

RORY S. TELEMECO

PERSONAL DATA

California State University, Fresno
Department of Biology
2555 East San Ramon Ave. M/S SB73
Fresno, CA 93740-8034

E-mail: telemeco@csufresno.edu
Office phone: 559-278-8702
Website: <https://telemecolab.org>

EDUCATION

Iowa State University of Science and Technology (ISU), Ames, IA, USA

Ph.D. in Ecology and Evolutionary Biology, August 2014

Advisor: Fredric Janzen

Dissertation: Here be Dragons: Functional Analyses of Thermal Adaptation and Biogeography of Reptiles in a Changing World.

University of Central Oklahoma (UCO), Edmond, OK, USA

M.S. in Biology (with honors), May 2009, E.C. Hall Scholar (highest-ranked graduate)

Adviser: Troy Baird

Thesis: Are Reproductive Life-History Traits of Australian Three-line Skinks Fixed or Phenotypically Plastic?

University of Central Oklahoma, Edmond, OK, USA

B.S. in Biology (*Summa Cum Laude*), December 2006, Class Marshall (highest-ranked graduate)

ACADEMIC POSITIONS

Assistant Professor of Biology, California State University, Fresno, CA (Nov 2017 – Present)

Postdoctoral Scholar, Auburn University, Auburn, AL (2016 – 2017)

Postdoctoral Scholar, University of Washington, Seattle, WA (2014 –2016)

Resident Scientist, Herbert Hoover High School, Des Moines, IA (2013–2014)

Teaching Assistant, Iowa State University, Ames, IA (2010)

Teaching Assistant, University of Central Oklahoma, Edmond, OK (2008–2009)

Instructor, Upward Bound, University of Central Oklahoma, Edmond, OK (2009)

Visiting Scholar, University of Sydney, Sydney, NSW, Australia (2007–2008)

HONORS

Herpetologist's League Graduate Research Award (Runner up) 2015

Wake Award for Phylogenetics and Comparative Biology (Finalist) 2015

Billings Award for Physiological Ecology (Honorable Mention) 2013

SSAR Henri Seibert Award for Morphology/Physiology 2012

Herpetologists League Graduate Research Award 2011

UCO Jackson College of Graduate Studies E.C. Hall Scholar 2009

UCO Outstanding Biology Graduate Student	2009
Herpetologists League Graduate Research Award	2008
Lothar Hornuff Field Biology Award	2007
UCO Department of Biology Outstanding Biology Senior	2007
UCO Department of Biology Academic Achievement Award	2007
Beta Beta Beta Frank G. Brookes Award	2007
Class Marshall for the UCO College of Math and Science	2006
Oklahoma Academy of Science- Best Oral Presentation in Biology	2006
Oklahoma Academy of Science- Third Best of Academy Oral Presentation	2006
UCO Biology Department Scholarship	2006
Vivian Sadler Field Scholarship	2006
Julian and Irene Rothbaum Award	2006
Chesapeake Energy Corporation Scholar	2005
National Dean's List	2004–2006
UCO Environmental Education Award	2003, 2004
Ethel Derrick Zoology Award	2003
President's Honor Role	2002–2008
Freshman Achievement Scholar	2002
Oklahoma City University Prairie to Peaks Scholar	2000

