

ANNA E. HILLER

LSU Museum of Natural Science
119 Foster Hall, Louisiana State University
Baton Rouge, LA 70803
(530) 574-3121 | ahille2@lsu.edu



Ecogeographical Rules • Montane Biogeography • Hybrid Zones • Biodiversity Genomics

EDUCATION

Ph.D. Student Systematics, Ecology and Evolution, Louisiana State University, 2016-present

Advisors: Dr. Brant Faircloth, Dr. Robb Brumfield

B.S. Environmental Science, University of California, Berkeley, 2010-2014

Mentors & Advisors: Dr. Carla Cicero, Dr. Rauri Bowie, Dr. Rosemary Gillespie

Thesis: Mapping the Diversification of Hawaiian Swordtail Crickets using ENM.

FELLOWSHIPS

Graduate Research Fellowship, National Science Foundation, 2018-2023 \$138,000

Louisiana Board of Regents Fellowship, 2016-2020 \$255,000

AWARDS & GRANTS

Student Research Grant, Wilson Ornithological Society, 2018 \$1,500

BioGrads Award, Dept. of Biological Sciences, Louisiana State University, 2018 \$400

R.C. Lewontin Early Award, Society for the Study of Evolution, 2018 \$2,500

Student Research Award, American Society of Naturalists, 2018 \$2,000

Graduate Student Research Award, Society of Systematic Biologists, 2017 \$1,700

Student Travel Award, American Ornithological Society, 2017 \$260

BioGrads Award, Dept. of Biological Sciences, Louisiana State University, 2017 (x2) \$800

Student Travel Award, American Ornithologists' Union, 2016 \$235

Undergraduate Conference Travel Award, Museum of Vertebrate Zoology, 2016 \$250

Sponsored Projects for Undergraduate Research, UC Berkeley, 2014 \$2,000

Travel Grant, College of Natural Resources, UC Berkeley, 2014 \$600

Dean's Honors, College of Natural Resources, UC Berkeley, 2013 --

PUBLICATIONS

Brady, M. L., **Hiller, A. E.**, D. L. Rumiz, N. Herzog, and S. K. Herzog. In review. Laughing Gull *Leucophaeus atricilla*, a first country record for Bolivia, and two notable *Fulica* Coot records from Laguna Guapilo, Santa Cruz Department. For submission to *Cotinga*.

Hiller, A. E., M. S. Koo, K. R. Goodman, K. L. Shaw, P. M. O'Grady, and R. G. Gillespie. In revision. Mixed signals in adaptive radiation: mapping the diversification of Hawaiian arthropods using Ecological Niche Modeling. For submission to *Biological Journal of the Linnean Society*.

Hiller, A. E., C. Cicero, M. J. Albe, T. L. W. Barclay, C. L. Spencer, M. S. Koo, R. C. K. Bowie, and E. A. Lacey. 2017. Mutualism in museums: A model for engaging undergraduates in biodiversity science. *PLOS Biology*. doi.org/10.1371/journal.pbio.2003318

DATA

Hiller, A. E., Goodman, K. R., Shaw, K. L., O'Grady, P. M., Gillespie, R. G. 2016. Species distribution models and georeferenced occurrence records for Hawaiian arthropods (*Laupala*, *Drosophila*, *Tetragnatha*, and *Nesosydne*). *PANGAEA*. doi.org/10.1594/PANGAEA.865181

PRESENTATIONS

- Hiller, A.**, R. Brumfield, and B. Faircloth. Drivers of diversity at the peaks: Speciation in *Diglossa* Flowerpiercers. 2018. *SEE Seminar Series*, Louisiana State University. Talk.
- Hiller, A.**, R. Brumfield, and B. Faircloth. Knowns and Unknowns in the Origin of Leapfrog Variation in Andean Birds. 2017. *Joint Meeting of the American Ornithological Society and the Society of Canadian Ornithologists*, Michigan State University. Lightning talk.
- Hiller, A.**, C. Cicero, M. Albe, *et al.* Teaching natural history beyond the classroom: Looking back on 10 years of the MVZ Undergraduate Program. 2017. *Natural History of the Vertebrates Reunion*, Museum of Vertebrate Zoology, UC Berkeley. Talk.
- Hiller, A.**, C. Cicero, M. Albe, T. W. Barclay, C. Spencer, M. Koo, R. Bowie, and E. Lacey. Mutualism in Museums: A 10-year Retrospective on the MVZ Undergraduate Program. 2016. *North American Ornithological Conference*, Washington D.C. Integrating Natural History Collections into Undergraduate Education symposium. Invited talk.
- Hiller, A.**, K. Goodman, R. Gillespie. Diversification of Hawaiian arthropods using Ecological Niche Modeling. 2015. *Science for Parks and Parks for Science Conference*, UC Berkeley. Poster.
- Hiller, A.**, C. Lee, K. Lyberger, Z. Hanna, and C. Cicero. Words of wisdom on undergraduate research opportunities. 2015. *Undergraduate Seminar on Independent Research and Funding*, Museum of Vertebrate Zoology, UC Berkeley. Talk.
- Hiller, A.**, K. Goodman, R. Gillespie. Diversification of Hawaiian swordtail crickets, an approach using Ecological Niche Modeling. 2014. *Island Biology*, University of Hawaii, Manoa. Poster.
- Hiller, A.**, K. Goodman, R. Gillespie. Mapping the diversification of Hawaiian swordtail crickets using Ecological Niche Modeling. 2014. *Environmental Sciences Senior Thesis Symposium*, UC Berkeley. Talk.

