
BRIAN S. ARBOGAST

Professor of Biology & Curator of Mammals
Department of Biology and Marine Biology
University of North Carolina Wilmington
Wilmington, NC 28403 (USA)



Assistant Director and Co-founder
Wildsumaco Biological Station, Ecuador
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EDUCATION

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| 1999 | Ph. D. | Biology, Wake Forest University, Winston-Salem, North Carolina |
| 1996 | M. S. | Zoology, Louisiana State University, Baton Rouge, Louisiana |
| 1992 | B. S. | Biology, Wake Forest University, Winston-Salem, North Carolina |

PRIMARY PROFESSIONAL POSITIONS

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| 2018-present | Professor and Curator of Mammals, Department of Biology and Marine Biology, University of North Carolina Wilmington |
| 2011-2018 | Associate Professor and Curator of Mammals, Department of Biology and Marine Biology, University of North Carolina Wilmington |
| 2011-present | Assistant Director, Wildsumaco Biological Station, Ecuador |
| 2022-present | Research Associate in Mammalogy, North Carolina Museum of Natural Sciences |
| 2013-2018 | Research Associate in Mammalogy, Museum of Comparative Zoology, Harvard University |

ADDITIONAL PROFESSIONAL POSITIONS HELD

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| 2022-present. | Member of the ad hoc Vision Committee, American Society of Mammalogists |
| 2019-2022: | Chair of the Conservation Committee, American Society of Mammalogists |
| 2008-present: | Coordinator of the Conservation Option for Biology Majors, UNC Wilmington, Wilmington, NC. |
| 2008-2013: | Adjunct Associate Professor, Department of Biological Sciences, Humboldt State University, Arcata, CA. |
| 2011-2012: | Associate Editor, <i>Journal of Mammalogy</i> |
| 2008-2011: | Assistant Professor and Assistant Curator of Mammals, Department of Biology and Marine Biology, UNC Wilmington, Wilmington, NC. |
| 2006-2008: | Associate Professor & Curator of Mammals, Department of Biological Sciences, Humboldt State University, Arcata, CA. |
| 2001-2006: | Assistant Professor and Curator of Mammals, Department of Biologic Sciences, Humboldt State University, Arcata, CA. |
| 1999-2001: | Post-Doctoral Research Associate, Department of Zoology and Burke Museum of Natural History, University of Washington, Seattle, WA. |

TEACHING AWARDS (2018-2023)

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| 2023 | American Society of Mammalogists Joseph Grinnell Award |
| 2022 | University of North Carolina Board of Governors Excellence in Teaching Award |
| 2019 | UNC Wilmington Distinguished Teaching Professorship Award |

OTHER NOTABLE ACHIEVEMENTS (2018-2022)

2021	Featured guest on <i>Science Tonight with Chris Smith</i> , May 20, 2021. Jaguars, Tapirs and Bears!
2020-present	Member of the North Carolina Scientific Council on Mammals
2020-2022	Chair of the UNCW Institutional Animal Care and Use Committee
2019-2022	Chair of the Conservation Committee of the American Society of Mammalogists
2019	Helped obtain \$30,000 in new matching funding (\$60,000 total) to construct new laboratory and teaching classroom buildings at Wildsumaco Biological Station, Ecuador.
2018-2019	Received a UNCW CAS Research Release to study mammal genomics at Harvard University

MANUSCRIPTS IN PREPARATION

Arbogast, BS., K Aplin, L Ogawa McLean, A Taylor and K Armstrong. Cryptic diversity in an iconic Australian marsupial: The Greater Glider, *Petauroides volans*.

Schumacher, KI, J Sparks, SJ Kamel, B Brown, J Pagels, and **BS Arbogast**. Multi-locus conservation genetics of the Northern Flying Squirrel (*Glaucomys sabrinus*) in the Appalachian Mountains.

Arbogast, BS, TW Knowles, A-M C Hodge, K Curry-Lindahl, SF Burneo, and R Kays. Elevational patterns of medium and large mammal species diversity on Sumaco Volcano, Ecuador.

Callahan, CM, NJ Kerhoulas, and **BS Arbogast**. Molecular Systematics and Population Genetics of Whale Lice Living on Gray-Whale Islands.

SELECTED PUBLICATIONS

Arbogast, BS and NJ Kerhoulas. The promise and pitfalls of using mammal range maps available on the Map of Life (Accepted July 2023) *Journal of Mammalogy*.

Rowan, L, **BS Arbogast**, and SJ Kamel.. 2022. Assessing the genetic consequences of habitat fragmentation on the federally threatened cheat mountain salamander (*Plethodon nettingi*): a comparative, multi-locus approach. *Conservation Genetics* 23: 699–711. <https://doi.org/10.1007/s10592-022-01449-3>

Arbogast, BS, SJ Kamel, NT Akers, and JG Hall. 2022. Kinship and Breeding Site Philopatry Drive Fine-Scale Genetic Structure in Fragmented Populations of the Gopher Frog (*Rana capito*) in North Carolina. *Journal of Herpetology*, 56: 249-257.

