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Education

- 2007–2013 Ph.D. in Ecology & Evolutionary Biology, University of Kansas
2004–2007 M.S. in Biological Sciences, Louisiana State University
1999–2004 B.S. in Biology, University of Wisconsin Oshkosh (*Summa Cum Laude*)

Professional Appointments

- 2022–present Senior Manager of Computational Biology, Adaptive Biotechnologies
2022–present Associate Professor, Department of Biological Sciences, Auburn University
2016–2022 Assistant Professor, Department of Biological Sciences, Auburn University
2016–present Curator of Amphibians and Reptiles, Auburn University Museum of Natural History
2013–2016 NSF Postdoctoral Research Fellow, University of Washington

Grants Awarded

† mentored undergraduate student; ‡ mentored graduate student; § mentored postdoc.

Oaks, J.R. (PI). Senior personnel: L.L. Grismer, C.D. Siler, and §P.L. Wood, Jr. Generalizing Bayesian Phylogenetics to Infer Shared Evolutionary Events. National Science Foundation Division of Environmental Biology Award [1656004](https://www.nsf.gov/awardsearch/showAward?AWDNO=1656004). 5/2017–5/2022. \$551,169. Funded.

Armbruster, J.W. (PI), J.E. Bond (Co-PI), K.M. Halanych (Co-PI), **J.R. Oaks (Co-PI)**, and D. Warner (Co-PI). CSBR: Natural History: Compactorized Shelving for the Wet Collections of the Auburn University Museum of Natural History. National Science Foundation Division of Biological Infrastructure Award. 1/2018–1/2020. \$195,450. Funded.

Oaks, J.R. (PI). ‡Buehler, M.D. (Co-PI), Counterman, B. (Co-PI), and O'Hanlon, B. (Co-PI). Enhancing conservation and captive breeding efforts toward the recovery of the Eastern indigo snake. The Cooperative Endangered Species Conservation Fund (Section 6 of the Endangered Species Act). 1/2023–1/2024. \$70,387. Funded.

Talley, B.L. (PI), **J.R. Oaks (Co-PI)**, and M. Hoffman (Co-PI). Enhancing captive breeding efforts toward the recovery of the Eastern indigo snake. The Cooperative Endangered Species Conservation Fund (Section 6 of the Endangered Species Act). 10/2020–10/2021. \$74,300. Funded.

Godwin, J. (PI), J.J. Apodaca (Co-PI), K. Lawson (Co-PI), and **J.R. Oaks (Co-PI)**. Occurrence of Western Chicken Turtle. Louisiana Department of Wildlife and Fisheries. 10/2019–10/2022. \$136,436. Funded.

Zohdy, S. (Co-PI), T. Schwartz (Co-PI), **J.R. Oaks (Co-I)**, and Z. Farris (Co-I). The Coevolution Effect: A Mechanism for Viral Spillover into Humans. Auburn University Intramural Grants Program. 5/2017–5/2019. \$40,000. Funded.

Grismer, J.L., **J.R. Oaks**, R.M. Brown, N.B. Ananjeva, X. Guo, and N. Batsaikhan. Revisiting Przhevalsky's Expeditions: Population genetics in the Gobi Desert. National Geographic Committee for Research and Exploration Grant. 5/2014–6/2015. \$20,000. Funded.

Oaks, J.R. (Co-PI), R. Brown (PI), and M. Holder (Co-PI). Comparative Phylogeography of a Dynamic Archipelago. National Science Foundation Doctoral Dissertation Improvement Grant. 8/2010–8/2012. \$14,886. Funded.

Grants Pending

Oaks, J.R. (PI). CAREER: A process-based, modular, phylogenetic framework for inferring rates and patterns of shared evolutionary events. National Science Foundation Division of Environmental Biology 9/2023–9/2028. \$1,432,790. Pending.

Oaks, J.R. (PI). ‡Buehler, M.D. (Co-PI), Counterman, B. (Co-PI), and O'Hanlon, B. (Co-PI). Enhancing conservation and captive breeding efforts toward the recovery of the Eastern indigo snake. The Cooperative Endangered Species Conservation Fund (Section 6 of the Endangered Species Act). 1/2024–1/2025. \$53,334. Pending.

Fellowships, Awards & Honors

Oaks, J.R. National Science Foundation Postdoctoral Research Fellowship in Biology—Intersections of Biology and Mathematical and Physical Sciences and Engineering. \$207,000. 11/2013–11/2016.

Oaks, J.R. National Research Council Postdoctoral Research Associateship—National Institute of Standards and Technology. \$137,200. 7/2013–7/2015. Awarded, but declined.

Publications

†mentored undergraduate student; ‡mentored graduate student; §mentored postdoc.

Book Chapters

1. ‡Cobb, K. A. and **J. R. Oaks** (2023). "Comparison of Linked versus Unlinked Character Models for Species Tree Inference". In: *Species Tree Inference: A Guide to Methods and Applications*. Ed. by L. S. Kubatko and L. L. Knowles. Princeton, New Jersey, USA: Princeton University Press. Chap. 10, pp.191–210.

Peer-reviewed Publications

40. **Oaks, J. R.**, P. L. §Wood, Jr., C. D. Siler, and R. M. Brown (2022). Generalizing Bayesian phylogenetics to infer shared evolutionary events. *Proceedings of the National Academy of Sciences* 119: e2121036119. DOI: [10.1073/pnas.2121036119](https://doi.org/10.1073/pnas.2121036119).
39. ‡Klabacka, R. L., H. A. Parry, K. N. Yap, R. A. †Cook, V. A. Herron, L. M. †Horne, M. E. Wolak, J. A. Maldonado, A. N. Kavazis, M. K. Fujita, **J. R. Oaks**, and T. S. Schwartz (2022). Reduced mitochondrial respiration in hybrid asexual lizards. *The American Naturalist* 199: 719–728. DOI: [10.1086/719014](https://doi.org/10.1086/719014).
38. §Grismer, J., P. Scott, E. Toffelmier, B. Hinds, R. ‡Klabacka, G. Stewart, V. †White, **J. Oaks**, and H. B. Shaffer (2022). Genomic data reveal local endemism in Southern California Rubber Boas (Serpentes: Boidae, *Charina*) and the critical need for enhanced conservation actions. *Molecular Phylogenetics and Evolution* 174: 107542. DOI: [10.1016/j.ympev.2022.107542](https://doi.org/10.1016/j.ympev.2022.107542).
37. ‡Buehler, M. D., P. Zoljargal, E. Purvee, K. Munkhbayar, M. Munkhbaatar, N. Batsaikhan, N. B. Ananjeva, N. L. Orlov, T. J. Papenfuss, D. Roldán-Piña, Douchindorj, L. L. Grismer, **J. R. Oaks**, R. M. Brown, and J. L. §Grismer (2021). The results of four recent joint expeditions to the Gobi Desert: Lacertids and agamids. *Russian Journal of Herpetology* 28: 15–32. DOI: [10.30906/1026-2296-2021-28-1-15-32](https://doi.org/10.30906/1026-2296-2021-28-1-15-32).
36. Wan, T., **J. R. Oaks**, X.-L. Jiang, H. Huang, and L. L. Knowles (2021). Differences in Quaternary co-divergence reveals community-wide diversification in the mountains of southwest China varied among species. *Proceedings of the Royal Society B: Biological Sciences* 288: 20202567. DOI: [10.1098/rspb.2020.2567](https://doi.org/10.1098/rspb.2020.2567).
35. ‡Klabacka, R. L., P. L. §Wood, Jr., J. A. McGuire, **J. R. Oaks**, L. L. Grismer, J. L. §Grismer, A. Aowphol, and J. W. Sites, Jr. (2020). Rivers of Indochina as potential drivers of lineage diversification in the spotted flying lizard (*Draco maculatus*) species complex. *Molecular Phylogenetics and Evolution* 150: 106861. DOI: [10.1016/j.ympev.2020.106861](https://doi.org/10.1016/j.ympev.2020.106861).
34. Weinell, J. L., A. J. Barley, C. D. Siler, N. L. Orlov, N. B. Ananjeva, **J. R. Oaks**, F. T. Burbrink, and R. M. Brown (2020). Phylogenetic relationships and biogeographic range evolution in Cat-eyed Snakes *Boiga* (Serpentes: Colubridae). *Zoological Journal of the Linnean Society*. DOI: [10.1093/zoolinnean/zlaa090](https://doi.org/10.1093/zoolinnean/zlaa090).
33. §Wood, Jr., P. L., L. L. Grismer, M. A. Muin, S. Anuar, **J. R. Oaks**, and J. W. Sites, Jr. (2020). A new potentially endangered limestone-associated Bent-toed Gecko of the *Cyrtodactylus pulchellus* (Squamata: Gekkonidae) complex from northern Peninsular Malaysia. *Zootaxa* 4751: 437–460. DOI: [10.11646/zootaxa.4751.3.2](https://doi.org/10.11646/zootaxa.4751.3.2).