OTHER CONTRIBUTIONS

- Gillespie, R., **A. Hiller**, M. Koo, M. Kelly, K. Koy, C. Marshall, and G. Rapacciuolo. HOLOS: Integrating biological and environmental data to assess ecological and evolutionary response to change. 2016. *Island Biology*, University of the Azores, Portugal. iDigBio symposium.

RESEARCH EXPERIENCE

- Graduate Research Fellow**, Louisiana State University, 2016-present
Molecular lab work, genomic library preparation, ornithological specimen preparation.
- Curatorial Assistant**, Museum of Vertebrate Zoology, UC Berkeley, 2011-2016
Work-study curatorial assistantship, later a staff position in the ornithology collection.
- Genetics Lab Assistant**, Evolutionary Genetics Lab, UC Berkeley, 2015
DNA extraction and Sanger sequencing for a phylogeny of Vireos (Vireonidae).
- Undergraduate Researcher**, Gillespie EvoLab, UC Berkeley, 2013-2015
Georeferenced specimen records and conducted Species Distribution Modeling research.

TEACHING EXPERIENCE

- Undergraduate Student Instructor** - Ornithology, with Dr. Rauri Bowie, 2015
Instructor - Advanced Specimen Preparation, with Dr. Carla Cicero, 2013-2015

OUTREACH

- Public Outreach & Science Communication**, LSU Museum of Natural Science, 2016-present
Participated in 10+ events to discuss biodiversity research using the LSUMNS collections. Audiences included the general public, bird watchers, and K-12 students. Wrote 16 natural history notes for the iPad project updating the LSUMNS public displays.

Women in STEM, LSU Museum of Natural Science, 2018-present

Group leader for 'Girl's Day/Night at the Museum', conceived of the idea with Dr. Dawn Jenkins and Outreach Coordinator Valerie Derouen. These events engaged 64+ local middle school girls in hands-on research activities and introduced them to women in STEM at LSU.

Undergraduate Mentorship, Museum of Vertebrate Zoology, 2013-2015

Trained 15 students, including 12 women, in specimen preparation and 7 students in curatorial.

Women in STEM, Expanding Your Horizons Event. UC Berkeley, 2015

Performed dissection demonstrations for 60 5th-8th grade girls during museum tours.

Public Outreach & Science Communication, Museum of Vertebrate Zoology, 2012-2015

Wrote 2 online articles and designed 3 public displays. Organized specimen exhibitions and volunteered as a docent for 'Cal Day', the annual museum open house with over 1000 visitors. Led tours for K-12 students, teachers, government agencies, and undergraduate classes.

OTHER SKILLS

- Historic DNA extraction, genomic library prep, target enrichment
- R, Linux/Unix command line, basic Python
- Experienced with CITES and USFW permits, international import and export permits
- Advanced Spanish, studied at Universidad San Francisco de Quito, Ecuador, fall 2012

FIELD EXPERIENCE

Expeditions - N San Martín, Peru 2018 (birds). Río Urubamba & Río Tambo, Peru, 2018 (birds). E Chuquisaca & Serranía de Siberia, Bolivia, 2018 (birds). W Texas, USA, 2017 (co-led, birds). Hawaii, USA, 2014 (arthropods). N California, USA, 2014 (birds). Chiapas, Mexico, 2013 (mammals & birds).

Other Fieldwork - Galápagos, Ecuador, 2012 (Galápagos sea lion population surveys, Blacktip reef shark radio telemetry). California, USA, 2010 (owl boxes & riparian habitat restoration).

Field Courses - Ornithology, Louisiana, USA, 2017. Ornithology, California, USA, 2015. IB 104 Natural History of the Vertebrates, California, USA, 2014. Tropical Ecology & Mountain Geology, Ecuador, 2012.

SERVICE

LSUMNS Museum Seminar coordinator, 2017-2018. AOS Student Affairs Committee member, 2017-present. LSU Women in Science member, 2016-present.

PROFESSIONAL MEMBERSHIPS

American Ornithological Society, Wilson Ornithological Society, Society of Systematic Biologists, Society for the Study of Evolution, American Society of Naturalists.