

# SCOTT HOTALING

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## EDUCATION and TRAINING

Updated: November 2018

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Sept., 2017-present	<b>Postdoctoral Research Associate</b> , School of Biological Sciences, Washington State University, Pullman, WA Advisor: Joanna L. Kelley
August, 2017	<b>Ph.D.</b> , Department of Biology, University of Kentucky, Lexington, KY Advisor: David W. Weisrock
May, 2010	<b>B.S.</b> , Zoology, North Carolina State University, Raleigh, NC Advisor: Nicholas M. Haddad

## GRANTS and FELLOWSHIPS

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2018	Antarctic Science International Bursary (\$8,500)
2018	Mazamas Standard Research Grant (\$3,500)
2018	Society for the Study of Evolution Outreach Grant for Promoting the Understanding of Evolutionary Biology (\$1,000)
2016	Wyoming Governor's Office Research Grant (\$11,000)
2015	U. of Kentucky Gertrude Flora Ribble Graduate Fellowship (\$23,249)
2015	Teton Conservation District Research Grant (\$5,149)
2015-2018	University of Wyoming-National Park Service Research Grants (\$20,000)
2013	Society for Freshwater Science General Endowment Award (\$1,000)
2013	Society for the Study of Evolution Rosemary Grant Award (\$2,250)
2012-2014	University of Kentucky Department of Biology Ribble Mini-Grants (\$1,900)
2012	American Alpine Club Graduate Student Research Grant (\$300)
2012, 2013	Glacier Park Fund Discretionary Research Grants (\$1,000)
2011	University of Kentucky Ribble Summer Fellowship (\$2,000)
2010	North Carolina State University Undergraduate Research Award (\$1,000)

## PUBLICATIONS

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**Summary (as of Nov. 1<sup>st</sup>, 2018):** 16 publications (11 as lead-author); **Mean impact factor:** 4.60  
**Google Scholar** (citations: >150; h-index: 7): <https://scholar.google.com/citations?user=r0-QHokAAAAJ>  
**ResearchGate** (RG score >22): [https://www.researchgate.net/profile/Scott\\_Hotaling](https://www.researchgate.net/profile/Scott_Hotaling)

<sup>1</sup>Undergraduate co-author

**In review** (PDFs available upon request; in review or revision as noted)

20. **Hotaling S**, Shain DS, Lang SA, Bagley RK, Tronstad LM, Weisrock DW, Kelley JL. Long-distance dispersal, ice sheet dynamics, and mountaintop isolation underlie the genetic structure of glacier ice worms. In review, *Proceedings of the Royal Society B*.
19. **Hotaling S**, Foley ME<sup>1</sup>, Zeglin L, Finn DS, Tronstad LM, Giersch JJ, Muhlfeld CC, Weisrock DW. Microbial assemblages reflect environmental heterogeneity in alpine streams. In review, *Global Change Biology*.
18. Dillon ME\*, **Hotaling S\***, Shah AA\*, Giersch JJ, Tronstad LM, Finn DS, Kelley JL. Supercooling points of alpine stoneflies (Plecoptera: Nemouridae) vary across species,

habitats, and populations in the Rocky Mountains. In review, *Cryobiology*. \*contributed equally

17. **Hotaling S**, Kelley JL, Weisrock DW. Nuclear and mitochondrial genomic resources for the meltwater stonefly, *Lednia tumana* (Plecoptera: Nemouridae). In revision, *Aquatic Insects*. *bioRxiv* pre-print, DOI: 10.1101/360180.

