

# Leslie J. Rissler

National Science Foundation

Senior academic and science leader with extensive experience advancing research enterprises at public universities and national funding agencies. Proven record of building inclusive, service-oriented research infrastructure; strengthening faculty research capacity across the academic career pipeline; and aligning institutional priorities with evolving national research, innovation, and funding landscapes. Experienced in leading complex organizations through periods of transition, cultivating interdisciplinary collaboration, and translating strategic vision into operational systems that support faculty, students, and communities.

Brings deep expertise in federal research administration, portfolio and budget stewardship, research ethics and compliance, and external partnership development through senior leadership roles at the National Science Foundation and in higher education. Recognized for a collaborative, empathetic leadership style; strong commitment to shared governance; and ability to integrate teaching, scholarship, and student engagement in ways that strengthen institutional impact, visibility, and public value.

## ADMINISTRATIVE & EXECUTIVE LEADERSHIP

### National Science Foundation (NSF), Directorate for Biological Sciences

**Section Head – Living Systems.** (2025-present)

**Acting Deputy Division Director.** Division of Environmental Biology (2019, 2024, 2025)

**Acting Division Director.** Division of Environmental Biology (2022)

**Program Director.** Evolutionary Processes Cluster. Division of Environmental Biology (2015-2019; rotator 2011-2013)

Provided senior executive leadership for the Division of Environmental Biology, overseeing a **\$100M+ annual research portfolio** supporting discovery-driven research across ecology, evolution, organismal biology, and interdisciplinary environmental science. Supervised and mentored 20+ Ph.D.-level program officers; led strategic planning and portfolio alignment; and guided implementation of division- and directorate-level initiatives. Advised senior NSF leadership on scientific priorities, workforce development, research integrity, and organizational operations.

## RESEARCH ENTERPRISE LEADERSHIP & CAPACITY BUILDING

- **Lead Organizer and Chair, Mid-Career Advancement Program, NSF**  
Conceived and led a multi-directorate initiative supporting associate professors at a critical career transition point. Coordinated five NSF science and engineering directorates; integrated mentoring, proposal development, and leadership support; and partnered with institutions to strengthen faculty research trajectories and retention. *Nominated by the Assistant Director of the Directorate for Biological Sciences for the NSF Director's Award.*
- **Contributor, Building Research Capacity of New Faculty in Biology (BRC-BIO), NSF**  
Served on the working group for a national capacity-building solicitation designed to support faculty research at minority-serving institutions, predominately undergraduate

institutions, and other colleges and universities outside the most research-intensive tier.

*Received the NSF Director's Award for Superior Accomplishment.*

- **Co-Chair, Safe and Inclusive Fieldwork (SAIF) Pilot, NSF**  
Led a cross-directorate initiative spanning Biological Sciences and Geosciences to improve safety, equity, and accountability in field-based research. Contributed to national policy development and implementation related to research ethics, compliance, and institutional responsibility.

## SELECTED ACADEMIC LEADERSHIP & PROGRAM DEVELOPMENT

- **Founder and Chair, Evolution Working Group**, University of Alabama. Established and led a cross-departmental faculty body advancing interdisciplinary collaboration and academic programming across multiple colleges.
- **Co-Director, Evolutionary Studies Minor**, University of Alabama. Co-founded and co-directed an interdisciplinary undergraduate minor; coordinated curriculum development, faculty participation, and long-term sustainability.
- **Science Advisor and Executive Co-Producer, *Speaking Evolution***. Public scholarship initiative broadcast on Alabama Public Television (PBS); nominated for an Emmy Award.
- **Chair, Core Curriculum Revision (Ecology & Evolution)**, University of Alabama. Led redesign of undergraduate core curriculum to align learning objectives, pedagogy, and program coherence.

## SELECTED EXTERNAL FUNDING & RESEARCH STEWARDSHIP

Experience securing, administering, and overseeing federal and state-funded research awards across biological sciences, natural history collections, education, and applied conservation. Brings a dual perspective as both a funded principal investigator and a senior leader within a federal research agency, with deep familiarity of proposal development, peer review, award management, compliance, and reporting requirements. Extensive experience mentoring faculty and students in grant development and supporting institutions in aligning research investments with strategic priorities.

### Selected Awards (Principal Investigator or Co-Principal Investigator)

- **National Science Foundation** — Comparative phylogeography and ecological divergence in amphibians across the southern Appalachians and Gulf Coastal Plain. \$100,000.
- **National Science Foundation** — Collaborative research on climate, demography, and population dynamics across elevational gradients. \$375,000.
- **National Science Foundation** — Biological Research Collections: Consolidation and enhancement of university natural history collections. \$498,779.
- **U.S. Department of Agriculture / U.S. Forest Service (Joint Fire Science Program)** — Biodiversity responses to prescribed fire in longleaf pine ecosystems. \$316,853.
- **State of Alabama Department of Conservation and Natural Resources** — Conservation genetics and population assessment of imperiled freshwater turtle species. \$139,532.
- **University of Alabama / Alabama Public Television** — Speaking Evolution science education initiative. \$85,000.

*Additional funding history available upon request.*

## TEACHING, MENTORING, AND FACULTY DEVELOPMENT (summary)

Extensive experience in undergraduate and graduate teaching and mentoring in ecology, evolution, conservation biology, biogeography, field zoology, and interdisciplinary biological sciences at a comprehensive public university. Longstanding record of mentoring Ph.D. and M.Sc. students, postdoctoral scholars, and early-career faculty, with particular emphasis on research development, grant writing, career advancement, and professional transitions. Deep commitment to experiential and field-based learning, integrating research and teaching, and supporting faculty and students as scholars whose work contributes to institutional mission, student success, and public engagement.

## SELECTED WORKING GROUPS & NATIONAL SERVICE

- **Member of NSF's Building Research Capacity of New Faculty in Biology solicitation's working group.** Goal to increase opportunities for research of new faculty of biology at minority-serving institutions, predominately undergraduate institutions, and other colleges and universities that are not among the nation's most research-intensive institutions.
- **Sexual Harassment Task Force at the National Science Foundation.** Worked with cross-directorate leaders to develop standards and policy within and outside of NSF. Wrote part of NSF Important Notice 144 and focused on ways to prevent harassment at remote field locations (see [https://www.nsf.gov/od/odi/promising\\_practices/index.jsp](https://www.nsf.gov/od/odi/promising_practices/index.jsp)). – **Received Director's Achievement in Equal Opportunity/Diversity and Inclusion Award for this work.**
- **Federal Steering Committee Member, National Nature Assessment.**
- **Member of NSF's team for the rewrite of *On Being a Scientist* (4<sup>th</sup> edition) by the National Academies.**

## ACADEMIC APPOINTMENTS

### University of Alabama, Tuscaloosa, AL

**Full Professor** and Curator of Amphibians and Reptiles. Department of Biological Sciences. (2014-2015; moved to the NSF in 2015)

**Associate Professor** and Curator of Amphibians and Reptiles. Department of Biological Sciences. (2009-2014)

**Assistant Professor** and Curator of Amphibians and Reptiles. Department of Biological Sciences. (2003-2009)

Research, teaching, and service in ecology, evolution, systematics, and conservation biology at a comprehensive public university with strong environmental and marine science interests. Developed interdisciplinary programs, mentored undergraduate, graduate students, and postdocs, and contributed to curriculum design and academic governance.

## EDUCATION

- 2019      **Certificate of Mastery. Federal Executive Institute**, Charlottesville. Participated in month-long, immersive on-site course: *Leadership for a Democratic Society*. This program offered senior-level executives an opportunity for intense leadership training using the U.S. Constitution as the principal foundation.
- 2001-2003      National Science Foundation Postdoctoral Research Fellow in Biological Informatics. **University of California at Berkeley**. Museum of Vertebrate Zoology. Co-advisors: Drs. David Wake and Craig Moritz
- 1995-2000      Ph.D. University of Virginia. Department of Biology. Charlottesville, Virginia. Major professors: Drs. Henry M. Wilbur (ecology) and Douglas R. Taylor (genetics and evolution)
- 1992-1995      MSc. **Utah State University**. Department of Biology. Logan, Utah. Major professor: Dr. Kimberly Sullivan
- 1987-1992      BSc. **Indiana State University**. Terre Haute, Indiana. Magna Cum Laude. Double Major: Life Science and Anthropology.

## AWARDS & HONORS

- **AAAS Fellow (Class of 2022)** – *“for distinguished contributions to the field of evolutionary biology, particularly for public understanding of evolution and advancement of underrepresented groups in science”*
- **National Science Foundation Director’s Award: Superior Accomplishment** (2023) – *“for outstanding insight and achievement in designing a new institutional capacity-building program within the biological sciences, yielding a portfolio inclusive of a broad and diverse range of institutions”*
- **Stephen Jay Gould Prize from Society for the Study of Evolution** (2020) – *“to recognize, promote, and reward individuals who have increased public understanding of evolutionary biology and its place in modern science”* \$5K award
- **National Science Foundation Director’s Award: Achievement in Equal Opportunity/Diversity and Inclusion Award.** (2019)
- **Emmy Nomination for Speaking Evolution PBS show** (Rissler was Science Advisor and Executive Co-Producer)
- **Plenary Speaker on Education and Research at BEACON Congress, Michigan State University**
- **Outstanding Service-Learning course - Conservation Biology BSC 482/582**, University of Alabama (2009)
- **ARCS Fellowship** (Achievement Rewards for College Scientists) (1997-2000)
- **National Science Foundation REU student at the University of Michigan Biological Station** (1992)

## SELECTED PUBLICATIONS (full list 50+)

- Le Sage, E. H., M. K. Unkefer, S. I. Duncan, J. A. Cundiff, **L. J. Rissler**, E. J. Crespi. 2022. Neuroendocrine correlates of juvenile amphibian behaviors across a latitudinal cline. *Hormones and Behavior* 146:online. Doi:10.1016/j.yhbeh.2022.105263.
- Le Sage, E. H., S. I. Duncan, T. Seaborn, J. Cundiff, **L. J. Rissler**, and E. J. Crespi. 2021. Ecological adaptation drives wood frog population divergence in life history traits. *Heredity* 126:790-804.
- Sillero, N., R. B. Huey, G. Gilchrist, **L. J. Rissler**, and M. Pascual. 2020. Distribution modelling of an introduced species: Do adaptive genetic markers affect potential range? *Proceedings of the Royal Society B* 287:20201791. Doi:10.1098/rspb/2020.1791.
- Rissler, L. J.**, K. L. Hale, N. R. Joffe, and N. M. Caruso. Gender differences in grant submissions across science and engineering fields at the NSF (2001-2016). 2020. *Bioscience* 70:814-820. Doi:10.1093/biosci/biaa02.
- Caruso, N. M., Staudhammer, C. L., and **L. J. Rissler**. 2020. A demographic approach to understanding the effects of climate on population growth. *Oecologia* 193:889-901
- Scott, P. A., T. C. Glenn, and **L. J. Rissler**. 2019. Formation of a recent hybrid zone offers insight to the geographic puzzle and maintenance of species boundaries in the musk turtles. *Molecular Ecology* 28:761-771. Doi:10.1111/mec.14983.
- Sheridan, J. A., N. Caruso, J. J. Apodaca, and **L. J. Rissler**. 2018. Shifts in frog size and phenology: Testing predictions of climate change on a widespread anuran using data from prior to rapid climate warming. *Ecology and Evolution* 8:1316-1327. Doi:10.1002/ece3.3636.
- Rissler, L. J.** 2016. Union of phylogeography and landscape genetics. *Proceedings of the National Academy of Sciences* 113:8079-8086. Doi:10.1073/pnas.1601073113.
- Cunningham, H. R., **L. J. Rissler**, L. B. Buckley, and M. C. Urban. 2015. Abiotic and biotic constraints across reptile and amphibian ranges. *Ecography* 39:1-8. Doi: 10.1111/ecog.01369.
- Crespi, E. J., **L. J. Rissler**, N. M. Mattheus, K. Engbrecht, S. I. Duncan, T. Seaborn, E. M. Hall, J. D. Peterson, and J. L. Brunner. 2015. Geophysiology of wood frogs: Landscape patterns of prevalence of disease and circulating hormone concentrations across the eastern range. *Integrative and Comparative Biology* 55:602-617. Doi: 10.1093/icb/icv096.
- Duncan, S. I., E. J. Crespi, N. M. Mattheus, and **L. J. Rissler**. 2015. History matters more when explaining genetic diversity within the context of the core-periphery hypothesis. *Molecular Ecology* 24:4323-4336. Doi: 10.1111/mec.13315.
- Scott, P. A., and **L. J. Rissler**. 2015. Integrating dynamic occupancy modeling and genetics to infer the status of the imperiled flattened musk turtle. *Biological Conservation* 192:294-303. Doi: 10.1016/j.biocon.2015.10.004.
- Rissler, L. J.**, S. Duncan, and N. Caruso. 2014. The relative importance of religion and education on university students' views of evolution in the Deep South and state science standards across the United States. *Evolution: Education and Outreach* 7:24. Doi: 10.1186/s12052-014-0024-1