Camper JD, Torres-Carvajal O, Ron SR, Nilsson J, Arteaga A, Knowles TW, and **BS Arbogast**. 2021. Amphibians and reptiles of Wildsumaco, Napo Province, Ecuador. *Check List* 17: 729-751. doi: 10.15560/17.3.729

Kays, R, **BS Arbogast**, M Baker-Whatton, C Bierne, HM Boone, et al. 2020. An Empirical Evaluation of Camera Trap Study Design: How Many, How Long, and When? *Methods in Ecology and Evolution* 11: 700-713. [doi: 10.1111/2041-210X.13370](https://doi.org/10.1111/2041-210X.13370)

Arbogast, BS. 2019. *Secret Lives of Carnivorous Marsupials*, by A Baker and C Dickman (Book Review). *Journal of Mammalogy* 100: 611-613.

Arbogast, BS, KI Schumacher, NJ Kerhoulas, AL Bidlack, JA Cook, and GJ Kenagy. 2017. Genetic data reveal a cryptic species of New World flying squirrel: *Glaucomys oregonensis*. *J. Mammalogy* 98:1027-1041. <https://doi.org/10.1093/jmammal/gyx055>

- Editor's Choice of the Literature, *Science*, August 4, 2017. [\[CLICK TO VIEW\]](#)
- Featured by *National Geographic*, May 30, 2017. Meet This Newly Discovered Flying Squirrel: North America's newest mammal, Humboldt's flying squirrel, helps solve an evolutionary mystery. [\[CLICK TO VIEW\]](#)
- *Discover* magazine's Top 100 discoveries of 2017 (Jan., 2018 Issue). [\[CLICK TO VIEW\]](#)
- Arbogast interviewed on Oregon Public Radio, June 20, 2017. [LISTEN HERE: http://ijpr.org/post/new-flying-squirrel-identified-northwest#stream/0](http://ijpr.org/post/new-flying-squirrel-identified-northwest#stream/0)

- Arbogast, BS**, AM-C Hodge, and JB Coltrain. 2017. Stable isotope analysis of dietary overlap between the endangered red wolf and sympatric coyote in northeastern North Carolina. *Southeastern Naturalist* 16: 283-296. <https://doi.org/10.1656/058.016.0215>
- Arbogast, BS**. 2017. *Phylogenomic Data Acquisition: Principles and Practice*, by WB Jennings (Book Review). *Trends in Ecology and Evolution* 32: 715-716. <https://www.sciencedirect.com/journal/trends-in-ecology-and-evolution/vol/32/issue/10#article-1>
- Arbogast, BS**. 2017. *The Return of the Unicorns: The Natural History and Conservation of the Greater One-Horned Rhinoceros* by E. Dinerstein (Book Review). *Journal of Mammalogy* 98: 1216-1218. <https://doi.org/10.1093/jmammal/gyx083>
- Hodge, AMC, and **BS Arbogast**. 2016. Carnivore diversity at a montane rainforest site in Ecuador's Gran Sumaco Biosphere Reserve. *Oryx: The International Journal of Conservation* 50: 474-479. doi:10.1017/S0030605315000101
- Cook, JA, S Greiman, S Agosta, RP Anderson, **BS Arbogast**, et al. 2016. Transformational principles for NEON sampling of mammalian parasites and pathogens: response to Springer and Colleagues. *BioScience* 66: 917-919. <https://doi.org/10.1093/biosci/biw123>
- Chavez, AS, SP Maher, **BS Arbogast**, and GJ Kenagy. 2014. Diversification and gene flow in nascent lineages of island and mainland North American pine squirrels (*Tamiasciurus spp.*). *Evolution* 68:1094-1109. <https://www.jstor.org/stable/24033771>
- Manly, B, **BS Arbogast**, DS Lee, and M Van Tuinen. 2013. Mitochondrial DNA analysis reveals substantial population structure within the endangered Black-capped Petrel (*Pterodroma hasitata*). *Waterbirds* 36:228-233.
- Lovette, IJ, **BS Arbogast**, RL Curry, RM Zink, CA Botero, JP Sullivan, AL Talaba, RB Harris, Rubenstein, RE Ricklefs, and E Bermingham. 2012. Phylogenetic relationships of the mockingbirds and thrashers (Aves: Mimidae). *Molecular Phylogenetics and Evolution* 63:219-229.
- Vanderhoff, EN., AMC Hodge, **BS Arbogast**, J Nilsson, and TW Knowles. 2011. Abundance and activity patterns of the margay (*Leopardus wiedii*) at a mid-elevation site in the Eastern Andes of Ecuador. *Journal of Neotropical Mammalogy* 18:271-279.
- Kerhoulas, NJ and **BS Arbogast**. 2010. Molecular Systematics and Pleistocene Biogeography of Mesoamerican Flying Squirrels. *Journal of Mammalogy* 91:654-667.
- Arbogast, BS**. 2007. A brief history of the New World flying squirrels: Phylogeny, biogeography and conservation genetics. *Journal of Mammalogy* 88:840-849.
- Cover Article
- Arbogast, BS**, SV Drovetski, RL Curry, P Boag, P Grant, R Grant, G Seutin and DJ Anderson. 2006. Origin and diversification of Galápagos mockingbirds. *Evolution* 60:370-382.
- Cover article for *Evolution*
 - Editor's Choice, *Science* 312:21 (April 7, 2006)
- Blois, JL, and **BS Arbogast**. 2006. Conservation genetics of the Sonoma Tree Vole (*Arborimus pomo*) based on mitochondrial and AFLP markers. *Journal of Mammalogy* 87:950-960.
- Arbogast, BS**. 2006. The geography of life. Book Review of *Biogeography*, 3rd ed., by M Lomolino, B Riddle, and J Brown. *Trends in Ecology and Evolution* 21:14-15
- Arbogast, BS**, JP Dumbacher and, SJ Stepan. 2006. Evaluation of scientific information regarding the Preble's meadow jumping mouse. A Scientific Report prepared by Sustainable Ecosystems Institute for the US Fish and Wildlife Service. 82 pp.
- Featured in *Nature* 446:250-253; *Linnaeus* at 300 (March 15, 2007)
- Arbogast, BS**, RA Browne, PD Weigl, and GJ Kenagy. 2005. Conservation genetics of endangered flying squirrels from the Appalachian mountains of eastern North America. *Animal Conservation* 8:123-133.

Zheng X, **BS Arbogast** and GJ Kenagy. 2003. Historical demography and genetic structure of sister species: deer mice (*Peromyscus spp.*) in the North American temperate rainforest. *Molecular Ecology* 12:711-724.

Arbogast BS, SV Edwards, J Wakeley, P Beerli, and JB Slowinski. 2002. Estimating divergence times from molecular data on phylogenetic and population genetic timescales. *Ann. Review of Ecol. & Systematics* 33:707-740.

Arbogast, BS, and GJ. Kenagy. 2001. Comparative phylogeography as an integrative approach to historical biogeography. *Journal of Biogeography* 28:819-825.

Arbogast, BS, RA Browne and PD Weigl. 2001. Evolutionary genetics and Pleistocene biogeography of North American tree squirrels (*Tamiasciurus*). *Journal of Mammalogy* 82:302-319.

Arbogast, BS. 2001. *Phylogeography*, by JC Avise. Book Review: *American Zoologist* 41:134-135.

Arbogast, BS. 1999. Mitochondrial DNA phylogeography of the New World flying squirrels (*Glaucomys*): implications for Pleistocene biogeography. *Journal of Mammalogy* 80:42-155.

Slowinski, JB, and **BS Arbogast**. 1999. Is there an inverse relationship between body size and the rate of molecular evolution? *Systematic Biology* 48:396-399.

Arbogast, BS, and JB Slowinski. 1998. Pleistocene speciation and the mitochondrial DNA clock. *Science* 282:1955.

FUNDING

Arbogast, BS and SJ Kamel. Comparative Population Genetics of Small Mammals Restricted to the Endangered Spruce-Fir Ecosystem of the Southern Appalachians of North Carolina. NC Wildlife Resources Commission. \$313,867. Funded, 2022 – 2026.

Arbogast, BS. and SJ. Kamel. Conservation Genetics and Development of a Genetic Management Plan for the Federally Threatened Cheat Mountain Salamander (*Plethodon nettingi*). UNCW Research Momentum Grant. \$4,973.96. Funded, Summer 2021.

Arbogast, BS (Sole PI). Examination of specimens of the recently discovered Humboldt's flying squirrel at the Burke Museum of Natural History, University of Washington, Seattle. UNCW CAS Travel Award, \$1,000.00. Funded, 2019/2020.

Arbogast, BS (Sole PI) Assessing Geographic Patterns of Genetic Variation and Gene Flow in North Carolina Populations of the Gopher Frog (*Rana capito*). NC Wildlife Resources Commission, \$41,144.00. Funded, 2017-2020.

Arbogast, BS (Sole PI) Assessing Geographic Patterns of Genetic Variation and Gene Flow in North Carolina Populations of the Gopher Frog. NC Aquarium Conservation Grant, \$8,700.00. Funded, 2017- 2020.

Arbogast, BS (Sole PI) CAS Pilot-Grant Award to visit Harvard to learn phylogenomic techniques and apply them to cryptic speciation in gliding mammals. \$3,500.00. Funded, January, 2019 – June, 2019.

Knowles, TW, BS Arbogast, EN Vanderhoff and PB Zwiars. Continued monitoring of near-threatened margays and other medium-large bodied mammals in Wildsumaco Wildlife Sanctuary. Submitted to Riverbanks Zoo & Garden Conservation Support Fund, \$7,198.80. Funded June, 2018 - Dec., 2018.

Arbogast, BS (Sole PI) Conservation of Rainforest Mammals in the Tropical Andes of Ecuador: a Scientific and Educational Approach. Friends of UNCW Grant, \$962.79. Funded, July 2018.

Knowles, TW (Principal), J Steinmetz (Co-PI), P Zwiars (Co-PI), BS Arbogast (Co-P.I.). Collaborative Proposal-Planning for the Future: Developing a Five Year Plan for Wildsumaco Biological Station, National Science Foundation-Improvement in Facilities, Communications, and Equipment at Biological Field Stations and Marine Laboratories (FSML). \$24,700. Funded 2014-2017.

Arbogast, BS. Conservation Genetics of the Cheat Mountain Salamander. West Virginia Department of Natural Resources. \$34,800. Funded 2013-2016

Arbogast, BS and TW Knowles. Documenting the Mammalian Biodiversity of Sumaco National Park, Ecuador. Riverbanks Zoo Conservation Support Fund. \$7,890. Funded 2013-2014.

Arbogast, BS and M van Tuinen. Conservation genetics of an endemic and threatened species of West Virginia snail: the flat-spined three-toothed land snail, *Triodopsis platysayoides*. West Virginia Department of Natural Resources. \$32,610. Funded 2010-2012

Arbogast, BS. Cracking the Gliding Code: Applying modern genomic approaches to identify new species, understand phenotypic variation, and unravel the great mystery of how gliding mammals are "built". UNCW Faculty Min-grant Program. \$9,300. Funded 2010-2011.

Arbogast, BS and AMC Hodge^{2,3}. Use of Stable Isotope Analysis to Elucidate Differences in Prey Selection by Red Wolves and Coyotes. Red Wolf Recovery Program, U.S. Fish and Wildlife Service. \$5,000. Funded 2010-2012.

Arbogast, BS. Conservation Genetics of the northern flying squirrel and Allegheny woodrat. West Virginia Department of Natural Resources. \$16,500. Funded 2009-2011.

Arbogast, BS. Conservation Genetics of the northern flying squirrel (*Glaucomys sabrinus*) in North Carolina and Virginia. NC Wildlife Resources Commission. \$4,750. Funded 2009-2011.

Arbogast, BS and K Armstrong. Cryptic and undocumented diversity in the mammals of Australasia: Symposium Proposal for the 2011 joint meetings of the American and Australian Mammal Societies, Portland, OR. \$4,300. Funded 2010.

Arbogast, BS. Conservation of Rainforest Mammals in the Tropical Andes of Ecuador: a Scientific and Educational Approach. UNCW Charles M. Cahill Award. \$3,000. Funded 2009.

Systematics and Evolutionary Ecology of New and Old World Avian Sister Radiations [Aves: Mimidae and Sturnidae]. NSF, Systematic Biology. \$145,816. PI: IJ Lovette, Cornell University. I was one of 9 Senior Personnel on this project. Funded 2005-2008.

Arbogast, BS. Genetic and Bioacoustic Studies of Mesoamerican Flying Squirrels. HSU Research Scholarship and Creative Activities Grant. \$3,500. Funded 2006.

Arbogast, BS. Comparative molecular evolution of whale ectoparasites. CSUPERB Faculty Research Grant. \$10,000. Funded 2005.

NSF REU Site in Ecological and Evolutionary Research at Humboldt State University. NSF REU. \$255,390. PI's Sean Craig and Matt Johnson, Humboldt State University. I was a "Senior Personnel" member/faculty mentor on this grant. Funded 2004-2007.

Arbogast, BS. Origin and Diversification of Galápagos mockingbirds. HSU Foundation Grant. \$1,100. Funded 2004.

Arbogast, BS. Whales as Islands: Biogeography and Co-evolution of Whales and Their Ectoparasites. HSU Research and Creative Activities Grant. \$4,300. Funded 2004.

Arbogast, BS. The Effects of Habitat Fragmentation on the Demographic and Genetic Structure of a Temperate Rainforest Endemic, the Sonoma Red Tree Vole (*Arborimus pomo*). HSU Research Scholarship and Creative Activities Grant. \$5,000. Funded 2002.

SELECTED AWARDS & HONORS

2023	American Society of Mammalogists' Joseph Grinnell Award for sustained excellence in education in mammalogy
2022	University of North Carolina Board of Governors Excellence in Teaching Award
2019	UNCW Distinguished Teaching Professorship Award
2019-2022	Chair, American Society of Mammalogist's Conservation Committee.
2013-2018	Research Associate, Museum of Comparative Zoology, Harvard University
2016	Featured Symposium Speaker. 23rd Annual Meetings of the Wildlife Society
2013	University of North Carolina Wilmington Grant Writing Incentive Program Award. Cracking the Gliding Code: Applying modern genomic approaches to unravel the mystery of how gliding mammals are "built."
2011	Featured Symposium Speaker, Joint Meetings of the American Society of Mammalogists and the Australian Mammal Society, Portland, OR. Cryptic speciation in an iconic Australian marsupial, the greater glider (<i>Petauroides volans</i>)

- 2011 Global Citizenship Course Development Award, UNCW-International Programs
- 2006 Featured Symposium Speaker, 2006 Meetings of the American Society of Mammalogists, Amherst, MA. Evolutionary and biogeographic history of the New World flying squirrels
- 2004 President McCrone Promising Faculty Scholar Award. Humboldt State University
- 1998 American Society of Mammalogists. First Runner-Up for the Albert R. and Alma Shadle Fellowship in Mammalogy (highest student award given by ASM at the time)
- 1998 American Museum of Natural History, Frank M. Chapman Award. Phylogeography of the Galápagos mockingbirds: a test of the prevailing-wind hypothesis of dispersal
- 1998 American Museum of Natural History, Theodore Roosevelt Award. The evolution of boreal mammal communities in North America: a comparative phylogeographic approach
- 1997 American Society of Mammalogists, Grant-in-aid of Research. The evolution of boreal mammal communities in North America: a comparative phylogeographic approach
- 1997 American Society of Mammalogists, Elizabeth Horner Award. Outstanding Graduate Student Research Proposal
- 1997 Wake Forest University Department of Biology, Graduate Student of the Year
- 1996 National Sigma Xi Competition. Phylogeography of the Galápagos mockingbirds
- 1996 Marine Biological Lab, Woodshole, MA. Workshop on Molecular Evolution Scholarship
- 1995 American Society of Mammalogists, Grant-in-aid of Research. Mitochondrial DNA variation and biogeography of the New World flying squirrels (*Glaucomys*) (1995).
- 1993 National Sigma Xi Competition. Mitochondrial DNA variation and biogeography of the New World flying squirrels (*Glaucomys*) (1993)
- 1992 Wake Forest University, Howard Hughes Undergraduate Travel Grant. Field-course in mainland Ecuador and the Galápagos Islands
- 1992 Derieux Award Winner (best student paper), North Carolina Academy of Science
- 1991 Wake Forest University, Howard Hughes Undergraduate Research Fellowship

