

Jonathan M. Huie

Friday Harbor Laboratories
620 University Road
Friday Harbor, WA 98250

jonathanmhuie@gmail.com
jonathanhuie.com

Education

- 2020 – pres. Ph.D. student in Biology with systematics, evolution, and ecology emphasis
George Washington University, Washington, DC
Advisor: Dr. Sandy Kawano
- 2015 – 2019 B.S. in Aquatic and Fishery Sciences & Marine Biology Double Major
University of Washington, Seattle, WA
Advisor: Dr. Luke Tornabene

Research Experience

- 2019 – 2020 **Lab Technician**, Summers and Tornabene Labs, Friday Harbor, WA
- Generated micro-CT data for oVert, uploaded scans to MorphoSource.org, trained visiting researchers on the equipment, oversaw high school and undergraduate students, animal care
- 2019 – 2020 **Curatorial Assistant**, UW Burke Fish Collection, Seattle, WA
- Catalogued and organized specimen lots, collected tissue samples, and participated in outreach events
- 2018 – 2019 **Thesis Student**, Tornabene Lab, University of Washington, Seattle, WA
- Combined functional morphology with comparative phylogenetic methods to investigate the evolution and adaptations of cleaner gobies.
- Summer 2018 **NSF-REU Intern**, Smithsonian National Museum of Natural History
Washington, DC
- Constructed a large morphological data set to examine patterns of ecomorphological diversification in mainland *Draconura* clade anoles.
- Advisors: Dr. Kevin de Queiroz and Dr. Ivan Prates
- 2017 **Student Researcher**, Summers Lab, Friday Harbor, WA
- Used micro-CT and geometric morphometrics to examine the feeding morphology and body shape of a specialized guild of rheophilic herbivores
 - Coupled micro-CT scanning with iodine-contrast staining to compare the ontogeny of jaw biomechanics in scale-feeding fishes
- 2016 – 2017 **Research Assistant**, Carrington Lab, University of Washington, Seattle, WA
- Assessed the effects of ocean acidification on the tensile strength of mussel byssal threads

PUBLICATIONS

- Huie, J.M.**, Prates, I., Bell, R.C., de Queiroz, K. (accepted). Convergent patterns of adaptive radiation between island and mainland *Anolis* lizards. *Biological Journal of the Linnean Society*.
- Huie, J.M.**, Thacker, C.E., Tornabene, L. (2020). Co-evolution of cleaning and feeding morphology in western Atlantic and eastern Pacific gobies. *Evolution*, 74(2), 419-433.
- George, M.N., Andino, J., **Huie, J.M.**, Carrington, E. (2019). Microscale pH and dissolved oxygen fluctuations within mussel aggregations and their implications for mussel attachment and raft aquaculture. *Journal of Shellfish Research*, 38(3), 795-809.
- Huie, J.M.**, Summers, A.P., Kolmann, M.A. (2019). Body shape separates guilds of rheophilic herbivores (Myleinae: Serrasalmidae) better than feeding morphology. *Proceedings of the Academy of Natural Sciences in Philadelphia*, 166(1), 1-15.
- Kolmann, M.A., **Huie, J.M.**, Evans, K.M., Summers, A.P. (2018). Specialized specialists and the narrow niche fallacy: a tale of scale-feeding fishes. *Royal Society open science*, 5(1), 171581.

INVITED SEMINARS

- 2019 **Huie, J.M.** Heroes and villains: Using microCT to study the evolution of interspecific relationships in fishes. Friday Harbor Labs, Friday Harbor, WA. December 4.

PRESENTATIONS

*Awarded best student presentation, ^xCancelled due to covid-19

- 2021 **Huie, J.M.**, Hall, K.C., Summers, A.P., Conway, K.W. Stick with it: potential convergent evolution of eco-morphotypes in clingfishes. Society for Integrative and Comparative Biology, Remote Conference. January 3-7.
- 2020^x **Huie, J.M.**, Tornabene, L. A family of thrifty sifters: morphological variation of winnowing gobies. Joint Meeting for Ichthyologist and Herpetologists. Norfolk, VA. Poster presentation.
- 2020 **Huie, J.M.**, Thacker, C., Tornabene, L. Co-evolution of cleaning and morphology in Caribbean and eastern Pacific gobies. Society for Integrative and Comparative Biology, San Francisco, CA. January 3-7. Oral Presentation.
- 2020 Kolmann, M.A., Hughes, L.C., Evans, K., **Huie, J.M.**, Orti, G., Hernandez, L.P. Carnivorous grazers? How to build scale-feeding and fin-feeding fishes from less egregious relatives. Society for Integrative and Comparative Biology, San Francisco, CA. January 3-7. Oral Presentation.
- 2019 **Huie, J.M.**, Thacker, C., Tornabene, L. Co-evolution of cleaning and morphology in Caribbean and eastern Pacific gobies. Gilbert Ichthyological Society, Eatonville, WA. September 20-22. Oral Presentation.
- 2019 **Huie, J.M.**, Tornabene, L. Co-evolution of cleaning and morphology in Caribbean neon gobies. Joint Meeting for Ichthyologist and Herpetologists, Snowbird, UT. July 24-28. Oral presentation.