32. Grismer, L. L., A. Rujirawan, K. Termprayoon, N. Ampai, S. Yodthong, P. L. §Wood, Jr., **J. R. Oaks**, and A. Aowphol (2020). A new species of *Cyrtodactylus* Gray (Squamata; Gekkonidae) from the Thai Highlands with a discussion on the evolution of habitat preference. *Zootaxa* 4852: 401–427. DOI: [10.11646/zootaxa.4852.4.1](https://doi.org/10.11646/zootaxa.4852.4.1).
31. O'Connell, K. A., **J. R. Oaks**, A. Hamidy, K. J. Shaney, N. Kurniawan, E. N. Smith, and M. K. Fujita (2020). Impacts of the Toba eruption and montane forest expansion on diversification in Sumatran parachuting frogs (*Rhacophorus*). *Molecular Ecology* 29: 2994–3009. DOI: [10.1111/mec.15541](https://doi.org/10.1111/mec.15541).
30. Grismer, L. L., K. O. Chan, **J. R. Oaks**, N. Thy, L. Sokun, M. L. Murdoch, B. L. Stuart, and J. L. §Grismer (2020). A new insular species of the *Cyrtodactylus intermedius* (Squamata: Gekkonidae) group from Cambodia with a discussion of habitat preference and ecomorphology. *Zootaxa* 4830: 75–102. DOI: [10.11646/zootaxa.4830.1.3](https://doi.org/10.11646/zootaxa.4830.1.3).
29. **Oaks, J. R.**, N. †L'Bahy, and K. A. ‡Cobb (2020). Insights from a general, full-likelihood Bayesian approach to inferring shared evolutionary events from genomic data: Inferring shared demographic events is challenging. *Evolution* 74: 2184–2206. DOI: [10.1111/evo.14052](https://doi.org/10.1111/evo.14052).
28. ‡David, K. T., **J. R. Oaks**, and K. M. Halanych (2020). Patterns of Gene Evolution Following Duplications and Speciations in Vertebrates. *PeerJ* 8: e8813. DOI: [10.7717/peerj.8813](https://doi.org/10.7717/peerj.8813).
27. Grismer, L. L., P. L. §Wood, Jr., M. S. Grismer, E. S. H. Quah, M. K. Thura, **J. R. Oaks**, A. Lin, and D. Y. Lim (2020). Integrative taxonomic and geographic variation analyses in *Cyrtodactylus aequalis* (Squamata: Gekkonidae) from southern Myanmar (Burma): one species, two different stories. *Israel Journal of Ecology & Evolution*. DOI: [10.1163/22244662-20191082](https://doi.org/10.1163/22244662-20191082).
26. Grismer, L. L., P. L. §Wood, Jr., E. S. H. Quah, M. K. Thura, **J. R. Oaks**, and A. Lin (2020). Four new Burmese species of *Hemiphyllodactylus* Bleeker (Squamata: Gekkonidae) from distantly related parapatric clades from the Shan Plateau and Salween Basin. *Zootaxa* 4758: 45–82. DOI: [10.11646/zootaxa.4758.1.2](https://doi.org/10.11646/zootaxa.4758.1.2).
25. Wright, A. M., R. S. Schwartz, **J. R. Oaks**, C. E. Newman, and S. P. Flanagan (2020). The why, when, and how of computing in biology classrooms. *F1000Research* 8: 1854. DOI: [10.12688/f1000research.20873.2](https://doi.org/10.12688/f1000research.20873.2).
24. Leaché, A. D., **J. R. Oaks**, C. Ofori-Boateng, and M. K. Fujita (2020). Comparative phylogeography of West African amphibians and reptiles. *Evolution* 74: 716–724. DOI: [10.1111/evo.13941](https://doi.org/10.1111/evo.13941).
23. Grismer, L. L., P. L. §Wood, Jr., E. S. H. Quah, M. S. Grismer, M. K. Thura, **J. R. Oaks**, and A. Lin (2020). Two new species of *Cyrtodactylus* Gray, 1827 (Squamata: Gekkonidae) from a karstic archipelago in the Salween Basin of southern Myanmar (Burma). *Zootaxa* 4718: 151–183. DOI: [10.11646/zootaxa.4718.2.1](https://doi.org/10.11646/zootaxa.4718.2.1).
22. **Oaks, J. R.** (2019). Full Bayesian comparative phylogeography from genomic data. *Systematic Biology* 68: 371–395. DOI: [10.1093/sysbio/syy063](https://doi.org/10.1093/sysbio/syy063).
21. **Oaks, J. R.**, K. A. ‡Cobb, V. N. Minin, and A. D. Leaché (2019). Marginal likelihoods in phylogenetics: a review of methods and applications. *Systematic Biology* 68: 681–697. DOI: [10.1093/sysbio/syz003](https://doi.org/10.1093/sysbio/syz003).
20. **Oaks, J. R.**, C. D. Siler, and R. M. Brown (2019). The comparative biogeography of Philippine geckos challenges predictions from a paradigm of climate-driven vicariant diversification across an island archipelago. *Evolution* 73: 1151–1167. DOI: [10.1111/evo.13754](https://doi.org/10.1111/evo.13754).
19. Zohdy, S., T. S. Schwartz, and **J. R. Oaks** (2019). The Coevolution Effect as a Driver of Spillover. *Trends in Parasitology*. DOI: [10.1016/j.pt.2019.03.010](https://doi.org/10.1016/j.pt.2019.03.010).
18. §Folt, B., J. Bauder, S. Spear, D. Stevenson, M. Hoffman, **J. R. Oaks**, P. L. §Wood, Jr., C. Jenkins, D. A. Steen, and C. Guyer (2019). Taxonomic and conservation implications of population genetic admixture, mito-nuclear discordance, and male-biased dispersal of a large endangered snake, *Drymarchon couperi*. *PLOS ONE* 14: 1–21. DOI: [10.1371/journal.pone.0214439](https://doi.org/10.1371/journal.pone.0214439).
17. Quah, E. S. H., L. L. Grismer, P. L. §Wood, Jr., M. K. Thura, **J. R. Oaks**, and A. Lin (2019). Discovery of the westernmost population of the genus *Ansonia* Stoliczka (Anura, Bufonidae) with the description of