PUBLICATIONS

27 peer-reviewed publications, 18 first or corresponding author

Citations = 936, h-index = 16, i10 index = 22

- Westfall, A.K., **R.S. Telemeco**, M.B. Grizante, D.S. Waits, A.D. Clark, D.Y. Simpson, R.L. Klabacka, A.P. Sullivan, G.H. Perry, J.R. Oaks, M.W. Sears, C.L. Cox, R.M. Cox, M.E. Gifford, H.B. John-Alder, T. Lankilde, M.J. Angilletta Jr., A.D. Leaché, M.A. Tollis, K. Kusumi, and T.S. Schwartz. (2021) A chromosome-level genome assembly for the Eastern Fence Lizard (*Sceloporus undulatus*), a reptile model for physiological and evolutionary ecology. *Gigascience*. IN PRESS DOI: 10.1093/gigascience/giab06. BioRxiv: <https://www.biorxiv.org/content/10.1101/2020.06.06.138248v1>
- Telemeco, R.S.†**, and E.J. Gangloff. 2021†. Introduction to the special issue—Beyond CT_{MAX} and CT_{MIN} : Advances in studying the thermal limits of reptiles and amphibians. *Journal of Experimental Zoology A*. 335: 1-5. DOI: 10.1002/jez.2447
- Taylor, E.N., L.M. Diele-Viegas, E.J. Gangloff, J.M. Hall, B. Halpern, M.D. Massey, D. Rödder, N. Rollinson, S. Spears, B.-J. Sun, and **R.S. Telemeco**. 2020. The thermal ecology and physiology of reptiles and amphibians: A user's guide. *Journal of Experimental Zoology A* 2020:1–32. DOI: 10.1002/jez.2396
- Aparicio Ramirez, A.†, K. Perez†, and **R.S. Telemeco**. 2020. Thermoregulation and thermal performance of Crested Geckos (*Correlophus ciliatus*) suggest an extended optimality hypothesis for the evolution of thermoregulatory set-points. *Journal of Experimental Zoology A*. 2020:1–10. DOI: 10.1002/jez.2388

- Telemeco, R.S.**, and E.J. Gangloff. 2020. Analyzing stress as a multivariate phenotype. *Integrative and Comparative Biology*. icaa005. DOI: 10.1093/icb/icaa005
- Telemeco, R.S.**, D.Y. Simpson, C.Tylan, T. Langkilde, and T.S. Schwartz. 2019. Contrasting responses of lizards to divergent ecological stressors across biological levels of organization. *Integrative and Comparative Biology*. 59: 282-291. DOI: 10.1093/icb/icz071
- Gangloff, E.J.†, and **R.S. Telemeco**‡. 2018. High temperature, oxygen, and performance: Insights from reptiles and amphibians. *Integrative and Comparative Biology* 58: 9-24. DOI: 10.1093/icb/icy005
- Camacho, A.G., J.M. VandenBrooks, A. Riley*, **R.S. Telemeco**, and M.J. Angilletta. 2018. Oxygen supply did not affect how lizards responded to thermal stress. *Integrative Zoology* 13: 428-436. DOI: 10.1111/1749-4877.12310
- Camacho, A., T. Rusch, G. Ray, **R.S. Telemeco**, M. Rodrigues, and M. Angilletta. 2018. Measuring behavioral thermal tolerance to address hot topics in ecology, evolution, and conservation. *Journal of Thermal Biology* 73: 71-79. DOI: 10.1016/j.jtherbio.2018.01.009
- Cordero, G.A., **R.S. Telemeco**, and E.J. Gangloff. 2018. Reptile embryos are not capable of behavioral thermoregulation in the egg. *Evolution and Development*. 20: 40-47. DOI: 10.1111/ede.12244
- Telemeco, R.S.**, E.J. Gangloff, G.A. Cordero, R.A. Polich, A.M. Bronikowski, and F.J. Janzen. 2017. Physiology at near critical temperatures, but not critical limits, varies between lizard species that partition the thermal environment. *Journal of Animal Ecology*. 86: 1510-1522. DOI: 10.1111/1365-2656.12738
- Telemeco, R.S.**, B. Fletcher*, O. Levy, A. Riley*, Y. Rodriguez-Sanchez*, C. Smith*, C. Teague*, A. Waters*, M.J. Angilletta, and L.B. Buckley. 2016. Lizards fail to plastically adjust nesting behavior or thermal tolerance as needed to buffer populations from climate warming. *Global Change Biology* 23:1075-1084. DOI: 10.1111/gcb.13476
- Gangloff, E.J., K.G. Holden, **R.S. Telemeco**, L.H. Baumgard, A.M. Bronikowski. 2016. Hormonal and metabolic responses to upper temperature extremes in divergent life-history ecotypes of a garter snake. *Journal of Experimental Biology*. 219: 2944-2954. DOI: 10.1242/jeb.143107.
- Telemeco, R.S.**, E.J. Gangloff, G.A. Cordero, T.S. Mitchell, B.L. Bodensteiner, K.G. Holden, S.M. Mitchell, R.L. Polich, and F.J. Janzen. 2016. Reptile embryos lack the opportunity to thermoregulate by moving within the egg. *American Naturalist*. 188: E13-E37. DOI: 10.1086/686628.
- Dillon, M.E., H.A. Woods, G. Wang, S.B. Fey, D.A. Vasseur, **R.S. Telemeco**, K. Marshall, and S. Pincebourde. 2016. Life in the frequency domain: The biological impacts of changes in climate variability at multiple time scales. *Integrative and Comparative Biology*. 56: 14-30. DOI: 10.1093/icb/icw024
- Smith, C. †*, **R.S. Telemeco** ‡, M.J. Angilletta, J.M. VandenBrooks. 2015. Oxygen supply limits the heat tolerance of lizard embryos. *Biology Letters* 11: 20150113. DOI: 10.1098/rsbl.2015.0113
- Telemeco, R.S.** 2015. Sex determination in the southern alligator lizard (*Elgaria multicarinata*, Anguillidae). *Herpetologica*. 71: 8–11. DOI: 10.1655/Herpetologica-D-14-00033
- Telemeco, R.S.** and E.A. Addis. 2014. Temperature has species-specific effects on corticosterone in alligator lizards. *General and Comparative Endocrinology* 206: 184-192. DOI: 10.1016/j.ygcen.2014.07.004

