CURRICULUM VITAE

Amanda E. Hewes
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EDUCATION

PhD Student – Biology
University of Washington – September 2020 to Present
GPA: 3.96 (4.0 scale)
Doctoral Dissertation: *Understanding honeyeater-plant interactions using a multiscale approach*

M.Sc. in Ecology and Evolutionary Biology
University of Connecticut – August 2018 to May 2020
GPA: 4.2 (4.3 scale)
MS Thesis: *Convergence and historical contingency in the evolution of lingual prey capture systems in lizards*

B.S. in Ecology and Evolutionary Biology (minor in Wildlife Conservation)
University of Connecticut – August 2014 to December 2017
GPA: 3.8 (4.0 scale) – Magna Cum Laude

PUBLICATIONS

1. **Hewes, A.E.,** Cuban, D., Groom, D.J.E., Sargent, A.J., Beltrán, D.F., and Rico-Guevara, A. Variable evidence for convergence in morphology and function across avian nectarivores. Journal of Morphology. 283(12): https://doi.org/10.1002/jmor.21513 - featured as Cover Image
2. Cuban, D., **Hewes, A.E.**, Sargent, A.J., Groom, D.J.E., and Rico-Guevara, A. 2022. On the feeding biomechanics of nectarivorous birds. Journal of Experimental Biology. 225(2): jeb243096
3. Phillips, J., **Hewes, A. E.**, Womack, M.C., and Schwenk, K. 2022. The Mechanics of Air-Breathing in African Clawed Frog Tadpoles, *Xenopus laevis* (Anura: Pipidae). Journal of Experimental Biology. 225(10): https://doi.org/10.1242/jeb.243102
4. **Hewes, A.E.**, and Schwenk, K. 2021. The functional morphology of lingual prey capture in a scincid lizard, Tiliqua scincoides (Reptilia: Squamata). Journal of Morphology. 282:127–145. 10.1002/jmor.21287
5. Phillips, J.R., **Hewes, A.E.**, and Schwenk, K. 2020. The mechanics of air breathing in gray tree frog tadpoles, *Hyla versicolor* (Anura: Hylidae). Journal of Experimental Biology. 223:10.1242/jeb.219311

MANUSCRIPTS (status/expected submission date)

1. Schwenk, K., and **Hewes, A. E.** Ingestion in Amphibians and Reptiles. Encyclopedia of Life Sciences (invited article, February 2023)
2. **Hewes, A.E.**, Baldwin, M.E., Buttemer, W., and Rico-Guevara, A. How do honeyeaters drink nectar? (February 2023)
3. **Hewes, A. E.**, and Schwenk, K. Contingency and convergence: a comparison of lingual prey capture mechanisms in two lizard lineages (Reptilia: Squamata) (June 2023)

FUNDING

PhD Program

Research Funding

- UW Biology Graduate Student Research Award ($6,000)
- Society of Integrative and Comparative Biology Student Travel Fellowship ($2,000)

Fellowship Funding

- UW Graduate School Boeing International Research Fellowship (1 quarter stiped, $8,100)
- Burke Museum Ornithology Fellowship (1 quarter stiped, $8,100)
- Univ. of WA Graduate School Top Scholar Fellowship (1 quarter stiped, $8,100)

Master's Program

Research Funding

- Univ. of CT Ecology and Evolutionary Biology Dept. Zoology Grant ($930)

PRESENTATIONS

1. SICB+ (virtual conference) – Jan. 2023
   Title: *How do honeyeaters drink nectar?*
2. International Ornithological Congress (virtual conference) – Aug. 2022
   Title: *The mechanics of nectar uptake in the honeyeater tongue*
3. SICB+ (virtual conference) – Jan. 2022
   Title: *The mechanics of nectar uptake in honeyeaters*
4. SICB National Conference, Austin TX – Jan. 2020
   Division of Vertebrate Morphology Student Presentation Competition
   Title: *A comparative study of lingual prey capture in iguanian and scincid lizards*
5. SICB Div. of Vert. Morphology NE Regional Conference, Boston College – Nov. 2019
   Title: *Lingual Prey Capture in the Blue Tongued Skink, Tiliqua scincoides, and Iguanian Squamates*
6. Joint Meeting of Ichthyologists and Herpetologists, Snowbird UT – July 2019
   Title: *Multiple origins of a complex phenotype: morphology, kinematics, and phylogenetics of tongue-feeding in squamate reptiles*
7. UConn EEB Graduate Student Symposium – Feb. 2019
   Title: *Convergent evolution of tongue feeding in squamates: morphology, kinematics, and phylogenetics*
8. SICB Div. of Vert. Morphology NE Regional Conference, Brown University – Oct. 2018
   Title: *How do complex traits evolve? The independent reacquisition of lingual prey capture in three lineages of jaw-feeding lizards*