- a new species from the Shan Plateau of eastern Myanmar. *Zootaxa* 4656: 545–571. DOI: [10.11646/zootaxa.4656.3.11](https://doi.org/10.11646/zootaxa.4656.3.11).
16. Grismer, L. L., P. L. Wood, Jr., E. S. H. Quah, M. K. Thura, **J. R. Oaks**, and A. Lin (2019). A new species of Bent-toed Gecko (Squamata, Gekkonidae, *Cyrtodactylus*) from the Shan Plateau in eastern Myanmar (Burma). *Zootaxa* 4624: 301–321. DOI: [10.11646/zootaxa.4624.3.1](https://doi.org/10.11646/zootaxa.4624.3.1).
 15. Leaché, A. D. and **J. R. Oaks** (2017). The utility of single nucleotide polymorphism (SNP) data in phylogenetics. *Annual Review of Ecology, Evolution, and Systematics* 48: 69–84. DOI: [10.1146/annurev-ecolsys-110316-022645](https://doi.org/10.1146/annurev-ecolsys-110316-022645).
 14. Lira-Noriega, A., O. Toro-Núñez, **J. R. Oaks**, and M. E. Mort (2015). The roles of history and ecology in chloroplast phylogeographic patterns of the bird-dispersed plant parasite *Phoradendron californicum* Nutt. (Viscaceae) in the Sonoran Desert. *American Journal of Botany* 102: 149–164. DOI: [10.3732/ajb.1400277](https://doi.org/10.3732/ajb.1400277).
 13. ***Oaks, J. R.** (2014). An Improved Approximate-Bayesian Model-choice Method for Estimating Shared Evolutionary History. *BMC Evolutionary Biology* 14: 150. DOI: [10.1186/1471-2148-14-150](https://doi.org/10.1186/1471-2148-14-150). *Highly accessed.
 12. **Oaks, J. R.**, C. W. Linkem, and J. Sukumaran (2014). Implications of uniformly distributed, empirically informed priors for phylogeographical model selection: A reply to Hickerson et al. *Evolution* 68: 3607–3617. DOI: [10.1111/evo.12523](https://doi.org/10.1111/evo.12523).
 11. Siler, C. D., **J. R. Oaks**, K. Cobb, O. Hidetoshi, and R. M. Brown (2014). Critically endangered island endemic or peripheral population of a widespread species? Conservation genetics of Kikuchi's gecko and the global challenge of protecting peripheral oceanic island endemic vertebrates. *Diversity and Distributions* 20: 756–772. DOI: [10.1111/ddi.12169](https://doi.org/10.1111/ddi.12169).
 10. Grismer, J. L., A. M. Bauer, L. L. Grismer, K. Thirakhupt, A. Aowphol, **J. R. Oaks**, P. L. Wood, Jr., K. O. Chan, N. Thy, M. Cota, and T. Jackman (2014). Multiple origins of parthenogenesis, and a species phylogeny for the Southeast Asian butterfly lizards, *Leiolepis*. *Biological Journal of the Linnean Society* 113: 1080–1093. DOI: [10.1111/bij.12367](https://doi.org/10.1111/bij.12367).
 9. Welton, L. J., P. L. Wood, Jr., **J. R. Oaks**, C. D. Siler, and R. M. Brown (2014). Fossil-calibrated phylogeny and historical biogeography of Southeast Asian water monitors (*Varanus salvator* Complex). *Molecular Phylogenetics and Evolution* 74: 29–37. DOI: [10.1016/j.ympev.2014.01.016](https://doi.org/10.1016/j.ympev.2014.01.016).
 8. **Oaks, J. R.**, J. Sukumaran, J. A. Esselstyn, C. W. Linkem, C. D. Siler, M. T. Holder, and R. M. Brown (2013). Evidence for climate-driven diversification? A caution for interpreting ABC inferences of simultaneous historical events. *Evolution* 67: 991–1010. DOI: [10.1111/j.1558-5646.2012.01840.x](https://doi.org/10.1111/j.1558-5646.2012.01840.x).
 7. Brown, R. M., C. D. Siler, C. H. Oliveros, J. A. Esselstyn, A. C. Diesmos, P. A. Hosner, C. W. Linkem, A. J. Barley, **J. R. Oaks**, M. B. Sanguila, L. J. Welton, R. G. Moyle, A. T. Peterson, and A. C. Alcala (2013). Evolutionary processes of diversification in a model island archipelago. *Annual Review of Ecology, Evolution, and Systematics* 44: 411–435. DOI: [10.1146/annurev-ecolsys-110411-160323](https://doi.org/10.1146/annurev-ecolsys-110411-160323).
 6. Welton, L. J., C. D. Siler, **J. R. Oaks**, A. C. Diesmos, and R. M. Brown (2013). Multilocus Phylogeny and Bayesian Estimates of Species Boundaries Reveal Hidden Evolutionary Relationships and Cryptic Diversity in Southeast Asian Monitor Lizards. *Molecular Ecology* 22: 3495–3510. DOI: [10.1111/mec.12324](https://doi.org/10.1111/mec.12324).
 5. ***Siler, C. D., J. R. Oaks, L. J. Welton, C. W. Linkem, J. Swab, A. C. Diesmos, and R. M. Brown** (2012). Did geckos ride the Palawan raft to the Philippines? *Journal of Biogeography* 39: 1217–1234. DOI: [10.1111/j.1365-2699.2011.02680.x](https://doi.org/10.1111/j.1365-2699.2011.02680.x). *Featured on journal cover.
 4. ***Oaks, J. R.** (2011). A time-calibrated species tree of Crocodylia reveals a recent radiation of the true crocodiles. *Evolution* 65: 3285–3297. DOI: [10.1111/j.1558-5646.2011.01373.x](https://doi.org/10.1111/j.1558-5646.2011.01373.x). *Featured in *Nature* (link) and on journal cover.
 3. Siler, C. D., **J. R. Oaks**, J. A. Esselstyn, A. C. Diesmos, and R. M. Brown (2010). Phylogeny and biogeography of Philippine bent-toed geckos (Gekkonidae: *Cyrtodactylus*) contradict a prevailing model of Pleistocene diversification. *Molecular Phylogenetics and Evolution* 55: 699–710. DOI: [10.1016/j.ympev.2010.01.027](https://doi.org/10.1016/j.ympev.2010.01.027).