- Telemeco, R.S.** 2014. Immobile and mobile life-history stages have different thermal physiologies in a lizard. *Physiological and Biochemical Zoology* 87: 203–215. DOI: 10.1086/674959
- Telemeco, R.S.**, K.C. Abbott, and F.J. Janzen. 2013. Modeling the effects of climate-change induced shifts in reproductive phenology on temperature-dependent traits. *American Naturalist* 181: 637–648. DOI: 10.1086/670051
- Telemeco, R.S.**, D.A. Warner, M.K. Reida, and F.J. Janzen. 2013. Extreme developmental temperatures result in morphological abnormalities in painted turtles (*Chrysemys picta*): A climate change perspective. *Integrative Zoology* 8: 198–209. DOI: 10.1111/1749-4877.12019
- Warner, D.A., M.A. Moody*, **R.S. Telemeco**, and J.J. Kolbe. 2012. Egg environments have large effects on embryonic development, but have minimal consequences for hatchling phenotypes in an invasive lizard. *Biological Journal of the Linnean Society* 105: 25–41.
- Warner, D.A., M.A. Moody*, and **R.S. Telemeco**. 2011. Is water uptake by reptilian eggs regulated by physiological processes of embryos or a passive response to developmental environments? *Comparative Biochemistry and Physiology A* 160: 421–425. DOI: 10.1016/j.cbpa.2011.07.013
- Telemeco, R.S.**, T.A. Baird, R. Shine. 2011. Tail waving in a lizard (*Bassiana duperreyi*) functions to deflect attacks rather than as a pursuit-deterrent signal. *Animal Behaviour* 82: 369–375. DOI: 10.1016/j.anbehav.2011.05.014
- Telemeco, R.S.** and T.A. Baird. 2011. Capital energy fuels production of multiple clutches whereas income energy fuels growth in collared lizards (*Crotaphytus collaris*). *Oikos* 120: 915–921. DOI: 10.1111/j.1600-0706.2010.18809.x
- Telemeco, R.S.**, R. Radder, R. Shine, and T.A. Baird. 2010. Thermal effects on reptile reproduction: Adaptation and acclimation in a montane lizard. *Biological Journal of the Linnean Society*. 100: 642–655.
- Telemeco, R.S.**, M.J. Elphick, and R. Shine. 2009. Nesting lizards (*Bassiana duperreyi*) compensate partly, but not completely, for climate change. *Ecology*. 90: 17–22.

‡: equal contributions, * undergraduate mentee
 PDF reprints can be accessed at telemecolab.org/publications-reprints

