

Randy Klabacka — Curriculum Vitae

Assistant Professor – Brigham Young University, Provo, UT – 801-422-7263

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Education

Ph.D. in Biological Sciences	2022
<i>Department of Biological Sciences, Auburn University</i>	
Advisors: Drs. Tonia Schwartz & Jamie Oaks	
B.S. in Biology	2016
<i>Department of Biology, Brigham Young University</i>	
Advisors: Drs. Jack Sites & Chad Hancock	

Professional Appointments

Assistant Professor	2025-present
<i>Biology Department, Brigham Young University</i>	
Assistant Professor	2023-2025
<i>Biological Sciences Department, Utah Tech University</i>	

Grants, Fellowships, and Scholarships

2025: BYU Life Sciences Teaching Development Grant	\$10,000
Actively learning the scientific tree of life in BIO 220	
Co-investigators: Elizabeth Bailey, Josh Hammari, and Michael Whiting	
2023: UT Faculty Research Fellowship	\$7,000
Bioinformatic examination of genome-wide expression and sequence variation in unisexual lizards	
2020: EECG Research Award (American Genetics Association)	\$8,000
Genomic and bioenergetic costs of asexuality in a vertebrate system (<i>Aspidoscelis</i>)	
2019: Trees in the Desert Workshop (NSF - University of Arizona)	\$1,000
funded workshop (covering travel, lodging, food, and workshop)	
2017: CMB Peaks of Excellence Research Fellowship (Auburn University)	\$4,500
Mitonuclear distancing: The baggage of an asexual reproductive strategy	
2017: Meredith Birchfield Endowed Fund for Excellence (Auburn Univ Museum of Natural History)	\$1500
Examining species boundaries in <i>Draco maculatus</i>	
2014: REU Supplement Recipient (BYU)	\$3,000
Phylogeny and biogeography of New World leaf-toed geckos (<i>Phyllodactylus</i>)	
2016: Office of Research & Creative Activities Grant (BYU)	\$1,500
Phylogeny and species boundaries in spotted flying lizards (<i>Draco maculatus</i>)	
2012-15: Undergraduate Academic Scholarships (BYU)	\$11,987

Awards

- 2023:** Utah Tech Research Award (UT Research Office)
- 2019:** 1st Place - Henri Seibert Competition Systematics & Evolution Category (SSAR) \$200
Riverine barriers as potential drivers of biodiversification in *Draco maculatus*
- 2019:** COSAM Travel Award (Auburn University) \$300
Funding to present research at 9th World Congress of Herpetology
- 2017:** NSF Travel Grant (Society of Systematics Biology Meeting) \$500
Funding to present research at 2017 SSB meeting
- 2015:** 3rd Place - HBLL College of Life Sciences Poster Competition (BYU) \$300
Phylogeny and species boundaries in spotted flying lizards (*Draco maculatus*)
- 2015:** College of Life Sciences Dean's List (BYU)