2. **Oaks, J. R.**, J. M. Daul, and G. H. Adler (2008). Life span of a tropical forest rodent, *Proechimys semispinosus*. *Journal of Mammalogy* 89: 904–908. DOI: [10.1644/07-MAMM-A-045.1](https://doi.org/10.1644/07-MAMM-A-045.1).
1. Grismer, L. L., T. Neang, T. Chav, P. L. Wood, Jr., **J. R. Oaks**, J. Holden, J. L. Grismer, T. R. Szutz, and T. M. Youmans (2008). Additional amphibians and reptiles from the Phnom Samkos Wildlife Sanctuary in Northwestern Cardamom Mountains, Cambodia, with comments on their taxonomy and the discovery of four new species. *Raffles Bulletin of Zoology* 56: 161–175. URL: <http://rmbn.nus.edu.sg/rbz/biblio/56/56rbz161-175.pdf>.

Non-peer-reviewed Publications

- Oaks, J. R. (2015). Book review of *Bayesian Phylogenetics: Methods, Algorithms, and Applications*, edited by Ming-Hui Chen, Lynn Kuo, and Paul O. Lewis. *Systematic Biology* 64: 1122–1125. [link](#).
- Oaks, J. R. (2014). Book review of *Crocodile* by Dan Wylie. *The Quarterly Review of Biology* 89: 405. [link](#).
- Oaks, J. R. (2014). Who's the living fossil? SciWorthy. <https://sciworthy.com/whos-the-living-fossil/>.

Presentations

Presenter in italics; †mentored undergraduate student; ‡mentored graduate student; §mentored postdoc.

Invited Seminars

19. **Oaks, J. R.** (2022). Generalizing phylogenetics to infer patterns predicted by processes of diversification. Invited seminar. Center for Genomic and Computational Biology, Duke University. Durham, North Carolina. URL: <https://www.slideshare.net/jamieoaks7/generalizing-phylogenetics-to-infer-patterns-predicted-by-processes-of-diversification-254039437>.
18. **Oaks, J. R.** (2021). Bayesian statistical approaches to inferring shared evolutionary events. Invited seminar. Bristol Myers Squibb. Seattle, Washington. URL: <http://phyletica.org/slides/bms.pdf>.
17. **Oaks, J. R.** (2021). Bayesian statistical approaches to inferring shared evolutionary events. Invited seminar. Adaptive Biotechnologies. Seattle, Washington. URL: <http://phyletica.org/slides/adaptive.pdf>.
16. **Oaks, J. R.** (2021). Generalizing phylogenetics to infer patterns predicted by processes of diversification. Invited seminar. Auburn University Department of Biological Sciences. Auburn, Alabama. Video: <https://youtu.be/KFJHbDLnpNE>. URL: <http://phyletica.org/slides/au-dbs-2021.pdf>.
15. **Oaks, J. R.** (2021). Generalizing Bayesian phylogenetics to infer shared evolutionary events. Invited seminar. The Leibniz Institute for the Analysis of Biodiversity Change (LIB). Hamburg & Bonn, Germany.
14. †*Klabacka*, R. L., P. L. §Wood, Jr., J. A. McGuire, **J. R. Oaks**, L. L. Grismer, J. L. §Grismer, A. Aowphol, and J. W. Sites, Jr. (2019). Riverine barriers as drivers of biodiversification in terrestrial fauna of Southeast Asia. Invited seminar. Museum of Natural Science, Louisiana State University. Baton Rouge, Louisiana.
13. **Oaks, J. R.** (2018). Generalizing the birth-death process to test for bursts of diversification across the phylogeny of Southeast Asian geckos. Invited seminar. Museum of Natural Science, Louisiana State University. Baton Rouge, Louisiana.
12. **Oaks, J. R.** (2018). Generalizing phylogenetics to infer patterns of shared evolutionary events. Invited seminar. Department of Evolution, Ecology, and Organismal Biology, The Ohio State University. Columbus, Ohio. URL: <https://www.slideshare.net/jamieoaks7/generalizing-phylogenetics-to-infer-patterns-of-shared-evolutionary-events>.
11. **Oaks, J. R.** (2017). Generalizing phylogenetics to infer shared evolutionary events. Invited seminar. Department of Biological Sciences, Louisiana State University. Baton Rouge, Louisiana. URL: <https://www.slideshare.net/jamieoaks7/generalizing-phylogenetics-to-infer-shared-evolutionary-events-82472215>.
10. **Oaks, J. R.** (2016). Generalizing phylogenetics to infer shared evolutionary events. Invited seminar. Department of Biology, Brigham Young University. Provo, Utah. URL: <https://www.slideshare.net/jamieoaks7/generalizing-phylogenetics-to-infer-shared-evolutionary-events>.
9. **Oaks, J. R.** (2016). Generalizing phylogenetics to infer shared evolutionary events. Invited seminar. Department of Biology, St. Cloud State University. St. Cloud, Minnesota.

8. **Oaks, J. R.** (2015). Accommodating clustered divergences in phylogenetic inference. Invited seminar. Department of Biology, University of Oklahoma. Norman, Oklahoma. URL: <https://www.slideshare.net/jamieoaks7/accommodating-clustered-divergences-in-phylogenetic-inference>.
7. **Oaks, J. R.** (2015). Improving inference of evolutionary history: Developing comparative methods for genomic data. Invited seminar. Department of Biological Sciences, Auburn University. Auburn, Alabama.
6. **Oaks, J. R.** (2014). Improving inference of evolutionary history: Developing comparative methods for genomic data. Invited seminar. Department of Integrative Biology, Oklahoma State University. Stillwater, Oklahoma.
5. **Oaks, J. R.**, J. Sukumaran, J. A. Esselstyn, C. W. Linkem, C. D. Siler, and R. M. Brown (2013). ABC, not as easy as 1, 2, 3: The potential perils of model choice via approximate Bayesian computation. Invited seminar. Department of Ecology and Evolutionary Biology, Cornell University. Ithaca, New York.
4. **Oaks, J. R.** (2010). Objective partition choice and the phylogenetic systematics and biogeography of the true crocodiles (*Crocodylus*). Invited seminar. Department of Ecology and Evolutionary Biology, University of Kansas. Lawrence, Kansas.
3. **Oaks, J. R.** (2009). Approximate Bayesian Computation in the Chiricahua Mountains. Invited seminar. Natural History Museum Seminar Series, University of Kansas. Lawrence, Kansas.
2. **Oaks, J. R.** (2007). Phylogenetic Systematics and Biogeography of the True Crocodiles (*Crocodylus*). Invited seminar. Natural History Museum Seminar Series, University of Kansas. Lawrence, Kansas.
1. **Carling, M.**, **Z. Cheviron**, **J. L. Grismer**, **A. Hamilton**, and **J. R. Oaks** (2007). Fieldwork at the LSU Museum of Natural Science: Where in the World are the Museum Students? Invited seminar. Louisiana State University Museum of Natural Science Seminar Series. Baton Rouge, Louisiana.