## Published

16. **Hotaling S**, Giersch JJ, Finn DS, Tronstad LM, Jordan SP, Serpa LE, Call RG, Muhlfeld CC, Weisrock DW. (In press) Congruent population genetic patterns but differing depths of divergence for three alpine stoneflies with similar ecology, geographic distributions, and climate change threats. *Freshwater Biology*.
15. **Hotaling S**, Kelley JL. (In press) The rising tide of high quality genomic resources. *Molecular Ecology Resources*, "News and Views."
14. **Hotaling S**, Quackenbush CR, Bennett-Ponsford<sup>1</sup> J, New DD, Rodriguez LA, Tobler M, Kelley JL (2018) Bacterial diversity in replicated hydrogen-sulfide rich springs. *Microbial Ecology*. DOI: 10.1007/s00248-018-1237-6
13. **Hotaling S** (2018) Publishing papers while keeping everything in balance: Practical advice for a productive graduate school experience. *Ideas in Ecology & Evolution*, 11, 35-46.
12. Weisrock DW, Hime PM, Nunziata SO, Jones KS, Murphy MO, **Hotaling S**, Kratovil JD (2018) Surmounting the large-genome problem for genomic data generation in salamanders. In: Population Genomics: Wildlife, Editors: Hohenlohe P, Rajora O. Springer, New York
11. **Hotaling S**, Muhlfeld CC, Giersch JJ, Miller MR, Ali OA, Jordan SP, Luikart G, Weisrock DW (2018) Demographic modeling reveals a history of divergence with gene flow for a glacially-tied stonefly in a changing post-Pleistocene landscape. *Journal of Biogeography*. DOI: 10.1111/jbi.13125
10. **Hotaling S**, Tronstad LM, Bish JC (2017) Macroinvertebrate diversity is lower in high-elevation lakes versus nearby streams: evidence from Grand Teton National Park, Wyoming. *Journal of Natural History*, 51, 1657-1669.
9. **Hotaling S\***, Slabach BS\*, Weisrock DW (2017) Next-generation teaching: a template for bringing genomic and bioinformatic tools into the classroom. *Journal of Biological Education*. 1, 1-13. \*contributed equally
8. Tronstad LM, **Hotaling S** (2017) Long-term trends in aquatic insect bioassessment metrics are not influenced by sampling method: empirical evidence from the Niobrara River. *Knowledge and Management of Aquatic Ecosystems*. 418, 12.
7. **Hotaling S**, Hood E, Hamilton TL (2017) Microbial ecology of mountain glacier ecosystems: biodiversity, ecological connections, and implications of a warming climate. *Environmental Microbiology*. Invited Review. 19, 2935-2948.
6. **Hotaling S\***, Finn DS\*, Giersch JJ, Weisrock DW, Jacobsen D. (2017) Climate change and alpine stream biology: progress, challenges, and opportunities for the future. *Biological Reviews*. 92, 2024-2045. \*contributed equally
5. Giersch JJ, **Hotaling S**, Kovach RP, Jones LA, Muhlfeld CC (2017) Climate-induced glacier and snow loss imperils alpine stream insects. *Global Change Biology*. 23, 2577-2589.
4. Hime PM\*, **Hotaling S\***, Shaffer HB, Voss SR, O'Neill EM, Weisrock DW (2016) The influence of locus number and information content on species delimitation: an empirical test case in an endangered Mexican salamander. *Molecular Ecology*, 25, 5959-5974. \*contributed equally

3. **Hotaling S**, Foley M<sup>1</sup>, Lawrence NM<sup>1</sup>, Bocanegra J<sup>1</sup>, Kappeler P, Yoder A, Weisrock DW (2016) Species discovery and validation in a cryptic radiation of endangered primates: coalescent-based species delimitation in Madagascar's mouse lemurs. *Molecular Ecology*, 25, 2029-2045.  
 Altmetric score = 249; #5 all-time for *Molecular Ecology* (of 4,034 studies).  
 Highlighted in *Popular Science*, *The Times of India*, *National Geographic España*.
2. Tronstad LM, **Hotaling S**, Bish JC (2016) Longitudinal change in stream invertebrate assemblages of Grand Teton National Park, Wyoming. *Insect Conservation and Diversity*, 9, 320-331.
1. Jordan S, Giersch JJ, Muhlfeld CC, **Hotaling S**, Fanning L<sup>1</sup>, Luikart G (2016) Low genetic diversity and strong subdivision in an endemic alpine stonefly threatened by climate change. *PLOS ONE*, 11, e0157386.

## POPULAR PRESS

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### PRINT

- 2018 **Hotaling S**. Glacier Ice Worms: An Alpine Enigma. *Out There Magazine*.
- 2016 **Hotaling S**. Melting Mountains: Glaciers, Climate Change, and Biodiversity in the Teton Range. *Drive: The Magazine from Subaru*.
- 2013 **Hotaling S**. This Is Our Mountain. *Drive: The Magazine from Subaru*.