Peer-reviewed Publications

* mentored undergraduate student

- Warner, Daniel A, Connor Kelly, Jenna E Pruett, Amélie Fargevieille, and **Randy L Klabacka** (2023). "Fluctuating environments hinder the ability of female lizards to choose suitable nest sites for their embryos." *Behavioral Ecology and Sociobiology* 77.3, p. 32.
- Beatty, Abby E, Emily P Driessen, Amanda D Clark, Robin A Costello, Sharday Ewell, Sheritta Fagbodun, **Randy L Klabacka**, Todd Lamb, Kimberly Mulligan, Jeremiah A Henning, et al. (2023). "Biology Instructors See Value in Discussing Controversial Topics but Fear Personal and Professional Consequences." *CBE—Life Sciences Education* 22.3, ar28.
- Tracy, Claire B., Emily Driessen, Abby E. Beatty, T. Lamb, Jenna E. Pruett, Jake Botello, Cara Brittain, Ísada Claudio Ford, Chloe C. Josefson, **Randy L Klabacka**, Tyler Smith, Ariel Steele, Min Zhong, Scott Bowling, Cindy Dixon, and Cissy Ballen (2022). "Why students struggle in undergraduate biology: sources and solutions." *accepted in CBE-Life Sciences Education*.
- Klabacka, Randy L**, Hailey A Parry, Kang Nian Ryan A Cook* Tori A Herron* L Miles Horne* Yap, Jose A Maldonado, Jamie R Oaks, Andreas N Kavazis, Matthew K Fujita, and Tonia S Schwartz (2022). "Reduced mitochondrial respiration in hybrid asexual lizards." *American Naturalist*.
- Grismer, Jesse, Peter Scott, Erin Toffelmier, Brian Hinds, **Randy L Klabacka**, Glenn Stewart, Virginia White, Jamie Oaks, and H. Bradley Shaffer (2022). "Genomic data reveal local endemism in Southern California Rubber Boas (Serpentes: Boidae, *Charina*) and the critical need for enhanced conservation actions." *accepted in Molecular Phylogenetics and Evolution*.
- Westfall, Aundrea K, Rory S Telemeco, Mariana B Grizante, Damien S Waits, Amanda D Clark, Dasia Y Simpson, **Randy L Klabacka**, Alexis P Sullivan, George H Perry, Michael W Sears, et al. (2021). "A chromosome-level genome assembly for the Eastern Fence Lizard (*Sceloporus undulatus*), a reptile model for physiological and evolutionary ecology." *GigaScience*.
- Klabacka, Randy L**, Perry L Wood Jr, Jimmy A McGuire, Jamie R Oaks, L Lee Grismer, Jesse L Grismer, Anchalee Aowphol, and Jack 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*, p. 106861.
- Gangloff, Eric J, Tonia S Schwartz, **Randy L Klabacka**, Natalie Huebschman, Ang-Yu Liu, and Anne M Bronikowski (2020). "Mitochondria as central characters in a complex narrative: Linking genomics, energetics, and pace-of-life in natural populations of garter snakes." *Experimental Gerontology*, p. 110967.

- Grismer, L Lee, Jr PL Wood, Shahrul Anuar, Marta S Grismer, ES Quah, Matthew L Murdoch, Mohd Abdul Muin, Hayden R Davis, Cesar Aguilar, **Randy L Klabacka**, et al. (2016). "Two new Bent-toed Geckos of the *Cyrtodactylus pulchellus* complex from Peninsular Malaysia and multiple instances of convergent adaptation to limestone forest ecosystems." *Zootaxa* 4105.5, pp. 401–429.
- Davis, Hayden R, L Lee Grismer, **Randy L Klabacka**, Mohd Abdul Muin, Evan SH Quah, Shahrul Anuar, Perry L Wood Jr, and JW Sites Jr (2016). "The phylogenetic relationships of a new Stream Toad of the genus *Ansonia* Stoliczka, 1870 (Anura: Bufonidae) from a montane region in Peninsular Malaysia." *Zootaxa* 4103.2, pp. 137–153.

Manuscripts in-review and in-prep

* mentored undergraduate student

- Sullivan, Kathryn A., **Randy L. Klabacka**, Allesandro Catenazzi, José Pérez Z, Pablo J. Venegas, Perry L. Wood Jr., Darren C. Browne, Claudia Koch, Jeroen P. van Leeuwen, Federico Valdez, Stuart V. Nielsen, Aaron M. Bauer, Jack W. Sites Jr., César Aguilar Puntriano, Eli Greenbaum, and Tony Gamble (2025). "One if by Land, Two if By Sea: Molecular Phylogeny and Biogeography of the Leaf-Toed Geckos (Phyllodactylidae: *Phyllodactylus*)."
in-review with Zoological Journal of the Linnean Society.
- Klabacka, Randy L.**, Geoffrey E. Hill, Damian K. Dowling, Joel Sharbrough, Robert D. Denton, and Justin C. Havird (2025). "Mitonuclear dynamics in unisexual vertebrates."
in-review with Philosophical Transactions of the Royal Society B.
- Ho, David, Aaron Odell, Tormey Duncan, Deimler Nathaniel, Valentine Patterson, Dai Tsuchiya, **Randy L. Klabacka**, Robert Schnittker, Diana Baumann, William Neaves, Anthony Barley, and Peter Baumann (2025). "Ancestral chromosome-level assemblies reveal post-hybridization genome evolution in the New Mexico whiptail lizard (*Aspidoscelis neomexicanus*)."
in-review with Genome Biology and Evolution.
- Klabacka, Randy L.**, Anne M. Bronikowski, Suzanne E. McGaugh, Dawn M. Reding, Daniel Nettleton, Andrew Lithio, Laurie S. Stevison, Jessica Judson, Baylee Christensen*, Reagan McKee*, Dante Celani*, and Tonia Schwartz (2024). "Evolution of targeted gene networks in divergent garter snake ecotypes."
in-prep for Aging Cell.

Invited Seminars

- 2025:** Disentangling hybridity and clonality in mitonuclear coadaptation *Johannes Gutenberg University*
Institute for Quantitative and Computational Biosciences, Mainz, Germany (*upcoming*)
- 2024:** What New Mexico's state reptile is teaching us about genetics *New Mexico Tech University*
Biology Department Seminar Series
- 2024:** Using unisexual squamate reptiles to understand mitonuclear evolution *Brigham Young University*
Department of Biology Seminar Series
- 2024:** Using unisexual squamate reptiles to understand mitonuclear evolution *Brigham Young University*
Plant and Wildlife Sciences Seminar Series
- 2021:** Workshop on Fostering Ideological Awareness *Auburn University*
Teaching evolution to students of faith: How instructors can help students overcome barriers
- 2019:** Museum of Natural Science Seminar Series *Louisiana State University*
Riverine barriers as drivers of biodiversification in terrestrial fauna of Southeast Asia

Presentations

* mentored undergraduate student

- Klabacka, Randy L**, Hailey Parry, Jeff Ryan Cook*, Tori Herron*, L Miles Horne* Yap, José Maldonado, Guillermo Álvarez, Andreas N Kavazis, Jamie R Oaks, Matthew K Fujita, and Tonia S Schwartz (n.d.). "Reduced endurance and mitochondrial respiration in hybrid asexual lizards (genus: *Aspidoscelis*).\" In: *SICB 2021* (). Virtual Conference – talk.
- Klabacka, Randy L**, Anne Bronikowski, Suzanne McGaugh, Dawn Reding, Daniel Nettleton, Andrew Lithio, Laurie Stevison, Jessica Judson, and Tonia Schwartz (2025). "Uncoiling senescence: Using garter snakes to understand the genetics of aging.\" In: *Society for Integrative and Comparative Biology Meeting*. Atlanta, GA– talk.
- McKee*, Reagan, Dustin Kolste*, Jeremy Bakelar*, and **Randy L Klabacka** (2025). "Anuran stress response genes likely evolved from apolipoprotein gene ApoA-II.\" In: *Society for Integrative and Comparative Biology Meeting*. Atlanta, GA– poster.
- Everett*, Alexander, David Bean*, Syrus Miner*, Jeremy Bakelar, and **Randy L Klabacka** (2025). "A broad analysis of amino acid sequence conservation in two essential bacterial proteins of the beta-barrel assembly machinery.\" In: *Society for Integrative and Comparative Biology Meeting*. Atlanta, GA– poster.
- Fernández Lara*, Vicente, Angelina Romero*, Reagan McKee*, and **Randy L Klabacka** (2024). "Morphological and molecular examination of an invasive whiptail lizard between native and introduced populations.\" In: *Joint Congress on Evolutionary Biology*. Montreal, CA– poster.
- Everett*, Alexander, David Bean, Syrus Miner, Jeremy Bakelar, and **Randy L Klabacka** (2024). "A broad analysis of amino acid sequence conservation in two essential bacterial proteins of the beta-barrel assembly machinery.\" In: *Joint Congress on Evolutionary Biology*. Montreal, CA– poster.
- Everett*, Alexander, David Bean*, Syrus Miner*, Jeremy Bakelar, and **Randy L Klabacka** (2024). "A broad analysis of amino acid sequence conservation in two essential bacterial proteins of the beta-barrel assembly machinery.\" In: *Joint Congress on Evolutionary Biology*. Montreal, CA– poster.
- Johnson*, Candice, Dante Celani*, Seun Onileowo Onileowo*, and **Randy L Klabacka** (2023). "The effect of read-to-reference evolutionary relatedness on bioinformatic mapping efficiency of genomic sequencing data.\" In: *EVOLUTION 2023*. Albuquerque, NM – poster.
- Christensen, Baylee*, Reagan McKee*, Dante Celani*, Candice Johnson*, Vicente Fernández Lara*, Kasia Poulsen*, Anne M Bronikowski, Suzanne E McGaugh, Dawn Reding, Andrew Lithio, Dan Nettleton, Laurie S Stevison, Jessica Judson, Tonia S Schwartz, and **Randy L Klabacka** (2023). "Comparing genetic divergence between biological groups using pair-wise population data, combinatorics, and a permutation test.\" In: *EVOLUTION 2023*. Albuquerque, NM – poster.
- Day*, Ryland R, Syrus W D Miner*, Adam P Dimaio*, Justin P LeClair*, T Smith, Aaron P Davis, and **Randy L Klabacka** (2023). "An inertial measurement unit enhanced knee brace working to improve outcomes after surgery.\" In: *UCUR 2023*. University of Utah; Salt Lake City, UT – poster.
- Klabacka, Randy L**, Anne Bronikowski, Suzanne McGaugh, Dawn Reding, Daniel Nettleton, Andrew Lithio, Laurie Stevison, Jessica Judson, and Tonia Schwartz (2021). "Genomic and phenotypic evolution of targeted gene networks in divergent garter snake ecotypes.\" In: *EVOLUTION 2021*. Virtual Conference – talk.

- Klabacka, Randy L**, Hailey Parry, Jeff Ryan Cook* Tori Herron* L Miles Horne* Yap, José Maldonado, Guillermo Álvarez, Andreas N Kavazis, Jamie R Oaks, Matthew K Fujita, and Tonia S Schwartz (2020). "The powerhouse of asexual cost? Endurance and mitochondrial efficiency in parthenogenetic whiptail lizards (genus *Aspidoscelis*).". In: *9th Annual World Congress of Herpetology*. University of Otago; Dunedin, NZ – talk.
- Klabacka, Randy L**, P L Wood Jr, Jimmy A McGuire, Jamie R Oaks, L Lee Grismer, Jesse L Grismer, Anchalee Aowphol, and Jack W Sites Jr (2019). "Riverine barriers as potential drivers of biodiversification in the *Draco maculatus* species complex of Indochina." In: *Joint Meeting of Ichthyologists and Herpetologists*. Snowbird, UT – talk *1st place in Henri Seibert Competition (Systematics & Evolution Category).
- Schwartz, Tonia S, Dawn Reding, **Randy L Klabacka**, Stephen Sephick, Laurie Stevison, and Anne M Bronikowski (2019). "Population genetics of the electron transport chain in snake populations exhibiting divergent resting metabolic rates." In: *Society for Integrative and Comparative Biology Meeting*. Tampa, FL – poster.
- Klabacka, Randy L**, José Maldonado, Andreas N Kavazis, Hailey Parry, Jamie R Oaks, Matthew K Fujita, and Tonia S Schwartz (2019). "Comparative examination of mitochondrial function in parthenogenetic whiptail lizards genus (*Aspidoscelis*).". In: *American Genetics Association Presidential Symposium*. Portland, OR – poster.
- Cook*, Ryan, **Randy Klabacka L**, Sarin Tiatragul, Gabrielle Ripa, Kayla Wilson, and Jamie Oaks (2018). "Longitudinal examination of lungless salamander species (family Plethodontidae) morphology in Alabama." In: *COSAM Research Fair 2018*. Auburn University – poster.
- Klabacka, Randy L**, P L Wood Jr, Jimmy A McGuire, Jamie R Oaks, L Lee Grismer, Jesse L Grismer, Anchalee Aowphol, and Jack W Sites Jr (2018). "Bayes factor delimitation supports population structure in Southeast Asian species complex of Agamid lizard." In: *Society for Systematic Biologists Meeting*. The Ohio State University; Cleveland, OH – poster.
- Schwartz, Tonia S, Dawn Reding, **Randy L Klabacka**, Stephen Sephick, Laurie Stevison, and Anne M Bronikowski (2017). "Targeted sequence capture for functional population genomics of genetic networks: Mapping approaches for non-model organisms." In: *Joint Meeting of Ichthyologists and Herpetologists*. Austin, TX – poster.
- Klabacka, Randy L**, P L Wood Jr, Jimmy A McGuire, L Lee Grismer, and Jack W Sites Jr (2017). "Speciation or isolated diversification: The hidden variation of *Draco maculatus*." In: *Society for Systematic Biologists Meeting*. Louisiana State University; Baton Rouge, LA – talk.
- Klabacka, Randy**, P L Wood Jr, and Jack W Sites Jr (2016). "Phylogeny and species boundaries in the "flying dragons" of the *Draco maculatus* species complex (family Agamidae)." In: *Utah Conference on Undergraduate Research*. University of Utah; Salt Lake City, UT – poster.
- Klabacka, Randy L**, P L Wood Jr, L Lee Grismer, Jimmy A McGuire, and Jack W Sites Jr (2016). "Hidden Dragons: The molecular composition of the *Draco maculatus* species complex." In: *South Eastern Population Ecology and Evolutionary Genetics Meeting*. Madison, FL – talk.
- Klabacka, Randy L**, P L Wood Jr, and Jack W Sites Jr (2015). "Phylogeny and species boundaries in the "flying dragons" of the *Draco maculatus* species complex (family Agamidae)." In: *HBLL BYU Poster Competition*. Brigham Young University; Provo, UT – poster *3rd Place.
- Klabacka, Randy L**, César Aguilar, Aaron M Bauer, Alessandro Catenazzi, Eli Greenbaum, Jack W Sites Jr, F Faldez, Perry L Wood Jr, Ryan Wilkes, and Tony Gamble (2015). "Phylogeny and biogeography of New World leaf-toed geckos, *Phyllodactylus* (Phyllodactylidae: Gekkota)." In: *Society for the Study of Amphibians and Reptiles Meeting*. University of Kansas; Lawrence, KA – poster.