Conference Presentations

42. **Oaks, J. R.** and P. L. [§]Wood, Jr. (2021). Expanding the space of phylogenetic trees to infer patterns predicted by shared processes of diversification. Conference talk. Evolution Meeting. Virtual. Video: <https://youtu.be/1PX5Yz-VgEc>. URL: <http://phyletica.org/slides/evolution-2021.pdf>.
41. **Oaks, J. R.** and P. L. [§]Wood, Jr. (2021). Generalizing Bayesian phylogenetics to infer shared evolutionary events. Conference talk. Mathematical, Inferential, and Computational Phylogenomics (MIC-Phy). Vienna, Austria (virtual). Video: <https://www.youtube.com/watch?v=4xzcrkYyriU>. URL: <http://phyletica.org/slides/mic-phy-2021.pdf>.
40. [‡]**Klabacka**, R. L., H. A. Parry, K. N. Yap, R. A. [†]Cook, V. A. Herron, L. M. [†]Horne, J. A. Maldonado, **J. R. Oaks**, A. N. Kavazis, M. K. Fujita, and T. S. Schwartz (2021). Reduced endurance and mitochondrial respiration in hybrid asexual lizards (genus: *Aspidoscelis*). Conference talk. Annual Meeting of the Society for Integrative & Comparative Biology. Virtual.
39. [‡]**Anamza**, T. and **J. R. Oaks** (2020). Improving estimation of shared evolutionary events. Conference poster. Southeastern Population Ecology and Evolutionary Genetics (SEPEEG) Conference. Auburn, Alabama.
38. [†]**Benedict**, C. A., L. L. Grismer, **J. R. Oaks**, and P. L. [§]Wood, Jr. (2020). Phylogenetic placement of Burmese tree frogs in the genus *Polypedates*. Conference poster. Annual Meeting of the Society for Integrative & Comparative Biology. Austin, Texas.
37. [‡]**Cobb**, K. A. and **J. R. Oaks** (2020). Comparing linked versus unlinked character models for species-tree inference. Conference poster. Meeting of the Society of Systematic Biologists. Gainesville, Florida.
36. [‡]**Klabacka**, R. L., H. Parry, J. Yap, R. [†]Cook, T. Herron, L. M. [†]Horne, J. Maldonado, G. Álvarez, A. Kavazis, **J. R. Oaks**, M. Fujita, J. Johnson, and T. S. Schwartz (2020). The powerhouse of asexual cost? Endurance and mitochondrial efficiency in parthenogenetic whiptail lizards (genus *Aspidoscelis*). Conference talk. 9th World Congress of Herpetology. University of Otago, Dunedin, New Zealand.
35. [§]**Wood, Jr.**, P. L., J. A. McGuire, L. L. Grismer, L. J. Welton, **J. R. Oaks**, and R. M. Brown (2020). Phylogenomics of the Green Crested Lizards (*Bronchocela*): with insights on spatial and temporal evolution. Conference poster. Meeting of the Society of Systematic Biologists. Gainesville, Florida.

34. ‡Klabacka, R. L., P. L. §Wood, Jr., J. A. McGuire, **J. R. Oaks**, L. L. Grismer, J. L. §Grismer, A. Aowphol, and J. W. Sites, Jr. (2019). Riverine barriers as potential drivers of biodiversification in the *Draco maculatus* species complex of Indochina. Conference talk. Joint Meeting of Ichthyologists and Herpetologists. Portland, Oregon. *Awarded best student paper in Systematics/Evolution.
33. †Lopez-Perez, J., M. Caldwell, D. Warner, M. Wolak, and **J. R. Oaks** (2019). Variation in local emydid nest site selection along a gradient of human activity. Conference poster. NSF REU Research Symposium. Auburn, Alabama.
32. ‡Cobb, K. A., N. †L'Bahy, and **J. R. Oaks** (2019). Insights from a general, full-likelihood Bayesian approach to inferring shared evolutionary events from genomic data. Conference poster. Evolution 2019. Providence, Rhode Island.
31. ‡Klabacka, R. L., J. Maldonado, A. Kavazis, H. Parry, **J. R. Oaks**, M. Fujita, and T. S. Schwartz (2019). Comparative examination of mitochondrial function in parthenogenetic whiptail lizards (genus: *Aspidoscelis*). Conference poster. American Genetic Association Presidential Symposium. Portland, Oregon.
30. **Oaks, J. R.**, L. R. Goertzen, K. M. Halanych, and S. R. Santos (2019). Computational Biology Education at Auburn University. Invited conference talk. iEvoBio 2019. Providence, Rhode Island. URL: <http://phyletica.org/slides/ievobio-2019>.
29. **Oaks, J. R.**, C. D. Siler, and R. M. Brown (2019). Full Bayesian comparative biogeography of Philippine geckos challenges predictions of climate-driven vicariant speciation. Conference talk. Evolution 2019. Providence, Rhode Island. Video: <https://www.youtube.com/watch?v=gULtPGdAQME>. URL: <https://www.slideshare.net/jamieoaks7/full-bayesian-comparative-biogeography-of-philippine-geckos-challenges-predictions-of-climate-driven-vicariant-speciation>.
28. Wan, T., H. Huang, **J. R. Oaks**, and L. L. Knowles (2019). Whether divergence time is a proxy for phylogeographic concordance: a case from mountains of Southwest China vertebrate community. Conference poster. Evolution 2019. Providence, Rhode Island.
27. ‡David, K. T., **J. R. Oaks**, and K. M. Halanych (2019). Much Ado About Orthologs: Consequences of Duplication and Speciation in Gene Evolution. Conference talk. Annual Meeting of the Society for Integrative & Comparative Biology. Tampa, Florida. *Kyle David received the David and Marvalee Wake Award for Best Student Oral Presentation.
26. §Wood, Jr., P. L., J. A. McGuire, L. L. Grismer, L. J. Welton, **J. R. Oaks**, and R. M. Brown (2019). Phylogenomics of the Green Crested Lizards (*Bronchocelela*): with insights on spatial and temporal evolution. Conference poster. 9th Biennial Conference of the International Biogeography Society. Málaga, Spain.
25. †Cook, R., R. ‡Klabacka, S. Tiatragul, G. †Ripa, K. †Wilson, and **J. R. Oaks** (2018). Longitudinal examination of the morphology of lungless salamanders (family Plethodontidae) in Alabama. Conference poster. Auburn University College of Science and Mathematics Undergraduate Research Fair. Auburn, Alabama.
24. Zohdy, S., T. S. Schwartz, and **J. R. Oaks** (2018). The Coevolution Effect: A hypothesis to explain zoonotic pathogen spillover. Conference talk. Annual Meeting of the American Society for Tropical Medicine and Hygiene. New Orleans, Louisiana.
23. Buehler, M. D., S. Hathaway, R. Fisher, T. R. Jackman, **J. R. Oaks**, and A. M. Bauer (2018). Patterns of Diversity and Evolutionary Relationships of Sea Kraits (*Laticauda*). Conference talk. Joint Meeting of Ichthyologists and Herpetologists. Rochester, New York.
22. †L'Bahy, N., K. ‡Cobb, B. §Folt, and **J. R. Oaks** (2018). Phylogenetic analysis of Relationships within the Sirenidae family. Conference poster. Symposium for the Auburn University Computational Biology NSF Research Experiences for Undergraduates. Auburn, Alabama. *Nadia L'Bahy was awarded Best Poster Runner Up.
21. ‡David, K., **J. R. Oaks**, and K. M. Halanych (2018). Orthologs and Paralogs: What's the Difference? Conference talk. 2018 Standalone Meeting of the Society of Systematic Biologists. Columbus, Ohio.
20. §Folt, B., J. Bauder, S. Spear, D. Stevenson, M. Hoffman, **J. R. Oaks**, C. Jenkins, D. Steen, and C. Guyer (2018). Mito-nuclear discordance, gene flow, and male-biased dispersal of a large snake, *Drymarchon*