- 2019 **Huie, J.M.**, Prates, I., Bell, R.C., de Queiroz, K. Morphological diversification of mainland *Draconura* clade anoles. Evolution, Providence, RI. June 21-25. Oral Presentation.
- 2019 **Huie, J.M.**, Tornabene, L. Co-evolution of morphology and cleaning in Caribbean cleaner gobies. University of Washington Undergraduate Research Symposium, Seattle, WA. May 17. Oral presentation.
- 2019 **Huie, J.M.**, Summers, A.P., Kolmann, M.A. Body shape and feeding morphology explain ecological differences in riverine herbivorous fishes. Society for Integrative and Comparative Biology, Tampa, FL. January 3-7. Poster presentation.
- 2018 ***Huie, J.M.**, Evans, K.M., Summers, A.P., Kolmann, M.A. Diversity of tooth form and function in scale-feeding fishes. Gilbert Ichthyological Society, Blue River, OR. October 5-7. Oral Presentation.
- 2018 **Huie, J.M.**, Prates, I., Bell, R.C., de Queiroz, K. Morphological and ecological diversity of mainland *Draconura* clade anoles. National Museum of Natural History, Smithsonian Institution, Washington, D.C. August 2. Poster presentation.
- 2018 **Huie, J.M.**, Summers, A.P., Kolmann, M.A. Are all herbivores created equal? Linking diet and morphology in phytophagous pacus. University of Washington Undergraduate Research Symposium, Seattle, WA. May 18. Oral presentation.
- 2018 Kolmann, M.A., **Huie, J.M.**, Evans, K.M., Summers, A.P. View to a keel: aggression, armor, and scale-feeding in piranhas. Society for Integrative and Comparative Biology, San Francisco, CA. January 3-7. Oral presentation.
- 2018 **Huie, J.M.**, Evans, K., Summers, A.P., Kolmann, M.A. Ontogeny of jaw biomechanics in lepidophagous fishes. Society for Integrative and Comparative Biology, San Francisco, CA. January 3-7. Poster presentation.

AWARDS & SCHOLARSHIPS

- 2020 NSF Graduate Research Fellowship (\$138,000)
- 2019 Friday Harbor Laboratories Student SICB Travel Funds – SICB (\$250)
- 2019 UW Undergraduate Research Conference Travel Award – Evolution (\$563)
- 2018 UW Undergraduate Research Conference Travel Award – SICB (\$573)
- 2018 Best Student Presentation, Gilbert Ichthyological Society
- 2018 Levinson Emerging Scholars Award (\$7,000)
- 2018 Melvin Anderson Memorial Scholarship (\$2,000)
- 2018 NSF Research Experience for Undergraduates (REU) at the Smithsonian National Museum of Natural History (\$6,000)
- 2018 Mary Gates Research Scholarship (\$5,000)
- 2017 College of the Environment Student Travel Fund – SICB (\$402)
- 2017 School of Aquatic and Fishery Sciences Travel Award – SICB (\$500)
- 2017 Ellie Dorsey Award (\$200)
- 2017 Wilbert McLeod Chapman Memorial Scholarship (\$1,000)
- 2017 Mary Gates Endowment Scholarship (\$1,250)
- 2016 Friday Harbor Laboratories Financial Aid (\$500)

2015 Hearing Loss Association Scholarship (\$1,000)

RECENT SERVICE AND OUTREACH

2020 – pres. *Integrative Organismal Biology* Outreach Associate
2019 – 2020 Trained high school and undergraduate students at Friday Harbor Labs
2019 SAFS Open House, University of Washington, Seattle, WA
2019 Polar Science Weekend Volunteer, Pacific Science Center, Seattle, WA
2019 Labs Unlocked, UW Burke Fish Collection, Seattle, WA
2018 – 2019 Editor of *FieldNotes*, an undergraduate-run environmental research journal
2018 Outreach facilitator at the Smithsonian National Museum of Natural History
2017 – 2019 Vice President of SeaDawgs, the official UW Marine Biology Club
2017 Scientist in the classroom, Spring Street School, Friday Harbor, WA
2016 Fieldtrip leader for UW marine biology class (BIOL 250)
2016 – 2017 Intern at Coastal Observation and Seabird Survey Team
2016, 2017 Open house volunteer at Friday Harbor Laboratories, Friday Harbor, WA
2016 Scientist in the classroom, Friday Harbor Elementary, Friday Harbor, WA
2016 Scientist in the classroom, Stillpoint School, Friday Harbor, WA

PROFESSIONAL AFFILIATIONS

2019 – 2021 Society for the Study of Evolution
2019 – 2020 American Society of Ichthyologists and Herpetologists
2018 – 2020 Gilbert Ichthyological Society
2017 – pres. Society for Integrative and Comparative Biology; DCB, DVM
2017 – pres. PADI Open Water