SELECTED SCIENTIFIC PRESENTATIONS (2005-present)

B.S. Arbogast, T.W. Knowles, A.M.C. Hodge, S.F. Burneo, E.N. Vanderhoff, P.B. Zwiars and J. Nilsson. Notable additions to the rich carnivore fauna of Wildsumaco Wildlife Sanctuary, Ecuador. Annual Meetings of the American Society of Mammalogists, June 14-18, 2021.

C.M. Callahan, N.J. Kerhoulas, and B.S. Arbogast. Molecular systematics and population histories of gray whales and their cyamid whale-lice. Annual Meetings of the American Society of Mammalogists, June 14-18, 2021.

Arbogast, B.S., T. W. Knowles, A-M.C. Hodge^{2,F}, K. Curry-Lindahl², S.F. Burneo, and R. Kays. Elevational structuring of medium-large species of terrestrial mammals on Sumaco Volcano, Ecuador. 99th Annual Meeting of the American Society of Mammalogists, Washington D.C., 28 Jun 2019 - 2 Jul 2019).

Novillo, M.², and B.S. Arbogast. Reliance on visual, olfactory, and acoustic cues in flower choice by nectar bats (*Lonchophylla robusta*). 99th Annual Meeting of the American Society of Mammalogists, Washington D.C., 28 Jun 2019 - 2 Jul 2019).

Vanderhoff, E., T.W. Knowles, M. Warren, P. Zwiars, and B.S. Arbogast. Preliminary investigation of resident and transient margays at Wildsumaco Wildlife Sanctuary, Ecuador. 99th Annual Meeting of the American Society of Mammalogists, Washington D.C., 28 Jun 2019 - 2 Jul 2019).

Arbogast, B.S., T. W. Knowles, A-M.C. Hodge^{2,F}, K. Curry-Lindahl², S.F. Burneo, and R. Kays. Elevational structuring of medium-large species of terrestrial mammals on Sumaco Volcano, Ecuador. 99th Annual Meeting of the American Society of Mammalogists, Washington D.C., 28 Jun 2019 - 2 Jul 2019).

Novillo, M.², and B.S. Arbogast. Reliance on visual, olfactory, and acoustic cues in flower choice by nectar bats (*Lonchophylla robusta*). 99th Annual Meeting of the American Society of Mammalogists, Washington D.C., 28 Jun 2019 - 2 Jul 2019).

Vanderhoff, E., T.W. Knowles, M. Warren, P. Zwiars, and B.S. Arbogast. Preliminary investigation of resident and transient margays at Wildsumaco Wildlife Sanctuary, Ecuador. 99th Annual Meeting of the American Society of Mammalogists, Washington D.C., 28 Jun 2019 - 2 Jul 2019).

TW Knowles, BS Arbogast, AMC Hodge^{2,3}, K Curry-Lindahl², SF Burneo, R Kays. Elevational patterns of co-existence and replacement in medium-large species of terrestrial mammals on Sumaco Volcano, Ecuador. 12th International Mammalogical Congress, Perth, Australia, July, 2017.

Invited Speaker, UNCW Darwin Day Symposium. Evolutionary genetics reveal a new species of North American flying squirrel. Wilmington, NC, February 7, 2017.

Invited Seminar, Museum of Comparative Zoology, Harvard University. Using camera traps to investigate elevational patterns of biodiversity in medium-large mammals of Sumaco Volcano, Ecuador. Cambridge, MA, October 7, 2016.

Invited Speaker, S.V. Edward's Laboratory Research Group. Cryptic speciation in North American flying squirrels and the Australian greater glider. Museum of Comparative Zoology, Harvard University. Cambridge, MA, October 7, 2016.

Featured Symposium Speaker, 23rd Annual Meetings of the Wildlife Society. Arbogast, BS (speaker), T.W. Knowles, A-M. C. Hodge^{2,3}, K. Curry-Lindahl², S. F. Burneo, and R. Kays. Elevational Patterns of Co-Existence and Replacement in Medium-Large Species of Terrestrial Mammals on Sumaco Volcano, Ecuador. Meetings of The Wildlife Society, Raleigh, NC, Oct., 2016.

Invited Speaker, West Virginia Department of Natural Resources. Conservation genetics of the Cheat Mountain Salamander. Elkins, WV, July, 2016.

Hanson, RL² and BS Arbogast. Community Membership and Territoriality in a Highly Diverse Assemblage of Andean Hummingbirds. Meetings of The Wildlife Society. Raleigh, NC, Oct., 2016.

Novillo, M² and BS Arbogast. Nectar bats reliance on visual, olfactory, and acoustic cues in flowerchoice. University of North Carolina Wilmington. 95th Annual Meeting of the American Society of Mammalogists. June 12-16, 2015, Jacksonville, Florida.