- couperi*. Conference poster. 2018 Standalone Meeting of the Society of Systematic Biologists. Columbus, Ohio.
19. ‡*Klabacka*, R., P. L. §*Wood*, Jr., J. A. McGuire, **J. R. Oaks**, L. L. Grismer, J. L. §Grismer, and J. W. Sites, Jr. (2018). Riverine barriers as potential drivers of biodiversification in a major evolutionary hotspot: A Bayesian approach to model comparison. Conference poster. 2018 Standalone Meeting of the Society of Systematic Biologists. Columbus, Ohio.
 18. **Oaks, J. R.** (2018). Inferring shared demographic changes from genomic data. Conference talk. 2018 Standalone Meeting of the Society of Systematic Biologists. Columbus, Ohio. URL: <https://www.slideshare.net/jamieoaks7/inferring-shared-demographic-changes-from-genomic-data>.
 17. ‡*Sipley*, B., S. A. Bullard, **J. R. Oaks**, and K. M. Halanych (2018). The evolution of blood parasitism in flatworms: what's VAP got to do with it? Conference talk. 2018 Standalone Meeting of the Society of Systematic Biologists. Columbus, Ohio.
 16. ‡*Westfall*, A., **J. R. Oaks**, and T. S. Schwartz (2018). The Evolution of Viviparity and the Insulin and Insulin-like Signaling Network in *Sceloporus* Lizards. Conference talk. 2018 Standalone Meeting of the Society of Systematic Biologists. Columbus, Ohio.
 15. ‡*Westfall*, A., T. S. Schwartz, and **J. R. Oaks** (2018). The Evolution of Viviparity and the Insulin Signaling Network in *Sceloporus* Lizards. Conference poster. Annual Meeting of the Society for Integrative & Comparative Biology. San Francisco, California.
 14. ‡*Klabacka*, R., P. L. §*Wood*, Jr., L. L. Grismer, J. A. McGuire, **J. R. Oaks**, and J. W. Sites, Jr. (2017). Speciation or isolated diversification: The hidden variation of *Draco maculatus*. Conference talk. 2017 Standalone Meeting of the Society of Systematic Biologists. Baton Rouge, Louisiana.
 13. **Oaks, J. R.** (2017). Ecoevolution: Estimating evolutionary coevolution. Conference talk. 2017 Standalone Meeting of the Society of Systematic Biologists. Baton Rouge, Louisiana. URL: <https://www.slideshare.net/jamieoaks7/generalizing-phylogenetics-to-infer-shared-evolutionary-events-76916482>.
 12. ‡*Klabacka*, R., P. L. §*Wood*, Jr., L. L. Grismer, J. A. McGuire, **J. R. Oaks**, A. Aowphol, and J. W. Sites, Jr. (2016). Hidden Dragons: The molecular composition of the *Draco maculatus* species complex. Conference talk. Southeastern Population Ecology and Evolutionary Genetics (SEPEEG) Meeting. Madison, Florida.
 11. **Oaks, J. R.** (2014). An improved approximate-Bayesian method for estimating shared evolutionary history. Conference talk. Evolution 2014, Ernst Mayr Competition. Raleigh, North Carolina. URL: <https://www.slideshare.net/jamieoaks7/slides-36177128>.
 10. **Oaks, J. R.** (2014). An improved nonparametric approximate-Bayesian method for estimating shared evolutionary history. Conference talk. EVO-WIBO 2014: 6th meeting of evolutionary biologists of the Pacific Northwest. Port Townsend, Washington.
 9. **Oaks, J. R.**, J. Sukumaran, J. A. Esselstyn, C. W. Linkem, C. D. Siler, and R. M. Brown (2012). ABC, not as easy as 1, 2, 3: The potential perils of model choice via approximate Bayesian computation. Talk. Graduate Student Symposium, Department of Ecology and Evolutionary Biology, University of Kansas. Lawrence, Kansas.
 8. **Oaks, J. R.**, J. Sukumaran, J. A. Esselstyn, C. W. Linkem, C. D. Siler, and R. M. Brown (2010). Comparative phylogeography of terrestrial vertebrates across Philippine Pleistocene aggregate island complexes. Conference talk. Evolution 2010. Portland, Oregon.
 7. †*Lusher*, E. and **J. R. Oaks** (2010). Phylogeography of Ringneck Snakes across Kansas. Poster. Undergraduate Research Symposium, University of Kansas. Lawrence, Kansas.
 6. **Oaks, J. R.** (2009). Objective partition choice and the phylogenetic systematics and biogeography of the true crocodiles. Conference talk. Joint Meeting of Ichthyologists and Herpetologists. Portland, Oregon. *Awarded best student paper in Systematics/Evolution.
 5. Linkem, C. W. and **J. R. Oaks** (2009). Examination and Utility of the Dirichlet Process Prior in Bayesian Phylogenetics: A Test with Scincid and *Anolis* Lizards. Conference talk. Evolution 2009, Ernst Mayr Competition. Moscow, Idaho.

4. **Oaks, J. R.** and C. W. Linkem (2009). Accommodating Among-Site Rate Variation in Phylogenetic Inference: Data Partitioning as a Random Variable and the Objective Choice of Partition Strategy. Conference talk. Evolution 2009, Ernst Mayr Competition. Moscow, Idaho.
3. **Oaks, J. R.** (2009). Objective Partitioning in Phylogenetic Inference. Talk. Sigma Xi Research Paper Competition, University of Kansas. Lawrence, Kansas.
2. **Oaks, J. R.** (2008). Accommodating Among-Site Rate Variation in Phylogenetic Inference: Data Partitioning as a Random Variable and the Objective Choice of Partition Strategy. Talk. Graduate Student Symposium, Department of Ecology and Evolutionary Biology, University of Kansas. Lawrence, Kansas.
1. **Oaks, J. R.** (2008). Evolution of the True Crocodiles (*Crocodylus*). Talk. Sigma Xi Research Paper Competition, University of Kansas. Lawrence, Kansas. *Awarded 2nd place.

Teaching Experience

Fall 2021	Evolution & Systematics (BIOL 3030), Auburn University
Fall 2021	Advanced statistical methods for evolutionary genetics (BIOL 7960), Auburn University
Spring 2021	Scripting for Biologists (BIOL 7180), Auburn University
Spring 2021	Advanced statistical methods for evolutionary genetics (BIOL 7960), Auburn University
Fall 2020	Evolution & Systematics (BIOL 3030), Auburn University
Fall 2020	Advanced statistical methods for evolutionary genetics (BIOL 7960), Auburn University
Summer 2020	Advanced statistical methods for evolutionary genetics (BIOL 7960), Auburn University
Spring 2020	Herpetology (BIOL 5740/6740), Auburn University
Fall 2019	Evolution & Systematics (BIOL 3030), Auburn University
Summer 2019	Workshop on basic scripting and using version control to improve reproducibility in science, Auburn Bioinformatics Bootcamp, Auburn University
Spring 2019	Scripting for Biologists (BIOL 7180), Auburn University
Fall 2018	Evolution & Systematics (BIOL 3030), Auburn University
Summer 2018	Advanced statistical methods for evolutionary genetics (BIOL 7960), Auburn University
Summer 2018	Workshop on using version control to improve reproducibility in science, Auburn Bioinformatics Bootcamp, Auburn University
Spring 2018	Herpetology (BIOL 5740/6740), Auburn University
Summer 2017	Advanced statistical methods for evolutionary genetics (BIOL 7960), Auburn University
Summer 2017	Workshop on using version control to improve reproducibility in science, Auburn Bioinformatics Bootcamp, Auburn University
Spring 2017	Herpetology (BIOL 5740/6740), Auburn University
Fall 2016	Evolution & Systematics (BIOL 3030), Auburn University
Fall 2016	Evolution (BIOL 7200), Auburn University
Spring 2015	Lecturer, Introductory Biology (BIOL 180), University of Washington
Fall 2014	Lecturer, Introductory Biology (BIOL 180), University of Washington

Advisee Honors and Awards

2022	Tanner Myers: Society of Systematic Biologists Graduate Student Research Award (\$2,900).
2020	Randy Klabacka: American Genetics Association Ecological, Evolutionary, and Conservation Genomics (EECG) Research Award (\$8,000).
2019	Kyle David: National Science Foundation Graduate Research Fellowship (\$138,000).
2019	Tanner Myers: Auburn University Presidential Graduate Research Fellowship (\$90,000).

- 2019 **Claire Tracy**: Auburn University Presidential Graduate Research Fellowship (\$90,000).
- 2019 **Claire Tracy**: Auburn University Allsup Fellowship (\$5,000).
- 2019 **Randy Klabacka**: Henry Seibert Award for Best Student Oral Presentation in Evolution/Systematics at the Joint Meeting of Ichthyologists and Herpetologists.
- 2019 **Kyle David**: David and Marvalee Wake Award for Best Student Oral Presentation at Annual Meeting of the Society for Integrative & Comparative Biology.
- 2018 **Breanna Siple**: National Science Foundation Graduate Research Fellowship (\$138,000).
- 2018 **Nadia L'Bahy**: Awarded Best Poster Runner Up at the Symposium for the Auburn University Computational Biology NSF Research Experiences for Undergraduates.
- 2017 **Aundrea Westfall**: Cellular and Molecular Biosciences Peaks of Excellence Research Fellowship (\$6,900).
- 2017 **Breanna Siple**: Stanley W. Watson Foundation Education Fund to attend 2017 Workshop on Molecular Evolution, Marine Biological Laboratory, Woods Hole, Massachusetts (\$1,502.50).
- 2017 **Breanna Siple**: American Society of Naturalists Travel Award to attend 2017 Joint Evolution meeting, Portland, Oregon (\$500).
- 2017 **Breanna Siple**: Society of Systematic Biologists Travel Award to attend TreeScaper workshop and SSB Standalone Meeting, Baton Rouge, Louisiana (\$500).
- 2017 **Breanna Siple**: Auburn University Museum of Natural History Meredith Ann Birchfield Endowed Fund for Excellence (\$600).
- 2017 **Randy Klabacka**: Auburn University Museum of Natural History Meredith Ann Birchfield Endowed Fund for Excellence (\$1500).
- 2017 **Randy Klabacka**: Cellular and Molecular Biosciences Peaks of Excellence Research Fellowship (\$6,900).

Software

Ecoevolity: Estimating evolutionary coevality. Author: J. Oaks.

Pycoevolity: A python package for summarizing the output of Ecoevolity. Author: J. Oaks.

Fragcoalsim: A package for coalescent simulations and expectations under population fragmentation. Author: J. Oaks.

SumTimes: A tool for estimating the probability of divergence-time scenarios from posterior samples of trees. Author: J. Oaks.

PyMsBayes: Multi-processing wrapper and API for approximate-Bayesian computation. Author: J. Oaks.

dpp-msbayes: Approximate-Bayesian method for comparative phylogeographical model choice. Author: J. Oaks.

ABACUS: Approximate BAYesian C Utilities. Author: J. Oaks.

SeqSift: Package for manipulating molecular sequence data. Author: J. Oaks.

SplitFreq: A tool to compare split frequencies between collections of trees. Author: J. Oaks.

SATé: Phylogenetic software for simultaneous alignment and tree estimation. Authors: J. Yu, M.T. Holder, J. Sukumaran, S. Mirarab, and J. Oaks.

Websites

- Phyletica Lab website: <http://phyletica.org>
- Phyletica Lab YouTube Channel: https://www.youtube.com/channel/UCPPWy11zYqq-91E_CQ0qPrw
- Ecoevolity Documentation: <http://phyletica.org/ecoevolity>
- PyMsBayes Documentation: <http://joaks1.github.io/PyMsBayes>

Open-Science Notebooks

†mentored undergraduate student; ‡mentored graduate student; §mentored postdoc.

11. ‡Cobb, K. and **J. R. Oaks** (2023). *Simulation analyses exploring robustness of species-tree methods to data errors and biases*. GitHub. URL: <https://github.com/kerrycobb/align-error-sp-tree-sim>.
10. **Oaks, J. R.** (2021). *Analyses exploring the behavior of generalized Bayesian phylogenetics: Version 1.0.0*. GitHub and archived on Zenodo. DOI: [10.5281/zenodo.5162056](https://doi.org/10.5281/zenodo.5162056).
9. **Oaks, J. R.** and P. L. §Wood, Jr. (2021). *Open-science notebook for the comparative phylogenetics of Philippine gekkonids: Version 2*. GitHub and archived on Zenodo. DOI: [10.5281/zenodo.5162085](https://doi.org/10.5281/zenodo.5162085).
8. **Oaks, J. R.** (2020). *Open-science notebook for comparing methods of estimating shared divergence times using Sanger sequence data*. GitHub. URL: <https://github.com/phyletica/codiv-sanger-bake-off>.
7. **Oaks, J. R.** (2020). *Open-science notebook for experimenting with new comparative phylogeographical models*. GitHub. URL: <https://github.com/phyletica/ecoevolity-model-prior>.
6. **Oaks, J. R.** (2020). *Open-science notebook to study the impacts of the Toba eruption and montane forest expansion on diversification in Sumatran parachuting frogs*. GitHub and archived on Zenodo. DOI: [10.5281/zenodo.3822724](https://doi.org/10.5281/zenodo.3822724).
5. **Oaks, J. R.** and K. A. ‡Cobb (2019). *Open-science notebook for using simulations to assess the statistical behavior of estimating model marginal likelihoods via approximate-likelihood Bayesian computation (ABC)*. GitHub and archived on Zenodo. DOI: [10.5281/zenodo.2540830](https://doi.org/10.5281/zenodo.2540830).
4. **Oaks, J. R.**, N. †L'Bahy, and K. A. ‡Cobb (2019). *Simulation experiments to explore statistical behavior of estimating shared demographic changes*. GitHub and archived on Zenodo. DOI: [10.5281/zenodo.3319992](https://doi.org/10.5281/zenodo.3319992).
3. **Oaks, J. R.**, C. D. Siler, and R. M. Brown (2019). *Open-science notebook for the comparative phylogenetics of Philippine gekkonids: Version 1*. GitHub and archived on Zenodo. DOI: [10.5281/zenodo.2642461](https://doi.org/10.5281/zenodo.2642461).
2. **Oaks, J. R.** (2018). *Analyses exploring the behavior of Ecoevolity, a method for estimating shared evolutionary events*. GitHub and archived on Zenodo. DOI: [10.5281/zenodo.1420600](https://doi.org/10.5281/zenodo.1420600).
1. **Oaks, J. R.**, M. T. Holder, and C. W. Linkem (2014). *Open-science notebook to assess the behavior of comparative phylogeographic model-choice methods*. GitHub and archived on Zenodo. DOI: [10.5281/zenodo.11557](https://doi.org/10.5281/zenodo.11557).