**Rissler, L. J.**, and J. Adamec. 2014. Gauging satisfaction with the new proposal process in DEB and IOS at the NSF. *Bioscience* 64:837-843.

Cunningham, H. R., and **L. J. Rissler**. 2013. Investigating behavioral shifts in aggression between a naturalized and native salamander species of the genus *Plethodon*. *Herpetological Conservation and Biology* 8:276-287.

Apodaca, J. J., **L. J. Rissler**, and J. C. Godwin. 2012. Population structure and gene flow in a heavily disturbed habitat: Implications for the management of the imperiled Red Hills salamander (*Phaeognathus hubrichti*). *Conservation Genetics* 13:913-923.

Glennon, K. L., **L. J. Rissler**, and S. A. Church. 2012. Ecogeographic isolation: a reproductive barrier between species and between cytotypes in *Houstonia* (Rubiaceae). *Evolutionary Ecology* 26:909-926.

\*Newman, C. E., J. A. Feinberg, **L. J. Rissler**, J. Burger, and H. B. Shaffer. 2012. A new species of leopard frog (Anura: Ranidae) from the urban northeastern U.S. *Molecular Phylogenetics and Evolution* 63:445-455. \*Press in New York Times, Wall Street Journal, CNN, and 200+ outlets.

Angert, A. L. L. G. Crozier, **L. J. Rissler**, S. E. Gilman, J. J. Tewksbury, and A. J. Chunco. 2011. Do species traits predict recent shifts at expanding range edges? *Ecology Letters* 14:677-689.

**Rissler, L. J.**, and W. H. Smith. 2010. Amphibian contact zone and phylogeographical break hotspots across the continental United States. *Molecular Ecology* 19:5404-5416.

Hickerson, M. J., B. C. Carstens, J. Cavender-Bares, K. A. Crandall, C. H. Graham, J. Johnson, **L. J. Rissler**, P. F. Victoriano, and A. D. Yoder. 2010. Phylogeography's past, present, and future: 10 years after Avise, 2000. *Molecular Phylogenetics and Evolution* 54:291-301.

**Rissler, L. J.**, and J. J. Apodaca. 2007. Adding more ecology into species delimitation: Ecological niche models and phylogeography help define cryptic species in the black salamander (*Aneides flavipunctatus*). *Systematic Biology* 56:924-942.

**Rissler, L. J.**, R. Hijmans, C. Graham, C. Moritz, and D. Wake. 2006. Phylogeographic lineages and species comparisons in conservation analyses: A case study of California herpetofauna. *American Naturalist* 167:655-666.

**Rissler, L. J.**, and H. M. Wilbur, and D. R. Taylor. 2004. The influence of ecology and genetics on behavioral variation in salamander populations across the Eastern Continental Divide. *American Naturalist*. 164:201-213.

Harding, E. K. , E. Crone, B. Elderd, J. Hoekstra, A. McKerrow, J. Perrine, J. Regetz, **L. J. Rissler**, A.G. Stanley, E. Walters, and NCEAS HCP Working Group. 2001. The scientific foundations of habitat conservation plans: A quantitative assessment. *Conservation Biology* 15 :488-500.