Knowles, TW, BS Arbogast, AMC Hodge^{2,3}, and EN Vanderhoff. Mammalogy at Wildsumaco Biological Station: The first five years. 95th Annual Meeting of the American Society of Mammalogists. June 12-16, 2015, Jacksonville, Florida.

Arbogast, BS, KI Schumacher^{2,3}, A Bidlack, JA Cook, GJ Kenagy. Analysis of Nuclear and Mitochondrial DNA Reveals Cryptic Speciation in North American Flying Squirrels (*Glaucomys*). Meetings of the Society for the Study of Evolution, Raleigh, NC, June 2014.

Invited Seminar. Arbogast, BS. Department of Biology, Wake Forest University. Volcano at the edge of two worlds: Mammalian Biodiversity of Sumaco Volcano, an unstudied peak at the Amazonian-Andean Junction in eastern Ecuador. September, 2013.

Invited Seminar. Arbogast, BS. Department of Biology, The College of William and Mary. Volcano at the edge of two worlds: Mammalian Biodiversity of Sumaco Volcano, an unstudied peak at the Amazonian-Andean Junction in eastern Ecuador. October, 2013.

Invited Seminar. Arbogast, BS. Department of Biology, Smithsonian Center for Conservation Genomics. Cryptic Diversity and Speciation in Gliding Mammals. October, 2013.

Curry-Lindahl, K², BS Arbogast, TW Knowles, and SF Burneo. Using camera trap surveys to address terrestrial mammal biodiversity and conservation in Sumaco National Park, Ecuador. 93rd Annual Meetings of the American Society of Mammalogists, Philadelphia, PA. June, 2013.

Arbogast, BS, KI Schumacher^{2,3}, A Bidlack, J Cook, and GJ Kenagy. Analysis of nuclear and mitochondrial DNA reveals cryptic speciation in North American flying squirrels (*Glaucomys*). 93rd Annual Meetings of the American Society of Mammalogists, Philadelphia, PA. June, 2013.

Hodge, AMC^{2,3} and BS Arbogast. Biogeographic patterns, life-history trends and conservation status of wild canids. 93rd Annual Meetings of the American Society of Mammalogists, Philadelphia, PA. June, 2013.

Kenagy, GJ, AS Chavez, JR Whorley, and BS Arbogast. Three squirrel tales: varying mitochondrial and nuclear DNA signals reflect different phylogeographic and taxonomic scenarios. 93rd Annual Meetings of the American Society of Mammalogists, Philadelphia, PA. June, 2013.

AS Chavez, BS Arbogast, SP Maher, and GJ Kenagy. Diversification and gene flow in island and mainland *Tamiasciurus* spp. – unraveling the mystery of Vancouver Island's squirrels. 93rd Annual Meetings of the American Society of Mammalogists, Philadelphia, PA. June, 2013.

Schumacher, KI^{2,3}, BS Arbogast, JL Sparks, JF Pagels, RJ Dyer, BL Brown. Conservation genetics of the endangered northern flying squirrel (*Glaucomys sabrinus*) across the Appalachian Mountains. First Joint Congress on Evolutionary Biology. Ottawa, Ontario. July, 2012.

Invited Seminar. Arbogast, B. Humboldt State University, Department of Biological Sciences, Arcata, CA. Cryptic diversity in an iconic Australian marsupial: the Greater Glider, *Petauroides volans*. Feb., 2012.

Invited Seminar. Arbogast, B. Humboldt State University, Wildlife Department, Arcata, CA. Volcano at the edge of two worlds: Mammalian Biodiversity of Sumaco Volcano, an isolated and unstudied peak at the Amazonian-Andean Junction in eastern Ecuador. Feb., 2012.

Featured Symposium Speaker. Arbogast, BS (speaker), K Aplin, K Armstrong, L Ogawa^{2,3}, and A Taylor. Cryptic diversity in an iconic Australian marsupial: the Greater Glider, *Petauroides volans*. 91st Annual Meeting of the American Society of Mammalogists, Portland St. University, Portland, OR. June, 2011.

Hodge, AMC^{2,3}, BS Arbogast, TW Knowles, and EN Vanderhoff. Interspecific spatial overlap and other factors affecting camera-trap success for the margay (*Leopardus wiedii*). 91st Annual Meetings of the American Society of Mammalogists. Portland, Oregon. June, 2011.

Schumacher, KI^{2,3}, BS Arbogast, JL Sparks, JF Pagels, RJ Dyer, BL Brown. Genetic evidence for a new subspecies of the endangered northern flying squirrel (*Glaucomys sabrinus*) in southwestern Virginia: implications for taxonomy and conservation. 91st Annual Meetings of the American Society of Mammalogists. Portland, Oregon. June, 2011.

Invited Seminar. Arbogast, BS. The Field Museum of Natural History, Chicago, IL. Cryptic Diversity and Speciation in Gliding Mammals. April, 2011.

Invited seminar. Arbogast, BS. College of Natural Resources, University of Nevada, Reno. The Conservation Challenges of Documenting Cryptic and Elusive Species: Examples from Gliding Mammals and Tropical Andean Carnivores. October, 2010.