MANUSCRIPTS IN REVISION, REVIEW, OR PREPARATION

- Smith, J.M., **R.S. Telemeco**, B.A. Briones Ortiz, C.R. Nufio, and L.B. Buckley. (In Revision). High elevation populations of montane grasshoppers exhibit greater developmental plasticity in response to seasonal cues. *Frontiers in Physiology*.
- Leibold, D.C.‡, J.A. Gastelum*, J.M. VandenBrooks, and **R.S. Telemeco**. (In Revision). Oxygen environment and metabolic oxygen demand predictably interact to affect thermal behavior in lizards, *Sceloporus occidentalis*. *Journal of Experimental Zoology A*.
- Telemeco, R.S.**‡, E.J. Gangloff‡, G.A. Cordero, E. Rodgers, and F. Aubret. (In Preparation, available upon request). From performance curves to performance surfaces: Interactive effects of temperature and oxygen availability on aerobic and anaerobic performance in the lizard *Podarcis muralis*. Planned submission to *Proceedings of the Royal Society B* in Fall 2021.
- Heredia, I.E.* , R.M. Warnert*, J.A. Gastelum*, E. Madrigal*, Y. Mordvinov, N.A. Pirogova*, V. Salcedo*, N. Xiong*, and **R.S. Telemeco**. (In Preparation, available upon request). Frugivorous lizards

(Crested Gecko, *Correlophus ciliatus*) avoid but can process ethanol in their diet. Planned submission to *Journal of Experimental Zoology A* Spring 2022.

Leibold, D.C.[‡], V. Valencia*, E.J. Gangloff, and **R.S. Telemeco**. (In Preparation, available upon request). Metabolic recovery from exertion depends on the form of perturbation in lizards. Planned submission to *Journal of Experimental Biology* Winter 2021-2022.

Underhill, D.*, N. Putnam*, V. Valencia*, T.A. Van Laar, and **R.S. Telemeco**. (In Preparation, available upon request). Effects of early-life exposure to adult feces and natural substrate on the survival, phenotype, and gut microbiome of Western Fence Lizards. Planned submission to *Proceedings of the Royal Society B* Winter 2021-2022.

Telemeco, R.S., B. Lavin, and C.R. Feldman (In Preparation, available upon request) Local adaptation and speciation in alligator lizards: An integrative analysis combining morphological, ecological, and molecular evidence. Planned submission to *Ecology and Evolution* Summer 2022.

[‡]equal contributions, * undergraduate mentee, [‡] MS student

FELLOWSHIPS AND GRANTS AWARDED

\$1.4M (\$402,334 for Fresno State subaward) – California Learning Lab Grand Challenge (Co-PI)	2021–2024
\$799,295 – US BoR and USFWS Central Valley Project Improvement Act Habitat Restoration Program Grant (Co-Proposal Proponent and primary author)	2021–2022
\$110,000 – EPA Science to Achieve Results (STAR) Fellowship	2010–2014
\$32,000 – NSF GK-12 Fellowship	2013–2014
\$27,000 – ISU Ecology and Evolutionary Biology Fellowship	2009
\$22,000 – Fulbright Post-graduate Scholar to Australia	2007
\$15,000 – ISU Miller Fellowship	2009–2011
\$14,498 – Fresno Chaffee Zoo Wildlife Conservation Fund Grant	2019
\$8,000 – UCO Research Assistantship	2008
\$5,000 – TULIP Labex Visiting Scientist	2019
\$3,867 – Company of Biologists Scientific Meeting Grant	2019
\$1,500 – CSUPERB COVID19 Recovery Grant	2020
\$1,000 – Chicago Herpetological Society Research Grant	2010
\$800 – Sigma Xi Grant in Aid of Research	2010
\$500 ea. – ISU EEOB Graduate Student Research Grant	2009, 2011
\$150 – UCO College of Math and Science Book Grant	2008
\$75 – Soc. for Study of Amphib. and Rept. of New Zealand Student Travel Grant	2009

GRANT PROPOSALS UNDER CONSIDERATION

Telemeco, R.S. *Repatriation and preservation of Blunt-nosed Leopard Lizards (*Gambelia sila*) in the Panoche Hills, CA.* US Bureau of Land Management Threatened and Endangered Species Program. Submitted 4 June 2021. Budget = \$299,693 over three years.