OUTREACH & VOLUNTEERING

PhD Program

- SICB Public Affairs Committee member – Spring 2022 - Present
- Member of the UW Biology Dept. and King County YWCA Femme2STEM project – Autumn 2021 to Present
- Outreach Associate for *Integrative Organismal Biology* – Spring 2021 to Present

- Social Media Assistant for *Integrative and Comparative Biology* – Spring 2021 to Present
- Presenter, Boys and Girls Club of King County YouthForce Program – Autumn 2020

Master's Program

- Student representative on the selection committee for the Herpetological Education Committee *Meritorious Teaching Award in Herpetology* – Summer 2020 & Summer 2021
- *Herpetological Review* copy editor – Summer 2019 to Summer 2021
- SSAR Student Participation Committee Member – Summer 2019 to Summer 2021
- UConn EEB Outreach Committee – Fall 2019
- Presenter, Connecticut Science Museum Women in Science Program – Summer 2019
- Presenter, The Children's Museum, West Hartford CT – Summer 2019
- Tutor for UConn Women in Math, Science, and Engineering Learning Community – Spring 2019 to Spring 2020
- Mentor for UConn Connects program, a program that matches an undergraduate at risk of academic suspension with a graduate student mentor – Fall 2018 to Spring 2020

UNDERGRADUATE ASSISTANTS & MENTORING

PhD Program

Yoon Lee, Allison Li, Nora Lee, Vishva Ilavelan, and Rosario Tarabi

- Assisted with digitizing 3D bird bill models for an NSF grant proposal and associated research project

Master's Program

Nathaniel Davino – Fall 2019 and Spring 2020

- Assisted with histochemical stain intensity quantification using ImageJ

Courtney Rose – Fall 2019

- Assisted with kinematic data collection from high-speed video of lizard feeding

Lilian Fajardo – Spring 2019 and Fall 2019

- Assisted with kinematic data collection from high-speed video of lizard feeding
- Assisted with histology of lizard tongues

Levi Santos – Fall 2019

- Assisted with kinematic data collection from high-speed video of lizard feeding

TEACHING ASSISTANTSHIPS

University of Washington

- General Biology II – Winter 2022
- General Biology – Autumn 2020 & Autumn 2021

University of Connecticut

- General Biology II – Spring 2020 & Fall 2018
- Biology of the Fishes – Spring 2019
- Mammology – Fall 2019

ACADEMIC AWARDS & SOCIETY AFFILIATIONS

- Member of Phi Beta Kappa Honors Society – Spring 2018 to Present
- University of Connecticut Babbidge Scholar – Spring 2018
- University of Connecticut New England Scholar – Spring 2017
- Member of National Society of Leadership and Success – Spring 2017 to Present
- Member of National Society of Collegiate Scholars – Fall 2015 to Present
- Member of National Honors Society Alpha Lambda Delta – Spring 2015 to Present

SKILLS

Wet Lab

- High-speed videography
- Paraffin histology
- Gross and fine dissection

Data Analysis

- Collection of kinematic data in Tracker
- Collection of morphometric data in ImageJ
- Experience with general coding, plotting, and statistics in R

Communication/ Personnel Management

- Workshop creation and presentation
- Communicating research concepts to the public, both in print and in presentations
- Experience delegating tasks to undergraduates, assessing productivity and quality of work
- Experience mentoring undergraduate students

Field

- Camera trapping
- Track and sign