Vanderhoff, EN, AMC Hodge, BS Arbogast, JR Burger, JD Camper, and TW Knowles. The margay (*Leopardus wiedii*) as a flagship species for conservation in the foothills of the Andes. Association of Southeastern Biologists, Asheville, North Carolina. April, 2010.

Hodge, AMC^{2,3}, BS Arbogast, EN Vanderhoff, J. Camper, JR Burger, and TW Knowles. Inventory of a mid-elevation assemblage of mammals in Ecuador's eastern Tropical Andes hotspot. Society for Integrative and Comparative Biology, Seattle, WA. January, 2010.

Invited speaker. Arbogast, BS. Adaptive Radiation in the Galapagos and Beyond. UNCW Evolution Learning Community Symposium "Darwin and the Origin of Species: A Twenty-First Century Perspective." UNC Wilmington. Wilmington, NC. November, 2009.

Knowles, TW, BS Arbogast, EN Vanderhoff, JD Camper, JR Burger and L Soetens. 2009. Mammal inventory of a new wildlife sanctuary in Ecuador's tropical Andes hotspot. 89th Annual Meeting of the American Society of Mammalogists, University of Alaska, Fairbanks, AK. June, 2009.

Callahan, CM² and BS. Arbogast. Molecular Systematics and Historical Demography of Gray Whale Lice: What Can They Tell Us About Gray Whales? 88th Annual Meeting of the American Society of Mammalogists, Brookings, South Dakota. June, 2008.

Kerhoulas, NK^{2,3*} and BS Arbogast. Molecular Systematics and Biogeography of Mesoamerican Flying Squirrels. 88th Annual Meeting of the American Society of Mammalogists, Brookings, South Dakota. June, 2008.

Cardona, MA^{1*}, and BS Arbogast. Phylogeography of Ringtails: A Comparison between populations from Texas and northern California. SACNAS (Society for Advancement of Chicanos/Latinos and Native Americans in Science) National Conference, University of Utah, Salt Lake City, Utah. 2008.

Arbogast, BS, SV Drovetski, RL Curry, PT Boag, G Seutin, PR Grant, BR Grant and DJ Anderson. The origin and diversification of Galápagos mockingbirds. North American Ornithological Congress, Veracruz, Mexico. 2006.

Featured Symposium Speaker. Arbogast, BS. Evolutionary and biogeographic history of the New World flying squirrels (*Glaucomys*). Invited symposium presentation in the northern flying squirrel: a biological portrait of a forest specialist in post-European North America. 86th Annual Meetings of the American Society of Mammalogists, Amherst, MA. June, 2006.

Callahan, CM^{1*} and BS Arbogast. Phylogeography of whale lice living on gray whale islands. 86th Annual Meetings of the American Society of Mammalogists, Amherst, MA. June, 2006.

Callahan, CM^{1*}, BS Arbogast, PD Goley, JW Demastes. Biogeography of Whale Lice (Amphipoda: Cyamidae) Living on Gray Whale Islands. 16th Biennial Conference on the Biology of Marine Mammals, San Diego, CA. Jan., 2005.

Blois, JL^{2,3*} and BS Arbogast. Patterns of genetic variation within an endemic arboreal vole, *Arborimus pomo*, in northern California. Meetings of the International Biogeography Society, Shepherdstown, WV, January, 2005.

Blois, JL^{2,3*} and BS Arbogast. A multilocus assessment of the genetic structure and diversity within an endemic, arboreal vole, *Arborimus pomo*, in northern California. 7th Annual Bay Area Conservation Biology Symposium, Stanford University. 2005.

Arbogast, BS, SV Drovetski, RL Curry, PT Boag, G Seutin, PR Grant, BR Grant and DJ Anderson. Origin and diversification of Galápagos mockingbirds. Meetings of the Society for the Study of Evolution, University of Alaska, Fairbanks, AK. June, 2005.

MEMBERSHIP IN SCIENTIFIC SOCIETIES

American Society of Mammalogists (since 1992)

Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)

STUDENT MENTORSHIP

GRADUATE STUDENTS- MAJOR ADVISOR:

A Deluca	Conservation Genetics of the southern red-backed vole and rock vole in the southern Appalachians (MS, UNCW, In progress).
C Watersmith	Conservation Genetics of the woodland jumping mouse and red squirrel in the southern Appalachians. (MS, UNCW, In progress)
N Akers	Conservation Genetics of North Carolina gopher frogs (MS, UNCW, 2021)
R Hanson	Community Membership and Territoriality in a Highly Diverse Assemblage of Andean Hummingbirds (MS, UNCW, 2017)
M Novillo	Flower choice in a nectivorous bat at Sumaco Volcano, EC (MS, UNCW, 2016)
L Rowan	Conservation genetics of the Cheat Mountain Salamander (MS, UNCW, 2016)
K Curry-Lindahl	Species diversity and elevational structuring of medium-large mammals in the cloud forest of Sumaco Volcano, Ecuador (MS, UNCW, 2013)
AMC Hodge	Ecological interactions among Andean forest carnivores (MS, UNCW, 2012)
KI Schumacher	Conservation genetics of the northern flying squirrel (MS, UNCW, 2012)
C Callahan	Systematics and biogeography of whale lice (MS, Humboldt St., 2008)
N Kerhoulas	Molecular Systematics of Mesoamerican Flying Squirrels (MS, Humboldt St. 2008)
J Blois	Conservation Genetics of the Sonoma Tree Vole (MS, Humboldt St., 2005)