### RADIO

- 2018 "Scientists race to research stonefly species threatened by climate change." Wyoming Public Radio.  
<http://www.wyomingpublicmedia.org/post/scientists-race-research-stonefly-species-threatened-climate-change#stream/0>
- 2017 "Why study stoneflies? Climate change biologist Scott Hotaling explains." 89.3 WFPL Louisville.  
<https://wfpl.org/why-study-stoneflies-climate-change-biologist-scott-hotaling-explains/>

### PHOTOGRAPHY

- 2007-present                      75+ photograph credits in regional, national, and international publications including 10 cover images.

## TECHNICAL REPORTS

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- 2017 Tronstad LM, Giersch JJ, **Hotaling S**, Zeglin L, Wilmot OJ, Bixby RJ, Finn DS. Establishing a long-term monitoring network assessing potential climatic refugia in cold alpine streams. University of Wyoming National Park Service Research Center Annual Report.
- 2017 **Hotaling S**, Tronstad LM, Giersch JJ, Muhlfeld CC, Finn DS, Weisrock DW. Comparative population genetics confirms range-specific lineages of alpine stoneflies imperiled by climate change. United States Fish & Wildlife Service.
- 2016 Tronstad LM, Giersch JJ, **Hotaling S**, Finn DS, Zeglin L, Wilmot OJ, Bixby RJ. A unique "icy seep" aquatic habitat in the high Teton Range: potential refuge for biological assemblages imperiled by climate change. University of Wyoming National Park Service Research Center Annual Report.
- 2016 Giersch JJ, **Hotaling S**, Kovach RP, Jones LA, Muhlfeld CC. Climate-change-induced glacier and snow loss threatens two endemic mountaintop invertebrates. United States Fish & Wildlife Service.

- 2016 Tronstad LM, **Hotaling S**. Comparing quantitative sampling techniques for aquatic invertebrates at Agate Fossil Beds National Monument. Natural Resource Data Series. National Park Service, Fort Collins, Colorado.
- 2015 Tronstad LM, **Hotaling S**, Giersch JJ, Finn DS, Wilmot OJ, Anderson MD. Characterizing biodiversity of alpine streams in Grand Teton National Park, Wyoming. University of Wyoming National Park Service Research Center Annual Report, 35, 89-98.

## AWARDS and HONORS

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- 2018 Best Poster, Washington State University Postdoctoral Showcase
- 2018 Association for the Sciences of Limnology and Oceanography Early Career Travel Award
- 2017, 2018 Travel Awards, NSF Polar Genomics Workshop
- 2016 Runner-up, Best Oral Presentation in Applied Research, Society for Freshwater Science Annual Meeting
- 2015 U. of Kentucky Gertrude Flora Ribble Graduate Fellowship
- 2013 U. of Kentucky College of Arts & Sciences Outstanding TA Award
- 2013 3<sup>rd</sup> Place Oral Presentation, Kentucky Academy of Sciences Meeting
- 2012-2017 U. of Kentucky Graduate School Travel Awards
- 2012-2017 U. of Kentucky Department of Biology Ribble Travel Awards
- 2012 People's Choice Award, Appalachian Mountain Photography Competition
- 2010 Sigma Xi Outstanding Undergraduate Research Award
- 2010 Dean's List, North Carolina State University
- 2007- 2012 Multiple 1<sup>st</sup> place awards, NC Wildlife Nature Photography Competition

## INVITED SEMINARS

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- 2019 "Ecology and evolution of biodiversity in mountain ecosystems." Flathead Lake Biological Station, University of Montana, MT. *Planned for February 2019.*
- 2018 "A century of alpine stream research: where are we now?" Association for the Sciences of Limnology & Oceanography Annual Meeting, Victoria, BC.
- 2018 "Molecular ecology of alpine ecosystems from snowfields to rivers." Western Washington University, Department of Biology, Bellingham, WA.
- 2018 "Evolutionary and ecological perspectives on biodiversity at high-elevations and latitudes." Oregon State University, Department of Integrative Biology, Corvallis, OR.
- 2018 "Next-generation teaching: bringing genomic and bioinformatic tools into the classroom." Oregon State University, Department of Integrative Biology, Corvallis, OR.
- 2018 "Evolutionary and ecological perspectives on biodiversity at high-elevations and latitudes." Palouse Ecology, Evolutionary, and Systematics Group, Moscow, ID.
- 2017 "Genetic perspectives on biodiversity from North American alpine streams." Washington State University, Department of Entomology, Pullman, WA.
- 2017 "Humans and the Planet: An Unnatural History." IdeaFestival. Louisville, KY.  
Available online: <https://www.ket.org/episode/KSTAM%20000210/>
- 2017 "Genes in mountain streams: Perspectives on biodiversity from mostly North American headwaters." University of Kentucky, Department of Entomology, Lexington, KY.
- 2017 "Conservation: Biodiversity in a rapidly changing world." Wildlands Social Club, Lexington, KY.

- 2017 “Genes in mountain streams: Perspectives on biodiversity from mostly North American headwaters.” Missouri State University, Department of Biology, Springfield, MO.
- 2016 “Genomic perspectives on biodiversity in alpine streams” University of Kentucky Department of Biology Doctoral Candidate Symposium, Lexington, KY.
- 2014 “Climate change in the Crown of the Continent: Glacier recession, genomics, and the fate of alpine species.” EcoLunch Seminar Series, University of Kentucky Department of Biology, Lexington, KY
- 2013 “Climate change, glacier recession, and the fate of alpine species.” Glacier National Park ‘Brown Bag’ Lecture Series, Glacier National Park, West Glacier, MT
- 2013 “Climate change in mountain systems.” Paradise Inn, Mount Rainier National Park, Paradise WA.
- 2013 “Climate change in mountain systems.” Cougar Rock Campground, Mount Rainier National Park, WA.
- 2013 “Landscape Photography, Finding Your Career Path, and the Impacts of Climate Change on High-Altitude Habitats.” Freshman Honors College Speaker Series, North Carolina State University, Raleigh, NC.

## CONTRIBUTED PRESENTATIONS

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\* *Presenting researcher(s)*

- 2018 **Hotaling S\***, Shain DH, Lang SA, Tronstad LM, Weisrock DW, Kelley JL. Population genomics of the glacier ice worm, *Mesenchytraeus solifugus*. *Washington State University Computational Research Symposium*. Poster.
- 2018 **Hotaling S\***, Giersch JJ, Tronstad LM, Zeglin L, Bixby R, Shah AA, Dillon ME, Kelley JL, Finn DS. Tracking climate change impacts on Rocky Mountain alpine streams with long-term data. *MtnClim*. Oral.
- 2018 **Hotaling S\***. EvoEd-IN: Improving evolutionary education in rural communities of the Inland Northwest. *Palouse STEAM Summit*. Oral.
- 2018 Finn DS\*, Acosta R, Hampel H, Vázquez R, Tronstad LM, **Hotaling S**, Giersch JJ, Encalada AC. Vulnerability of high-altitude macroinvertebrates to climate change in tropical and temperate zones. *Congreso Ecosistemas Acuáticos Tropicales en el Anthropoceno*. Oral.
- 2018 Finn DS\*, Tronstad LM, **Hotaling S**, Giersch JJ, Bixby RJ, Zeglin L. Alpine streams fed by subterranean ice as potential climate refugia for temperature-sensitive taxa. *Society for Freshwater Science*. Oral.
- 2018 Lins LSF\*, Helou L, **Hotaling S**, Fiston-Lavier AS, Kelley JL. Evolutionary dynamics of the Type III antifreeze protein gene cluster in polar fish. *EVO-WIBO*. Poster.
- 2018 **Hotaling S\***, Shain DH, Lang SA, Tronstad LM, Weisrock DW, Kelley JL. Population genomics of the glacier ice worm, *Mesenchytraeus solifugus*. *EVO-WIBO*. Poster.
- 2018 Lins LSF\*, Helou L, **Hotaling S**, Fiston-Lavier AS, Kelley JL. Evolutionary dynamics of the Type III antifreeze protein gene cluster in polar fish. *Washington State University Showcase*. Poster.
- 2018 **Hotaling S\***, Shain DH, Lang SA, Tronstad LM, Weisrock DW, Kelley JL. Population genomics of the glacier ice worm, *Mesenchytraeus solifugus*. *Washington State University Showcase*. Poster.
- 2018 Tronstad LM\*, **Hotaling S**, Giersch JJ, Finn DS, Wilmot O. Aquatic invertebrate assemblages living in three alpine stream types in the Teton Range, Wyoming *American Fisheries Society*. Oral.

