meyers Registration Award for SACNAS, Institute for Modeling Collaboration and Innovation, University of Idaho (**\$205**)
- 6. **2019 2020** Bioinformatics and Computational Biology Fellowship, University of Idaho (\$67,084)

COURSE TEACHING EXPERIENCE

Spring 2024	Herpetology Lab (BIOL 489). University of Idaho, 29 students
Spring 2023	Ecology and Population Biology Lab (BIOL 314). University of Idaho, 24 students
Fall 2022	Herpetology Lab (BIOL 489). University of Idaho, 21 students
Spring 2022	Ecology and Population Biology Lab (BIOL 314). University of Idaho, 23 students
Fall 2021	Herpetology Lab (BIOL 489). University of Idaho, 25 students
Fall 2020	Herpetology Lab (BIOL 489). University of Idaho, 19 students

WORKSHOP TEACHING EXPERIENCE

Fall 2023	Software Carpentries: Data Visualization. University of Idaho, 17 students
Summer 2023	Studying Biodiversity with R Workshop. Santa Cruz Island, Galápagos, 22 students
Spring 2022	Software Carpentries: Data Visualization. University of Idaho, 15 students

OUTREACH EXPERIENCE

Fall 2024	Great American Teach-In, Pepin Academies, Tampa, Florida
Fall 2024	Bio/Diversity Project Presentation, University of Arizona
Summer 2024	Coding Summer Camp Presentations, University of Idaho
Spring 2024	Vandal Game Convention, Polymorphic Games Studio Booth, University of Idaho
2022 - 2023	Office of Undergraduate Research How-To Series Presentations, University of Idaho

Fall 2018	Great American Teach-In, Pepin Academies, Tampa, Florida
2017 - 2018	High School Chemistry Lab Visit Instructor, Florida Southern College
2015 - 2018	Polk Nature Discovery Center Presentations, Lakeland, Florida
2015 - 2017	First Friday and Children's Museum Chemistry Demos, Florida Southern College

UNIVERSITY SERVICE

2021 - 2024	Founding Vice President of the University of Idaho's SACNAS Chapter
2021 - 2023	Bioinformatics and Computational Biology Student Representative

PRESENTATIONS AT PROFESSIONAL MEETINGS

Presenter is first author, unless indicated by *

- 1. Martinet, K.M., Harmon, L.J., & Román-Palacios, C. 2025. SSARP: an R package for easily creating species- and speciation-area relationships. SICB, Atlanta, Georgia.
- 2. **Martinet, K.M.**, Godfrey, B., & Harmon, L.J. 2024. SSARP: Easily Project Species-Area Relationships. Arizona Postdoctoral Research Conference, Tucson, Arizona. Poster.
- 2. **Martinet, K.M.**, Godfrey, B., & Harmon, L.J. 2023. SSARP: Easily Project Species-Area Relationships. EVO-WIBO, Port Townsend, Washington. Poster.
- 3. Martinet, K.M., Wright, L.R., Soule, T., Harmon, L.J., & Robison, B.D. 2022. Evolutionary Diversification in a Digital Video Game. Evolution, Cleveland, Ohio.
- 4. **Martinet, K.M.**, Robison, B.D., Soule, T., Holliday, G., Mason, L., Wright, L.R., & Harmon, L.J. 2021. Survival of the Hairiest: Mate Selection in an Evolutionary Video Game. Evolution, Virtual.
- 5. **Martinet, K.M.** & Harmon, L.J. 2020. Species-Area Curves for Island Lizard Radiations. Society of Systematic Biologists Standalone Meeting, Gainesville, Florida. Poster.
- Martinet, K.M., Stemle, L.R., & Langford, G.J. 2018. A Comparative Analysis of the Commensal Diversity from Two Gopher Tortoise (Gopherus polyphemus) Populations in Central Florida. Joint Meeting of Ichthyologists and Herpetologists, Rochester, New York. Poster.

- 7. Stemle, L.R., **Martinet**, **K.M.**, & Langford, G.J. 2018. Life History Traits and Spatial Ecology of the Striped Mud Turtle, *Kinosternon baurii*, in Central Florida. Joint Meeting of Ichthyologists and Herpetologists, Rochester, New York.
- 8. Stemle, L.R.*, **Martinet, K.M.***, & Langford, G.J. 2017. Life History Traits and Spatial Ecology of the Striped Mud Turtle, *Kinosternon baurii*, in Central Florida. Florida Chapter of The Wildlife Society Spring Conference, Orlando, Florida. Poster.