

Thornton R. Larson

CURRICULUM VITAE

Assistant Professor of Biology, Sul Ross State University, Phone:
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Education

Ph.D. (Quantitative Biology) Focus: Biogeography, Genetics, Evolution	2021	The University of Texas at Arlington Advisor: Dr. Eric Smith
M.S. (Biological Science) Focus: Phylogenetics, Biogeography	2015	The University of Texas at El Paso Advisor: Dr. Eli Greenbaum
B.S. (Biology)	2011	Northland College
A.A. (Biology)	2006	William Rainey Harper College

Professional History

2022 – present	Assistant Professor , Sul Ross State University 4409 Mammalogy 4301 Cell Biology 5307 Biogeography
2020 – 2021	Adjunct Instructor , Tarrant County College. 1406 Majors Biology I, lecture and lab 1409 Non-majors Biology II, lecture
2017 – 2021	Graduate Teaching Assistant , The University of Texas at Arlington 1442 Ecology and Evolution (5 semesters), 1333 Discovering Biology (1 Semester), 1334 Life on Earth (2 Semester) Supervisor: Heather Arterburn
2019	Graduate Research Assistant , The University of Texas at Arlington, Amphibian and Reptile Diversity Research Center Supervisors: Carl Franklin and Eric Smith
2016	Fulbright Student Researcher , Fulbright/AMINEF, Indonesia
2015	Graduate Teaching Assistant , The University of Texas at Arlington 1333 Discovering Biology (1 Semester) Supervisor: Rachel Wostl
2012 – 2015	Graduate Teaching Assistant , The University of Texas at El Paso Introduction to Biology (3 semesters), Organismal Biology (3 Semesters), Ecology (4 semesters) Supervisors: Horacio Gonzalez, Jennie McLaren, Elizabeth Walsh

Grants and Awards

2021	University of Texas at Arlington Phi Sigma Large Research Grant , University of Texas at Arlington Phi Sigma, \$1,000
2020	Graduate Student Research in Herpetology , Chicago Herpetological Society, \$1,000

2020	Michael Dee Conservation Grant , Herpetological Conservation International, \$1,200
2020	Grants-in-Aid of Research , SICB, \$1,000
2019	Charlotte Mangum Student Support Program , SICB, \$110
2019	Learning Community Award , the University of Texas at Arlington CIRTL, \$500
2015 – 2016	Critical Language Enhancement Award , Fulbright/AMINEF, \$7,500
2015 – 2016	Fulbright Student Researcher Award , Fulbright/AMINEF, \$19,700
2015	Graduate Incentive Grant , University of Texas at El Paso, \$5,000
2014	Travel Award , American Society of Ichthyologists and Herpetologists, \$300
2014	Graduate Travel Award , University of Texas at El Paso, \$1,000
2014	Study Abroad Travel Award , University of Texas at El Paso, \$1,300

Mentoring

Spring 2020	Sambriddhi Ghimire (UT–Arlington – Arlington, TX, USA) – Experimental design, DNA extraction.
2017 – 2018	Mayeda Shafique (UT–Arlington – Arlington, TX, USA) – Herpetofauna identification and meristic data collection.
2016	Alif Rizky Utama (Universitas Mulawarman – Samarinda, Kalimantan Timur, Indonesia) – Survey and collection techniques, herpetofauna species preparation, taxonomic identification, and shipment of specimens.
2016	Indrah Hadiyana (ECOSITROP – Samarinda, Kalimantan Timur, Indonesia) – Survey and collection techniques, herpetofauna species preparation, taxonomic identification and digitization techniques (photography).
2016	Joko Ready (Universitas Mulawarman – Samarinda, Kalimantan Timur, Indonesia) – Survey and collection techniques, herpetofauna species preparation and taxonomic identification.
2016	Iis Wahyudi (Universitas Mulawarman – Samarinda, Kalimantan Timur, Indonesia) – Survey and collection techniques.
2014 – 2015	Samantha Stuart (UT–El Paso – El Paso, TX, USA) – Molecular techniques (tissue extraction, PCR, electrophoresis) and phylogenetic identification.
2014 – 2015	Waleeja Rashid (UT–El Paso – El Paso, TX, USA) – Molecular techniques (tissue extraction, PCR, electrophoresis) and phylogenetic identification.

Service and Community Outreach

2019 – 2021	Judge , Dallas Regional Science and Engineering Fair. - I judged 9 th through 12 th -grade science projects to assist the promotion of science in the Dallas region.
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- 2020 **Article Reviewer**, Herpetological Monographs.
- 2019 **Volunteer**, Boy Scouts of America Summer Camp Napowan.
- I ran the Webelos program and ran some aspects of the Shooting Sports Program.
- 2018 **Alumni Volunteer**, Fulbright Enrichment Seminar, “Big Data for the Public Good: Innovations in Civic Engagement.” Philadelphia, PA
- 2017 **Article Reviewer**, PLOS ONE.
- 2016 **Selection Committee Member**, Fulbright/AMINEF.
- I evaluated finalists for the Fulbright program for Indonesian students to the United States.
- 2013 – 2015 **Volunteer**, El Paso Zoo.
- I assisted in education programs and the commissary preparing animal diets.
- 2013 – 2015 **Big Brother**, Big Brother and Big Sister of El Paso.
- I mentored a youth in the community, helped him discover new things, and provided confidence building, educational development and emotional support.
- 2014 **Judge**, Sun County Science Fair.
- I judged science projects by students to help further their development in science.
- 2013 **Judge**, Wiggs Middle School.
- I judged 6th-grade through 8th-grade science projects to assist the promotion of science from UTEP.
- 2013 **Judge**, Ascarate Elementary School.
- I judged 3rd-grade through 6th-grade science projects to assist the promotion of science from UTEP.

Publications

- Larson TR**, Fernino TJ, Hamidy A, Kurniawan N, Fujita MK, Smith EN. (in prep). Phylogeny of the *Limnonectes kuhlii* complex on the islands of Indonesia reveals just as many known species as unknown species. Target journal: *Molecular Phylogenetics and Evolution* or *Biological journal of the Linnean Society*
- Larson TR**, Fernino TJ, Hamidy A, Kurniawan N, Fujita MK, Smith EN. (in prep). Widespread and limited distribution of closely related frog groups suggests periods for dispersal and isolation in Indonesia’s Major Sunda Islands. Target journal: *Journal of Biogeography* or *Molecular Ecology*
- Larson TR**, Hadiyana I, Rayadin Y, Hamidy A, Kurniawan N, Smith EN. (in prep). Amphibian species survey of urban secondary protected forest in Samarinda, Kalimantan Timur, Indonesia. Target Journal: *Herpetological Review*
- Larson TR**, Jacobs JL, Hamidy A, Kurniawan N, Smith EN. (in prep). Sexual selection leads to stronger morphological divergence in males of closely related cryptic frog species. Target journal: *Herpetologica* or *Frontiers in Ecology and Evolution*

- Sarker GC, **Larson TR**, Wostl E, Thammachoti P, Hamidy A, Kurniawan N, Smith EN. (submitted) Phylogeny of the giant river toads (Bufonidae: *Phrynoidis*) of Southeast Asia reveals a new species from Sumatra, Indonesia. **Zootaxa**.
- O’Connell KA, Hall A, **Larson TR**, Hamidy A, Kurniawan N, Fujita MK, Smith EN. (in review). Description of a new species of parachuting frog (Rhacophoridae: *Rhacophorus*) from northern Sumatra using micro-computed tomography.
- Harvey MB, **Larson TR**, Jacobs JL, Shaney K, Streicher JW, Hamidy A, Kurniawan N, Smith E. 2020. “*Phoxophrys* after 59 years: review of morphology, phylogeny, status of *Pelturagonia*, and a new species from Southeastern Kalimantan. **Herpetological Monographs**, 33: 71–107.
- Larson TR**, Castro D, Behangana M, Greenbaum E. 2016. Evolutionary history of the river frog genus *Amietia* (Anura: Pyxicephalidae) reveals extensive diversification in Central African highlands. **Molecular Phylogenetics and Evolution**. 99: 168–181.

Professional Presentations

- 2021 **Larson TR**, Kiny PB, Jacobs JL, Hamidy A, Kurniawan N, Smith EN. Intrasexual selection drives sexual dimorphism in the skull in males of closely related species within the *Limnonectes kuhlii* complex, 2021 Kansas Herpetological Society Meeting, Pittsburg, KS.
- 2021 **Larson TR**, Firreno TJ, Hamidy A, Kurniawan N, Fujita M, Smith EN. Systematics of the cryptic frog complex *Limnonectes kuhlii* (Anura: Dicroglossidae) from volcanic regions of Java and Sumatra, 2021 Joint Meetings of Ichthyologists and Herpetologists, Phoenix, AZ.
- 2019 **Larson TR**. Guest lecturer for Ecology and Evolution at the University of Texas at Arlington. Course and slides prepared by Dr. Eric Smith (2 lectures)
- 2017 **Larson TR**. Amphibian and reptile survey of Kalimantan Timur. Presentation to The University of Texas at Arlington Biology Department Retreat 2017, Tyler, TX.
- 2016 **Larson TR**. Amphibian and reptile survey of Kalimantan Timur. