

Heather Lerner, Ph.D.

Museum Director, Associate Professor

CONNECT

765-238-5534

Mariner@gmail.com

Richmond / IN / USA

hrllerner (skype)

% heatherlerner.com

heather-rl-lerner

EDUCATION

Ph.D. Ecology & Evolutionary Biology University of Michigan, Ann Arbor, MI 2007

M.S. Ecology & Evolutionary Biology University of Michigan, Ann Arbor, MI 2003

B.A. Biology, Environmental Science Bryn Mawr College, Bryn Mawr, PA 1999

SKILLS

Biological Collections-Based Research

Exhibit and Audience Evaluation

Budget Management

Collaboration / Teamwork

Grant Writing

Exhibit Design

STEM Communication

ABOUT ME

I am a passionate museum director and scientist who creatively connects scientists, STEM, and communities in meaningful ways. My leadership style focuses on relationship-building, community-led projects and evidence-based practices to support the joyful pursuit of knowledge and social change.

WORK EXPERIENCE

Research Fellow

Knology (formerly New Knowledge) / New York City, NY / 2019 - 2020 (sabbatical) NSF-funded sabbatical research on the role of informal STEM learning centers as agents of social change

- Interpret nation-wide public and zoo/aquarium visitor surveys
- Prepare manuscripts for peer review
- Distribute findings nationally to practitioners

Museum Director, Associate Professor of Biology and Museum Studies

Joseph Moore Museum / Earlham College / Richmond IN / 2011 - present

Provide direction for ~50 staff, ~\$300k operating budget, and >50,000 collections objects. Lead strategic planning, establishment of an advisory board, major fundraising initiatives, revision of 70% of exhibit space & collaborations with ~30 faculty & community organizations. Chair the Museum Studies Program. Teach courses in Biology and Museum Studies. Conduct biological & audience-based research with undergraduates.

- 300% increase in visitorship over eight years
- 375% increase in staff over eight years
- \$1.3 Million in new grant funding awarded over eight years including IMLS, NSF
 & private foundations

Postdoctoral Research Associate

Smithsonian Institution / Washington D.C. / 2007 - 2011

NSF-funded research on molecular phylogenetics of modern and extinct Hawaiian songbirds

- Conduct next-generation DNA sequencing of modern & ancient specimens
- Perform phylogenetic analysis
- Develop & staff outreach stations at Smithsonian events

Bird Division Collections Assistant

University of Michigan Museum of Zoology / Ann Arbor, MI / 2007

- Prepare study skins and skeletons for avian collection
- Catalog specimens in the Specify database
- Maintain library holdings of the Josselyn Van Tyne Memorial Library

SELECT GRANTS

Institute of Museum and Library Services

2019 Collections Stewardship, Museums for America Program, co-PI, \$480,543

2018 Collections Assessment for Preservation \$7,800 2014 Collections Stewardship, Museums for America, co-

PI, \$310,636

2012 Museum Assessment Program, American Association of Museums

National Science Foundation

2020 What are the Environmental Causes of Population Variability of Highly Mobile Animals, ROA \$67,258 2019 Informal STEM Learning Capacity Building for the

2019 Informal STEM Learning Capacity Building for Joseph Moore Museum, ROA \$31,724

2014 Network Infrastructure for Improved Science
Discovery and Education, CC*IIE Campus Design
co-PI, \$347,228

Private Foundations

2015-19 Stamm-Koechlein Family Foundation, \$60,500 2012-19 Borman Family Foundation, \$110,000

SELECT COURSES

Biology and Natural History Collections

Ecological Biology with lab (BIOL 111), Evolution with lab (BIOL 451), Marine Biology Seminar (BIOL 471), Hawaiian Islands Biodiversity (OFFC 399), Natural History Museum Curation with lab (BIOL 240), Advanced Natural History Museum Curation with lab (MUSE 473/BIOL 342); Museum Specimen Preparation (BIOL 481), Independent Research (BIOL 486)

Museum Studies (all with lab)

Engaging Audiences (MUSE 215), Scientific Illustration (MUSE 285/Art 481), Advanced Web Communication for Museums (MUSE 243), Independent Study/Internship (MUSE 385/481), Museum Marketing and Communication (MUSE 210); Museum Exhibits Fabrication (MUSE 231)

CERTIFICATIONS

Certified Interpretive Guide Trainer

Certified Interpretive Guide

Project Wet

WORK EXPERIENCE CONT.