Mentorship

I have mentored 25 undergraduate students in bioinformatics, field biology, and molecular lab work. Three of these undergraduates published research with me as co-authors. Current positions of these students include veterinary school, hydrology technician, M.S./Ph.D. evol/ecol graduate school, undergraduate research assistant, and working on manuscripts for peer-reviewed publications.

Teaching Experience

Course Instructor.....Course Type

Utah Tech University

- **2024:** BIOL 4010: Molecular Evolution *In-person*
- **2023,2024:** BIOL 4320: Scripting for Biologists *In-person*
- **2023,2024:** BIOL 3030: Principles of Genetics *In-person*
- **2023,2024:** BIOL 2300: Fundamentals of Bioinformatics *In-person*
- **2023,2024:** BIOL 4310: Advanced Bioinformatics *In-person*

Auburn University

- **2022:** BIOL 7180: Scripting for Biologists *Online and Synchronous*
- **2021:** BIOL 3000: Genetics *Online and Asynchronous*

Teaching Assistantships.....Instructor(s)

Auburn University

- **2021:** BIOL 7180: Scripting for Biologists *Jamie Oaks*
- **2020:** BIOL 4020: Vertebrate Biodiversity Lab *Dan Warner*
- **2020:** BIOL 5740/6740: Herpetology Lab *Jamie Oaks & Dan Warner*
- **2019:** BIOL 4020: Vertebrate Biodiversity Lab *Joshua Hall*
- **2018:** BIOL 5240/6240: Animal Physiology Lab *Ray Henry*
- **2017-2019:** BIOL 5600/6600: Biomedical Physiology Lab *Mary Mendonca*
- **2016:** BIOL 2501: Anatomy and Physiology Lab *Shobnom Ferdous*

Brigham Young University

- **2014-2016:** BIO 130 Lecture: Principles of Biology *Keoni Kauwe and Byron Adams*
- **2013-2014:** BIO 130 Lab: Principles of Biology *Jamie Jensen*

Guest Lectures.....Instructor(s)

Brigham Young University

- **2024:** Herpetology (BIO 445) *My journey as a herpetologist*
- **2016:** Principles of Biology *The domains of life*
- **2016:** Principles of Biology *The central dogma of biology*

Utah Tech University

- **2023,2024:** Principles of Biology (BIOL 1610) *Overview of Bioinformatics*
- **2023,2024:** Principles of Biology (BIOL 1610) *Mendel and the Gene Idea*
- **2023,2024:** Principles of Biology (BIOL 1610) *Cell Division*

Auburn University

- **2021:** Mitonuclear Ecology (BIOL 6750) *The evolution of sex*
- **2021:** Scripting for Biologists (BIOL 7180) *Creating python classes & using random number generators*
- **2021:** Scripting for Biologists (BIOL 7180) *Implementing regular expressions*

- **2021:** Scripting for Biologists (BIOL 7180) *Introduction to Biopython*
- **2019:** Vertebrate Biodiversity (BIOL 4020) *Amphibian Life History Strategies*
- **2018:** Functional Genomics (BIOL 5850/6850) *Using high-throughput sequencing for targeted genes*
- **2018:** Evolution and Systematics (BIOL 3030) *Early evolutionary ideas- Tree thinking*

Professional Development

- **2025:** Y Faculty Institute ("Y-Fi") *NSF-created, BYU-supported*
 - Completed week-long, in-person course focused on reforming classrooms into student-centered places of learning.
- **2023:** Microcredential Course: Promoting Active Learning *Organizer: ACUE*
 - Completed course in effective teaching practices focused on techniques in active learning. Satisfied expectations of the course, including successful completion of 6 modules of learning and implementation.
- **2021:** Fostering ideological awareness - professional workshop *Organizer: Dr. Abby Beatty*
 - Week-long, inter-institutional workshop where collaborators presented research and collaboratively created open-source course modules for contextualizing societal and ethical impacts of applied biology.
- **2020:** Introduction to Discipline-Based Education Research - graduate course *Instructor: Dr. Cissy Ballen*
 - Semester-long graduate course focused on topics, literature, and methods of discipline-based education research, with an emphasis on active-learning teaching strategies. As part of this course, we published a manuscript on barriers to introductory biology students (see Tracey et al. in Manuscripts In-review section)
- **2018:** Engaged and Active Student Learning - professional workshop *Host: AU Biggio Center*
 - Half-day workshop, literature, and methods of discipline-based education research, with an emphasis on active-learning teaching strategies.

Field Experience

2024: Led team of seven in UT, AZ, NM and TX and collected 70 <i>Aspidoscelis neomexicanus</i>	<i>1 month</i>
2023: Assisted with animal capture and tail sampling of 300 Phrynosomatids in Grand Canyon	<i>7 days</i>
2021: Assisted with animal capture and respirometry of <i>Thamnophis elegans</i> in CA	<i>10 days</i>
2021: Assisted with animal capture processing of 8 <i>Anolis</i> species in FL	<i>5 days</i>
2020: With team of 3 collected 200 live <i>Anolis sagrei</i> for lab breeding colony	<i>2 days</i>
2019: Led team of five in NM and TX and collected 50 live <i>Aspidoscelis</i> of five species	<i>1 month</i>
2018: Led team of four in NM and TX and collected 210 <i>Aspidoscelis</i> of 12 species	<i>2 months</i>
2017: Led team of two to validate potential <i>Aspidoscelis</i> collection localities	<i>3 weeks</i>
2016: Collected various herpetofauna for BYU Bean LS Museum in Thailand and Malaysia	<i>3 weeks</i>
2015: Collected morphological data from live <i>Crotalus oreganus lutosus</i>	<i>1 day</i>
2014: Participated in neotropical biology and geology field course in Costa Rica	<i>2 weeks</i>
2013: Counted egg masses & recorded localities for <i>Rana luteiventris</i> habitat restoration	<i>1 day</i>

Research Assistantships

Research Focus.....Principle Investigator(s)

- **Summer 2022:** Museum Curatorial Assistant *Jon Armbruster and David Laurencio*
- **Summer 2021:** Phylogenetics and Functional Genomics *Jamie Oaks and Tonia Schwartz*
- **Summer 2020:** Phylogenetics *Jamie Oaks*
- **Summer 2019:** Phylogenetics *Jamie Oaks*
- **Summer 2018:** Functional Genomics *Tonia Schwartz*
- **2013-16:** Phylogenetic Systematics *Jack Sites*

○ **2013-16:** Metabolic Physiology and Bioenergetics

Chad Hancock

Outreach and Community Service

Brigham Young University

2025: Iguanathon Organizer and supervisor

Beaver Dam Wash Conservation Area

2020-present: QuickGRITS podcast: [link](#) (available on Spotify)

Creator

Utah Tech University

2024: Iguanathon Organizer and supervisor

Beaver Dam Wash Conservation Area

2023: Bioinformatics guest lecture

UT STEM Outreach; Hurricane HS Comp Sci class

2023: Bioinformatics Q&A

Zion International Program; Japanese visiting students

2023: Museum tour guide

Museum of Natural Sciences; Utah Tech University

2023: Virgin river litter collector

Bi-annual Virgin River Cleanup; UT Biological Sciences Department

Auburn University

2022: "Gross Out Camp" Museum Instructor

Fresh Air family; Auburn, AL

2020: Chief Science Officers "Zoom In On Science" Guest

SciTech Institute; Kenya

2020: Chief Science Officers "Zoom In On Science" Guest

SciTech Institute; Sonora, Mexico

2019: Volunteer Field Ornithology TA

UTEP-IMRS Field Biology Course

2018: Volunteer Field Herpetology TA

UTEP-IMRS Field Biology Course

2016: Reptile and Amphibian Studies Scout Merit Badge Instructor

Boy Scouts of America

2018-2021: Member of the Snake Response Team

Auburn University

Department Service Positions

Brigham Young University

2015-16: Co-president/founder of Life Sciences Pre-Graduate Student Club

BYU

Utah Tech University

2023-2025: Bioinformatics Program Coordinator

Utah Tech University

2023-2025: IACUC Member

Utah Tech University

2023-2025: Biological Sciences Poster Judge

Biannual Poster Competition; UT Biological Sciences Dept

Auburn University

2020-2022: DBS Seminar Committee Grad Representative

Auburn University

2022: DBS Seminar Host Chair - Brandon Ogbunu Visit (Princeton)

Auburn University

2021: DBS Seminar Host Committee Member - Rebecca Tarvin Visit (UC- Berkeley)

Auburn University

2019: Grad Representative - Global Change Biology Hiring Committee

Auburn University

2018: DBS Seminar Host Chair - Matt Fujita Visit (UT- Arlington)

Auburn University

2016-2018,2022: Natural History Museum Open House Representative

Auburn University

2018: DBS Seminar Host Chair - Marjorie Oleksiak Visit (U Miami)

Auburn University

2017: DBS Seminar Host Committee Member - Peter Andolfatto Visit (Princeton)

Auburn University

2017: DBS Seminar Host Committee Member - Armin Moczek Visit (Indiana Univ)

Auburn University

University Service Activities

Brigham Young University

2015: Host for the BYU-sponsored "Night at the Museum"

Monte L. Bean Life Science Museum

2014: Tour guide for LSB opening- President's Leadership Council dinner

Brigham Young University

Utah Tech University

2023: Lead Organizer and Host for Dr. Perry Ridge visit

Utah Tech University Forum

2023: Organizer and Panel Member for Grad School Q&A

Utah Tech University

2023: Panel Member for Undergraduate Research

Trailblazer Connections; UT Welcome Week

2023: STEM Poster Judge

Trailblazer Symposium; Utah Tech University

Auburn University

2021: Safe techniques for handling snakes: Instructor

E. W. Shell Fisheries, Auburn University

2019: STEM Discovery Day instructor

Auburn University

Field of Discipline Service

2025: DPCB Wake Poster Award Judge

SICB, Atlanta, GA

2024: ASN Ruth Patrick Student Poster Award Judge

Joint Congress on Evolution, Montreal, CA

2024: ASN Outstanding Student Poster Award Judge

Evolution Meeting, Albuquerque, NM

2024: Best Salamander Poster Award

World Congress of Herpetology, Dunedin, NZ

Scholarly Reviewer

Molecular Ecology

Biological Journal of the Linnean Society

Genome Biology and Evolution

Ecology and Evolution

Herpetologica

Entomology, Ornithology, & Herpetology: Current Research

Reptiles & Amphibians

Grant Panelist

National Science Foundation (NSF)

Czech Science Foundation (GACR)

Professional Memberships

Society for the Study of Amphibians and Reptiles (SSAR)

Society for Integrative and Comparative Biology (SICB)

Society for the Study of Evolution (SSE)