Telemeco, R.S., E.J. Gangoff, and J. Eme. *Collaborative Research: RUI: IEP: Temperature-oxygen performance surfaces (TOPS): Testing a predictive framework for performance limits across phylogeny and topography.* National Science Foundation IOS. Submitted 15 Mar 2021. Total budget across three universities = \$1,889,250. Fresno State budget = \$755,591

TECHNICAL SKILLS

Computer programming (proficient in R, functional in Bash, beginner in Python), Statistical analyses (primarily use R; specialize in mixed-models and multivariate statistics), Simulation modeling (primarily use R), Biophysical modeling (R), Species-distribution modeling (R), GIS (R, DIVA GIS, and ArcGIS), Metabolomic analysis (GC-MS), Respirometry (Sable systems), Geometric morphometrics (R and TPS software), Endocrine analyses (EIA and RIA), Standard molecular techniques (DNA and RNA extraction, amplification, quality control, etc.), Functional Genomics pipelines (RNAseq, Transcriptomics), Thermal physiology experiments, Reptile research (collection, husbandry, incubation, development, anatomy, etc.).

INVITED PRESENTATIONS

USFWS Blunt-nosed Leopard Lizard Virtual Symposium	Aug 2021
Plenary at California HerpFest (Scientific meeting of CA Herpetologists)	Feb 2020
Symposium at 9 th World Congress of Herpetology, Dunedin, NZ	Jan 2020
Department of Biology Seminar, University of Nevada, Reno	Sep 2019
CNRS Station d'Ecologie Théorique et Expérimentale, Moulis, France	Jun 2019
Université de Toulouse, Toulouse, France, TULIP Labex Seminar Series	Jun 2019
California State University, San Marcos, Department of Biology	Mar 2019
Iowa State University, Ecology and Evolutionary Biology Seminar Series	Mar 2017
California State University, Fresno, Department of Biology	Dec 2016
University of Scranton, Department of Biology	Nov 2016
Pennsylvania State University, Department of Biology	Sep 2016
University of Memphis, Department of Biology	Feb 2016
University of Washington, Department of Biology Postdoctoral Symposium	Feb 2015
University of Washington, Department of Biology	Feb 2014
University of Central Oklahoma, College of Mathematics and Science	Apr 2013

CONFERENCE PRESENTATIONS

9 th World Congress of Herpetology. Oral	2020
Joint Meeting of Ichthyologists and Herpetologists. Oral and Poster	2008,'11,'15,'18-19
Society of Integrative and Comparative Biology Annual Meeting. Oral	2013–2018
University of Washington, Biology Department Annual Meeting. Oral	2014, 2015
Ecological Society of America Annual Meeting. Oral	2013

7th World Congress of Herpetology. Oral	2012
EPA Fellowship Conference. Poster	2011
Midwest Ecology and Evolution Annual Conference. Oral	2010
Southwestern Association of Naturalists Annual Meeting. Oral	2007, 2009
Second Meeting of the Australasian Societies of Herpetology. Oral	2009
Oklahoma Research Day. Poster	2007, 2008
Oklahoma Academy of Science Technical Meeting. Oral	2006

TEACHING

CALIFORNIA STATE UNIVERSITY, FRESNO, CA, USA

- **BIOL 101:** General Ecology Lecture and Laboratory.
 - Instructor of Record: Spring, Fall 2018; Spring, Summer, Fall 2020; Spring, Summer, Fall 2021
 - 6595 students/semester
 - Taught lecture sections, taught lab Summer 2020, managed remaining lab sections.
 - Course re-design
- **BIOL 180:** Biology Colloquium
 - Instructor of Record: Spring 2020
 - Organized off- and on-campus presenters to expose students to a diversity of new science and scientific concepts. Additionally, organized meetings for the presenters, including a pizza lunch with students.
- **BIOL 189T and BIOL 260T:** Introduction to Computing for Biologists.
 - Fall 2019, 2020, and 2021
 - Designed and implemented the course for undergraduate and graduate students
 - Introduce students to common open-source tools including R and shell/bash scripting. Also introduce students to interacting with remote super computers.
- **BIOL 189T:** Physiological Ecology of Animals.
 - Instructor of Record Spring 2019
 - Designed the course
 - Lecture and Lab. Lab is a Course-based Undergraduate Research Experience (CURE) where students design, implement, and present on publication-worthy experiments.