Assistant Educator, Exhibit Co-Creator

University of Michigan Museum of Natural History / Ann Arbor, MI / 2004-2006

- Deliver interactive evolution workshops for students and public
- Co-create exhibit featuring my graduate research on Harpy Eagles
- Co-create interactive digital biodiversity exhibit

Wildlife and Wetland Plant Biologist

Wetlands Research Associates / San Rafael, CA / 1999-2001

- Conduct sensitive plant/animal surveys
- Delineate existing wetlands & design wetland remediation
- Create federal & state permit applications, document compliance

SELECT PUBLICATIONS & PRESENTATIONS

- Xenikoudakis, G., Ahmed, M., Harris, J., Wadleigh, R., Paijmans, J., Hartmann, S., Barlow, A., **Lerner, H.R. L.,** Hofreiter, M. (2020, in press) Ancient DNA reveals twenty million years of aquatic life in beavers. Current Biology D-19-03123
- **Lerner, H.R.L.** (2019) The Power of the Campus Museum for Connecting Students, Faculty and the Community at Large. SENCER Summer Institute. August 3, Case Western University (*Invited Symposium Speaker*)
- Lerner, H.R.L. (2019) Unlocking the Collections Vault with Museomics. Pymatuning Laboratory of Ecology. University of Pittsburgh. June 20, Linesville, PA (Invited Speaker)
- Lerner, H. R. L., Christidis L., Gamauf A., Griffiths C., Haring E., Huddleston CJ, Kabra S., Kocum A., Krosby M., Kvaloy K., Mindell D., Rasmussen P., Rov N., Wadleigh R., Wink M., Gjershaug JO (2017) Phylogeny and new taxonomy of Booted Eagles (Accipitriformes: Aquilinae). Zootaxa 4216:4
- **Lerner, H.R.L.** (2017) Promoting Research and Outreach that Uses Collections. Society for the Preservation of Natural History Collections. June 22, Denver, CO (*Invited Symposium Speaker*)
- **Lerner, H. R. L.** (2011) Phylogeny and Taxonomy of Bonelli's Eagle. In: Bonelli's Eagle (ed. Hernandez VJ). SEO/BirdLife, Madrid
- Lerner, H. R. L., Meyer, M., Hofreiter, M., James, H. F., Fleischer, R. C. (2011) Multilocus resolution of phylogeny and timescale in the extant adaptive radiation of Hawaiian honeycreepers. Current Biology (cover, F1000 recommended)
- **Lerner, H. R. L.** (2011) Eagle watchers: observing and conserving raptors around the world (Invited Book Review). The Wilson Journal of Ornithology 123:2
- **Lerner, H. R. L**. and Fleischer, R. C. (2010) Prospects for next-generation sequencing in avian studies (invited reviewed commentary). Auk 127(1):4-15 [open access version]
- Lerner, H. R. L., Johnson, J. A., Lindsay, A. R., Kiff, L. and Mindell, D. P. (2009) Mitochondrial genetic diversity and differentiation among Harpy eagles (*Harpia harpyja*). PLoS ONE 4(10): e7336. doi:10.1371/journal.pone.0007336 [open access version]
- **Lerner, H. R. L.,** Klaver, M. and Mindell, D. P. (2008) Molecular phylogenetics of the buteonine birds of prey (Aves: Accipitridae). Auk 125: 304-315 [pdf]
- Lerner, H. R. L. and Mindell, D. P. (2005) Phylogeny of eagles, Old World vultures and other Accipitridae based on nuclear and mitochondrial DNA. Molecular Phylogenetics and Evolution 37 (2): 327-346 [pdf]