Service

University Service

2016–present	DBS: AUMNH Curator of Reptiles & Amphibians
2021–2024	AU: Member of University Senate Computing Committee
2021–present	AU: Assessment Reporter for the Graduate Certificate in Computational Biology
2019–present	DBS: Committee member of the DBS Awards Committee
2021	COSAM: Ad hoc award selection committee; Dean's Research Awards
2021	COSAM: Ad hoc award selection committee
2018–2021	AU: Member of University Senate Computing Committee
2020	DBS: Ad hoc contributor to the assessment tools for Student Learning Outcome (SLO) for Evolution (DBS SLO 7); attended committee meetings and provided assessment questions, rubrics, and feedback
2020	COSAM: Ad hoc award selection committee
2020	DBS: Peer reviewer of teaching of DBS faculty member
2020	AU: Reviewer of Alabama Agricultural Experimental Station Hatch Proposal
2019	DBS: Peer reviewer of teaching of DBS faculty member
2018–2019	DBS: Member of search committee for a Museum Director
2018–2019	COSAM: Member of search committee for a faculty position in Biostatistics/Bionformatics

- 2018–2019 DBS: Member of committee assigned with implementing new Student Learning Outcome (SLO) for written communication (DBS SLO 4)
- 2017–2019 DBS: Committee member of the DBS Graduate Studies Committee
- 2016–2018 DBS: Committee member of the DBS Informatics Steering Group
- 2018 COSAM: Member of search committee for Specialist I position in Communications and Marketing
- 2018 AU: Snake safety training at E.W. Shell Fisheries Center; 61 participants, including undergraduate and graduate students, postdocs, faculty, and staff
- 2017 AU: Snake safety training at E.W. Shell Fisheries Center
- 2016–2017 DBS: Member of the committee for planning construction of the Interdisciplinary Sciences Building

Professional Service

- 2021–present Associate editor for *Systematic Biology*
- 2021 Conduct moderator and Evo Ally for the 2021 Evolution Meeting
- 2021 Participated in the Student-Faculty Networking Lunch Program at the 2021 Evolution Meeting
- 2021 Reviewer for the *Society of Systematic Biologists Graduate Student Research Awards*
- 2020 Attended Safe-Zone Training. Offered by Auburn University's Human Resources Development
- 2020 Attended Workshop on Gender Identity and Pronouns for Faculty. Offered by Auburn University's Office of Inclusion and Diversity and the College of Education's Critical Studies Working Group.
- 2020 Organized and participated in a Student-Faculty Lunch as part of the Evolution Community Resources for Early Career Researchers (ECR²).
- 2020 Reviewer for the *Society of Systematic Biologists Graduate Student Research Awards*
- 2019 Hosted a booth at the iEvoBio Software Bazaar. iEvoBio Conference. Providence, Rhode Island.
- 2016–2021 Member of the editorial board for *Systematic Biology*
- 2020 Reviewer for the *Society of Systematic Biologists Graduate Student Research Awards*
- 2019 Reviewer for the *Society of Systematic Biologists Mini-ARTS Program*
- 2018 Lead Instructor of a Comparative Phylogeography Workshop. Standalone Meeting of the Society of Systematic Biologists. Columbus, Ohio. 52 participants, including graduate students, postdocs, and professors. <http://phyletica.org/ecoevoluty/workshops/ssb-2018.html>
- 2018 Reviewer for the *Society of Systematic Biologists Graduate Student Research Awards*
- 2017 Reviewer for the *Society of Systematic Biologists Graduate Student Research Awards*
- 2016 Reviewer for the *National Science Foundation Dimensions of Biodiversity Program*
- 2016 Reviewer for the *Society of Systematic Biologists Mini-ARTS Program*
- 2014 Reviewer for the *National Security Agency Mathematical Sciences Grant Program*
- Reviewer for *BMC Evolutionary Biology* (3), *Evolution* (5), *Molecular Biology and Evolution* (1), *Molecular Ecology* (3), *Molecular Phylogenetics and Evolution* (1), *Organisms Diversity and Evolution* (2), *Proceedings of the Royal Society B* (2), *Systematic Biology* (22), and *Theoretical Population Biology* (1)

Outreach

- 2021 Prison education—Alabama Prison Arts + Education Project (APAEP)
- Created a biology-themed issue of *The Warbler* newsletter, which is distributed by the APAEP to over 800 current and former students, and by other prison-education organizations across 28 states and 3 countries.

- 2019 Prison education—Alabama Prison Arts + Education Project (APAEP)
◦ Taught an evolutionary biology course to a diverse class of 20 students incarcerated at the Staton Correctional Facility. <https://github.com/phyletica/apaep-evolution>
- 2019 STEM Summer Bridge Program
◦ Guest lecturer for the program to help prepare students from traditionally underrepresented groups for academia.
- 2019 Prison education—Alabama Prison Arts + Education Project (APAEP)
◦ Worked with Wayne Barger to develop and teach an evolutionary botany course at an Alabama Correctional Facility.
- 2019 Alabama State Science Olympiad
◦ Developed and administered practical exam in herpetology for the middle and high school competitions.
- 2018 Prison education—Alabama Prison Arts + Education Project (APAEP)
◦ Developed and taught an evolutionary biology course to a diverse class of 39 students incarcerated at the Ventress Correctional Facility in Clayton, Alabama. <https://github.com/phyletica/apaep-evolution>
- 2018 Alabama State Science Olympiad
- 2018 Open House of the Auburn University Museum of Natural History
◦ Led tours through the AUMNH Research Collections for members of the public of all ages
- 2017 Open House of the Auburn University Museum of Natural History
- 2016 Open House of the Auburn University Museum of Natural History
- 2016 Project Lead the Way (PLTW) Alabama State Conference
◦ Gave a presentation about bioinformatics to K-12 educators from across Alabama
- 2013–present Blog contributor: phyletica.org
- 2014 Contributed a short story about my research to Sciworthy.com, a news site with the goal of improving public understanding of science. <https://sciworthy.com/whos-the-living-fossil/>

Additional Research Experience & Skills

Computer programming languages: C/C++, Python, Julia, R, Java, PERL, shell scripting, and L^AT_EX

Fieldwork: Southeastern USA (2016–present & 2004–2007); Myanmar (2018); Cambodia (2012, 2006); Malaysia (2011, 2006); Great Plains, USA (2007–2009); Florida, USA (2002); Wisconsin, USA (2001)