UNIVERSITY OF WASHINGTON, Seattle, WA, USA

- Guest lecturer for **BIO 421:** Ecological and Evolutionary Physiology. Prepared and gave 2 active-learning lectures on Thermal Ecology and Stress Ecophysiology

IOWA STATE UNIVERSITY, Ames, IA, USA

- **HON 321N:** Origin of a Theory: A Guided Tour of Charles Darwin's *On the Origin of Species*, Fall 2012 (Co-created and taught this seminar course for undergraduates with M. Karnatz)
- **HON 322Q:** Life is Plastic, It's Fantastic!, Spring 2012 (Co-created and taught this seminar course for undergraduates with M. Karnatz)
- **BIO 312L:** Ecology Laboratory, Summer 2010

HERBERT HOOVER HIGH SCHOOL, Des Moines, IA, USA

- **Resident Scientist:** (2013–2014) Developed and taught weekly lessons for Earth Science (3 sections) and Botany/Zoology (2 sections). Assisted with AP Environ. Science (1 section). Component of the GK-12 Fellowship

UNIVERSITY OF CENTRAL OKLAHOMA, Edmond, OK, USA

- **Upward Bound Biology:** (Instructor), 2009
- **BIO 1204L:** Gen. Biology Laboratory (taught 3 sections and assisted with 2), 2008-2009
- **BIO 1404/1404L:** Animal Biology (Supplemental Instructor for Lecture and Lab) 2005–2006

PROFESSIONAL SERVICE

EDITORIAL SERVICE

- Editorial Board Member: *Journal of Experimental Zoology A* (Feb 2019 – Present)
- Associate Editor: *Journal of Experimental Zoology A* (Feb 2019 – Dec 2020)

PEER REVIEWS

- **Journals:** *American Naturalist* (3), *African Journal of Herpetology* (2), *Biological Journal of the Linnean Society* (3), *Biology Letters* (5), *Climatic Change* (2), *Conservation Physiology, Ecology and Evolution*, *Ecological Monographs* (2), *Evolution* (2), *Global Change Biology*, *Herpetologica*, *Herpetological Review*, *Integrative and Comparative Biology*, *Integrative Zoology* (2), *Journal of Experimental Biology*, *Journal of Experimental Zoology A* (6), *Journal of Herpetology* (4), *Journal of Thermal Biology* (7), *Methods in Ecology and Evolution*, *Molecular Ecology*, *Nature Communications* (3), *Oecologia* (2), *Physiological and Biochemical Zoology* (2), *PLoS ONE* (3), *Science Advances*, *Scientific Data*
- **Ad hoc NSF reviews:** OPUS, DEB CAREER, IOS CAREER

UNIVERSITY SERVICE

California State University, Fresno

- UNIVERSITY COMMITTEES
 - Institutional Animal Care and Use Committee (IACUC). (Member: 2018-present, **Chair:** FA 2019-present)
 - University Task Force on Climate Action for Fresno State. Representative from the College of Science and Mathematics (FA2020-present).
- COLLEGE COMMITTEES: International (2018-present)
- DEPARTMENT COMMITTEES: Staffing and Scheduling (FA 2018-SP 2020), Retreat (FA 2018-FA 2019), Ad Hoc IRB (2018), Graduate/Research (SP 2019-Present), Safety (FA 2020 - Present).

Auburn University

- AUBURN INSciTE: Cofounded this program to help facilitate informal science education

University of Washington

- DEPARTMENTAL COMMITTEES: Search Committee postdoctoral member (full-time physiology lecturer, Spring 2015), Research Committee postdoctoral member (2015-2016 academic year).

Iowa State University

- DEPARTMENTAL GRADUATE STUDENT ORGANIZATION: President (May2012–May2013), Curriculum Committee Chair (Aug 2011–May2012), Social/Outreach Committee Chair (Aug 2010–July 2011).
- MIDWEST ECOLOGY & EVOLUTION CONFERENCE: Committee Member (2009–2010). The committee organized and ran the 2010 MEEC Conference hosted at ISU.

SOCIETY SERVICE

- SYMPOSIUM CO-ORGANIZER: “**Beyond CT_{MAX} and CT_{MIN} : Advances Studying the Thermal Ecology of Reptiles and Amphibians**” 9th World Congress of Herpetology, Dunedin, NZ. Jan 2020
- SESSION MODERATOR:
 - Society of Integrative and Comparative Biology Annual Meeting (2013, 2014, 2016)
 - 7th World Congress of Herpetology (2012)
 - Midwest Ecology and Evolution Conference (2010)
- STUDENT AWARDS JUDGE
 - Society for Integrative and Comparative Biology Annual Meeting (2020)
 - Society for the Study of Amphibians and Reptiles (2019)
- βββ NATIONAL BIOLOGICAL HONOR SOCIETY: President ΨM Chapter (2005–2006), Secretary ΨM Chapter (2006–2007).