- 2018 **Hotaling S\***, Giersch JJ, Finn DS, Tronstad LM, Muhlfeld CC, Weisrock DW. Conservation genomics of an alpine stonefly threatened by climate change. *Society for Integrative & Comparative Biology*. Oral.
- 2017 Finn DS\*, **Hotaling S**, Tronstad LM, Giersch JJ, Zeglin L. Tetons alpine streams: unsung heroes of diversity and vulnerability. AMK Research Station Summer Seminar Series, Grand Teton National Park, Wyoming. Oral.
- 2017 **Hotaling S\***, Finn DS, Giersch JJ, Tronstad LM, Muhlfeld CC, Weisrock DW. Conservation genomics of an alpine stonefly threatened by climate change. *Society for Freshwater Science*. Oral.
- 2016 **Hotaling S\***, Giersch JJ, Muhlfeld CC, Jordan S, Miller MR, Luikart G, Weisrock DW. Demographic model testing reveals a history of divergence with gene flow for a glacially-tied stonefly in a post-Pleistocene landscape. *Society for Freshwater Science*. Oral.
- 2016 Foley ME\*, **Hotaling S**, Foley ME, Zeglin L, Giersch JJ, Finn DS, Tronstad LM, Muhlfeld CC, Weisrock DW. Microbial diversity of alpine streams: a North American perspective. *Evolution*. Poster.
- 2016 Lawrence N\*, **Hotaling S**, Weisrock DW. Coalescent-based species delimitation using Bayesian statistical analysis in Madagascar's mouse lemurs. *University of Kentucky Showcase of Undergraduate Scholars*. Poster.
- 2016 Dapore Z\*, Elder T\*, Pina J\*, Redden C\*, Grau E, Foley M, **Hotaling S**, Weisrock W. A comparative assessment of prokaryotic diversity among alpine stream environments within Grand Teton National Park, Wyoming. *University of Kentucky Showcase of Undergraduate Scholars*. Poster.
- 2016 Price K\*, Shen C\*, Davis-Peterson I\*, Watts A\*, Grau E, Foley M, **Hotaling S**, Weisrock W. A comparative assessment of prokaryotic diversity among alpine stream environments within Glacier National Park, Montana. *University of Kentucky Showcase of Undergraduate Scholars*. Poster.
- 2015 Yoder AD\*, **Hotaling S**, Foley M, Blanco M, Campbell CR, Larsen PA, Weisrock DW. Finding the trees in the forest: an integrative approach for exploring mouse lemur species diversity. *Mouse Lemur Working Group*. Oral.
- 2015 **Hotaling S\***, Muhlfeld CC, Giersch JJ, Ali OA, Miller MR, Luikart G, Weisrock DW. Demographic model testing for a glacially-tied stonefly reveals a history of divergence with gene flow linked to a changing post-Pleistocene landscape. *Society for Freshwater Science*. Oral.
- 2015 Tronstad LM\*, **Hotaling S**, Bish JC. An assessment of longitudinal change in stream invertebrate assemblages of Grand Teton National Park, Wyoming. *Society for Freshwater Science*. Oral.
- 2014 **Hotaling S\***, Muhlfeld CC, Giersch JJ, Ali OA, Miller MR, Luikart G, Weisrock DW. Using RAD sequencing to illuminate demographic history of the meltwater stonefly (*Lednia tumana*) in Glacier National Park, MT. *Joint Aquatic Sciences Meeting*. Oral.
- 2014 **Hotaling S\***, Muhlfeld CC, Giersch JJ, Ali OA, Miller MR, Luikart G, Weisrock DW. Using RAD sequencing to illuminate population genomic structure of the meltwater stonefly (*Lednia tumana*) in Glacier National Park, MT. *Midwest Ecology and Evolution Conference*. Oral.
- 2013 **Hotaling S\***, Muhlfeld CC, Giersch JJ, Ali OA, Miller MR, Luikart G, Weisrock DW. Using RAD-sequencing to illuminate population genomic structure of the meltwater stonefly (*Lednia tumana*) in Glacier National Park, MT. *Kentucky Academy of Science*. Oral.
- 2013 **Hotaling S\***, Muhlfeld CC, Giersch JJ, Ali OA, Miller MR, Luikart G, Weisrock DW. Illuminating population genetic structure of the meltwater stonefly (*Lednia tumana*) in Glacier National Park, Montana. *UK CEEB Symposium*. Oral.