GRADUATE STUDENTS- CO-ADVISOR

L Ogawa	Conservation Genetics of the Eared-Grebe. (MS, UNCW, 2010)
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GRADUATE STUDENTS- COMMITTEE MEMBER

MEMBER OF 6 CURRENT MS AND PHD COMMITTEES

PREVIOUS COMMITTEES (2008-2022)

S Barco	Abundance, health status and sources of mortality for loggerhead sea turtles in Chesapeake Bay and the surrounding ocean waters of Virginia (PhD, UNCW, 2020)
JM Rodriguez Baron	By-catch rates, post-release mortality and population genetics of the East Pacific leatherback sea turtle (PhD, UNCW, <i>in progress</i>)
S Nelson	A Study of Episodic-Like Memory in Rodents (MS, UNCW-Psychology)
C Torres	Systematics and morphological evolution in flamingos (MS, UNCW, 2014)
S Chavez	Assessment of exclusion devices on reducing by-catch of Diamondback terrapins in southeastern North Carolina (MS, UNCW, 2013)
J Pinson	Phylogeography of Appalachian ferns (MS, UNCW, 2013)
JE Williams	Species richness of bats (Chiroptera) in western South Carolina (MS, UNCW, 2013)
A Millis	Seasonal patterns of reproduction in male evening bats (MS, UNCW, 2013)
L Jarvis	Sperm preference and hybridization in blue mussels, <i>Mytilus</i> spp. (MS, UNCW, 2012)
K Freeman	Behavior of Townsend's Big-eared Bat (MS, Humboldt State, 2012)
B McClean	Stable isotope analysis of enamel in fossil and modern mammals (MS, UNCW, 2011)

JP Kennedy	Bat Activity across a vertical gradient of an old-growth redwood forest (MS, HSU 2011)
S Hutchinson	Phylogeography of <i>Cryptotis parva</i> (MS, UNCW, 2010)
S Schmitt	Genetic and morphological variation in the Udoteaceae (MS, UNCW, 2010)

GRADUATE STUDENTS- COMMITTEE MEMBER (2001-2008):

Member of 17 graduate student thesis committees at Humboldt State University

UNDERGRADUATE HONORS-PRIMARY MENTOR (UNCW 2008-PRESENT)

A Pruim	Review of the global conservation status of the humpback whale student (In progress)
I Fincham	Initial study of bioluminescent insects at the Wildsumaco Wildlife Sanctuary, EC (2015).
M Taig-Johnston	Mammal diversity in managed and unmanaged longleaf pine forests (2014)
K Dodds	Genetic variation in the Allegheny woodrat (2012)
S Chavez	Comparative phylogeography of Great Basin Mammals (2012)
A Taylor-Smith	Assessing urban stream quality (2011)
C Goldchain	Comparative feeding morphology in marine carnivores (2011)
B Manly	Conservation genetics of the black-capped petrel. (2010)

UNDERGRADUATE HONORS- COMMITTEE MEMBER (UNCW 2008-PRESENT)

C Burns	Description of a new species of <i>Blakea</i> from Columbia (In progress)
S Koehler	Analysis of field survey data methods for raccoons (<i>Procyon lotor</i>) (2021)
W Fezner	Stable Isotope Analysis of foraging behavior in Galapagos birds (2016)
M Yeager	Herpetological survey of the longleaf pine forest on the UNCW campus (2012)
E Probst	Egg size and development rates in American lobsters (<i>Homarus americanus</i>): relationship to female size (2010)
A Tomerdahl	Blood biochemistry of loggerhead sea turtles (<i>Caretta caretta</i>) entangled in longline fishing gear in the western Mediterranean (2010)
B Reuhland	Reconstruction of the Evolutionary History of Parrots (Aves: Psittaciformes) from retroelement insertion events (2010)

UNDERGRADUATE PROJECTS SUPERVISED AT HUMBOLDT STATE UNIVERSITY (2001-2008)

M. Cardona	Mitochondrial DNA phylogeography of the ringtail cat (<i>Bassariscus astutus</i>)
J. Hutchinson	Microsatellite analysis of a hybrid zone between distinct mitochondrial lineages of the northern flying squirrel, <i>Glaucomys sabrinus</i> .
L Avalos, L Holme	Genetic analysis of mammals of the sky islands of the Great Basin.
E Britz	Analysis of DNA variation of Hubb's beaked whale from museum specimens.
C Callahan	Analysis of genetic variation in northern flying squirrels from the Sierra Nevada.
L Kentfield	Using DNA data to assess natal beaches of sea turtles in the HSU Vertebrate Museum's Herpetology Collection.
J Morris, J Brownlee	Rearticulation of the skeleton of a green sea turtle.
J Smith, L Kentfield	Rearticulation of the skeleton of a mountain lion.
C Christman, N. Hall	Rearticulation of the skeleton of an elephant seal.
J Wu, A Young	Directed study in museum specimen preparation.
J Bryant, D Cook	Small mammal surveys of Humboldt Co., CA.
T McGaffey.	Comparisons of head ornamentations in Cetariodactyla.
J Eberle, J Tonda, & C Callahan	Rearticulating the skeleton of Hubb's Beaked whale.