STUDENTS MENTORED

Graduate Students:

ADVISEES: D. Leibold (MS Bio), C. Thao (MS Bio), K. Alkhalifah (MS Bio), A. Lyu (MS Bio), T. Combs (MS Biotech), S. Doria-Kelly (MS Bio)

ON COMMITTEE: J. Chung (MS Bio), T. Montenegro (MS Bio), S. Moshier (MS Bio), R. Morrow (MS Bio), S. Saini (MS BioTech), N. Sayavong (MS Bio), R. Hang (MS Bio), K. Helwick (MS Bio), S. Weaver (MS Bio Cal Poly SLO), D. Simpson (PhD Bio Auburn)

Undergraduate Students:

California State University, Fresno: A. Alexander, A. Aparicio Ramirez^{◊*}, Z. Attia[◊], T. Combs, J. Connolly[◊], K. Gangbin, J. Gastellum[◊], C. Gomez[◊], S. Gonzalez, G. Hussin, N. Kanwar, H. McMills, K. Melikyan, S. Menyhay[◊], D. Mitchell, J. Parrilla, K. Perez^{◊*}, K. Pinto, N. Pirogova[◊], S. Puente, N. Putnam[◊], K. Ramirez^{◊Δ}, J. Solorzano, G. Trejo Aceves[◊], A. Ulloa, D. Underhill[◊], V. Valencia[◊]

University of Washington/Arizona State: A. Arakaki, K. Arshid, K. Bliven, B. Briones Ortiz[◊], K. Brown, J. Bunes, G. Burgin, B. Fletcher^{◊*}, R. Howard, R. Jayyusi, K. Jones, K. Krieger, A. Riley^{◊*}, C. Rotteger, J. Ruff, Y. Rodriguez-Sanchez^{◊*}, A. Savala, L. Semanik, C. Smith^{◊*}, C. Teague^{◊*}, O. Van Vianen, A. Waters^{◊*}

Iowa State University: M. Barazowski, B. Bodensteiner, A. Brouillette, M. Moody*, T. Hermes, E. Hernandez, J. Reneker

[◊] independent research experience, * mentoring resulted in publication(s), ^ΔRISE fellow

INFORMAL TEACHING AND OUTREACH

***Science: A Candle in the Dark-* Radio show on 88.1 KFCF Fresno**

Co-host and producer of a monthly radio program about Science in California's Central Valley (SP 2018 - Present)

Central Valley Café Scientifique, Fresno, CA

- Co-organize with other faculty/staff at California State University, Fresno (2018 - Present)
- Presented Feb 2018: "To hot ta trot: What breaks when animals get too hot"

Pacific Science Center, Seattle, WA

- Portal to the Public Science Communication Fellow (November 2014–August 2016)
- "Science and a Movie: Anaconda" led a public discussion and viewing of the movie, "Anaconda" at Seattle's Central Cinema (June 2016, 2 nights)
- "Meet a Scientist" one on one interaction with visitors (Feb 2016)
- "Scientist on a Stage" program (Feb 2016)
- Assisted with Portal to the Public training (Feb 2016)
- *Grossology* expert (answer the public's questions about human physiology, Fall 2015)
- Science Café (Feb. 2015) "How do animals respond to global change and will it be good enough?" evening program for adults on the ways in which animals respond to global change.

Reading/Discussion Groups that I organized for students

- Spring 2018-Present Fresno State: TREE Lab reading group on Evolutionary Ecology and Physiology.
- Fall 2015 UW: Levins 1968 *Evolution in Changing Environments: Some Theoretical Explorations*
- Winter and Spring 2015 UW: Flatt and Heyland 2012 *Mechanisms of Life History Evolution*
- Spring 2014 ISU: West-Eberhard 2003 *Developmental Plasticity and Evolution*
- Fall 2014 ISU: Coyne and Orr 2004 *Speciation*
- Spring and Summer 2014 ISU: Roff 1993 *Evolution of Life Histories: Theory and Analysis*

Clubes de Ciencia, Mexico, Merida, Yucatan, MX

- Created and led a 1-wk immersive, experiential-learning science "camp" for Mexican undergraduate students entitled "Leapin' Lizards: Cold-blooded Animals in a Warming World" (July 2015)
- Students designed and implemented 3 experiments relating to thermal biology and behavior over the course of the camp and presented their results as posters for the Clubes de Ciencia symposium

Phoenix Comicon 2015: Science Panelist, Phoenix, AZ

- Sat on two science-education panels for the public in May 2015: "Disasters and Adventures in Science" and "Safe Alien Sex." Each panel was attended by 300+ people.

Science Center of Iowa, Des Moines, IA

- Animal Kingdom Summer Camp presentation on snake biology for children (July 2013)
- Café Scientifique (March 2013) "Hot Chicks and Cool Dudes, When Sex is More than X and Y" evening program for adults on sex-determination mechanisms and their biological implications in our changing world.

Oklahoma City Zoo and Botanical Gardens, Oklahoma City, OK

- Education Staff/Snooze Leader (2003–2007). Led overnight programs for all ages, and gave public seminars

Our Lady of Guadalupe Summer Camp, Wellston, OK

- Camp Counselor & OLOG Zoo Curator (2002–2006). Supervised, taught, and counseled children from 4th–12th grades, maintained a small collection of animals for educational use.

Additional Outreach Activities

- Sierra Vista Elementary field trip to Fresno State. May 2018. Created animal-based activities.
- Huron Elementary School Career Day, Huron, CA. April 2018: Spent the day interacting with elementary school students and teaching them about science careers.
- Symbi Science Days, Brody and Harding Middle Schools, Des Moines, IA, USA (April 2013 and 2014). Developed hands-on activities/presentations about natural selection for >400 students over 2 days.
- St. Cecilia Elementary School, Ames, IA, USA. September 2012. Co-led a workshop on the biology of reptiles
- Des Moines Central Campus High School, Biotechnology Course. September 2011. Co-led a series of seminars on the biological applications of biotechnology tools
- Agricultural Leadership Camp, Iowa State University, Ames, IA, USA. September 2010 and 2011. Presented seminars on conservation and agricultural impacts on biota
- Science Bound, Iowa State University, Oct 2009, Seminar on turtle biology for high school students

PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science (AAAS), Herpetologists League (HL), Society for Integrative and Comparative Biology (SICB), Society for the Study of Evolution (SSE), Society for the Study of Amphibians and Reptiles (SSAR), **ΒΒΒ** National Biological Honor Society (Tri-Beta), The National Scholars Honor Society, **AX** Academic Honor Society

MEDIA COVERAGE

RADIO

- KFCF's Science: A Candle In the Dark (Guest: Feb. 2018, Jan. 2019, CoHost (SP2019-Present))
- National Public Radio's "Science Friday" (Aug. 2017) Discussed thermoregulatory mechanisms in animals. <<https://www.sciencefriday.com/segments/panting-perspiration-and-puddles/>>
- Iowa Public Radio's "River to River" (Feb. 2013) Discussed sex-determination mechanisms and their biological implications in our changing world.
<http://news.iowapublicradio.org/post/climate-changes-effect-animal-reproduction>
- Public Radio International's "Living on Earth" (May 2013) discussed the results of Telemeco et al. 2013. *Am Nat.* 181: 637–648.
<<http://www.loc.org/shows/segments.html?programID=13-P13-00019&segmentID=5>>

PRINT

- "The Washington Post" (Jan 2018) Interviewed for insight on the effects of climate change on turtle populations. <https://www.washingtonpost.com/news/speaking-of-science/wp/2018/01/08/climate-change-is-turning-99-percent-of-these-baby-sea-turtles-female/?noredirect=on&utm_term=.1c1378c06f00>
- "New Scientist" Issue 2916 (May 2013) Featured Telemeco et al. 2013. *Am Nat* 181: 637–648 <<http://www.newscientist.com/article/dn23486-painted-turtles-set-to-become-allfemale.html>>
- "Huffington Post" (May 2013) featured Telemeco et al. 2013. *Am Nat* 181: 637–648. <http://www.huffingtonpost.com/2013/05/07/sex-of-turtles-changing-female-climate-change_n_3224368.html>