- 2013 **Hotaling S\***, Muhlfeld CC, Giersch JJ, Ali OA, Miller MR, Luikart G, Weisrock DW. Using RAD sequencing to illuminate demographic history of the meltwater stonefly (*Lednia tumana*) in Glacier National Park, MT. *Joint Aquatic Sciences Meeting*. Oral.
- 2013 Foley M\*, Bocanegra J, **Hotaling S**, Blanco M, Weisrock DW. Using genetic markers to resolve the identity of a newly-discovered mouse lemur population in Madagascar. *University of Kentucky Undergraduate Research Symposium*. Poster.
- 2013 **Hotaling S\***, Muhlfeld CC, Giersch JJ, Ali OA, Miller MR, Luikart G, Weisrock DW. Using RAD sequencing to illuminate demographic history of the meltwater stonefly (*Lednia tumana*) in Glacier National Park, MT. *Evolution*. Oral.
- 2013 Hime PM\*, **Hotaling S**, Shaffer HB, Weisrock DW. Coalescent species delimitation using NGS-scale data: a test case in Ambystomatid salamanders. *Evolution*. Oral.
- 2010 **Hotaling S\***, Fields WR, Haddad NH. Using individual photographs and multivariate analysis to identify individual Eastern tiger salamanders. *North Carolina State University Undergraduate Research Symposium*. Poster.

## TEACHING EXPERIENCE and INNOVATION

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**Innovation:** In collaboration with Drs. David Weisrock and Brittany Slabach, I led an effort to develop a course-based undergraduate research (“CURE”) experience in microbial ecology, genomics, and bioinformatics. We implemented this CURE in 2014 in BIO 198, and it has remained in use annually since. Complete details are reported in Hotaling *et al.*, (2017) *Journal of Biological Education*.

- 2017 Evolution (TA: spring semester). BIO 303. University of Kentucky. My role was to revise existing course materials and develop new lessons for the course recitation under the supervision of the course coordinator (Dr. Madhu Srinivisan).
- 2016 Honors Introductory Biology (TA: fall semester). BIO 198. University of Kentucky.
- 2016 Scholars Biology Research (co-instructor). BIO 199. University of Kentucky. I guided 11 students in an undergraduate research experience studying microbial diversity of alpine streams.
- 2015 Principles of Genetics (TA: spring semester). BIO 304. University of Kentucky.
- 2014 Honors Introductory Biology (TA: fall semester). BIO 198. University of Kentucky.
- 2014 Principles of Genetics (TA: spring semester). BIO 304. University of Kentucky.
- 2013 Principles of Genetics (TA: fall semester). BIO 304. University of Kentucky.
- 2013 Introduction to Biology (TA: spring semester). BIO 155. University of Kentucky.
- 2012 Introduction to Biology (TA: fall semester). BIO 155. University of Kentucky.
- 2012 Introduction to Biology (TA: spring semester). BIO 155. University of Kentucky.
- 2011 Introduction to Biology (TA: fall semester). BIO 155. University of Kentucky.
- 2009-2016 Led half-day and full-day nature photography tours with a maximum of four participants. Workshops included extensive backcountry travel in harsh conditions as well as natural history and photographic instruction.

## OUTREACH and SERVICE

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- 2019 Session Organizer, “Climate change in high-gradient mountain streams,” Planned for Society for Freshwater Science Annual Meeting.
- 2018-present Founder, Evolutionary Education in the Inland Northwest (“EvoEd-IN”; [www.EvoEd-IN.org](http://www.EvoEd-IN.org)), a network to connect high school teachers with biologists to broaden exposure to evolutionary research in rural communities.

- We will hold an in-person workshop in spring 2019, an event that we expect to occur annually thereafter.
- 2018 Expert contributor, Ask Dr. Universe blog, Washington State University.
- 2016 President, University of Kentucky Biology Graduate Student Association.
- 2016 Member, University of Kentucky Department of Biology Chair Re-Appointment Committee.
- 2016 Session Organizer, “Molecular Ecology”, Society for Freshwater Science Annual Meeting.
- 2015 Session Chair, Society for Freshwater Science Annual Meeting.
- 2014-present **Reviewer:** *Biological Journal of the Linnean Society, Freshwater Biology, Freshwater Science, GigaScience, Global Change Biology, Journal of Biogeography, Molecular Ecology, Molecular Ecology Resources, PLOS ONE, Royal Society Open Science, Systematic Biology.*
- 2007-present Numerous photographs donated to conservation and outreach causes.
- 2007-2013 Gave 14 lectures on landscape photography, natural history, and global change biology to diverse audiences across the United States.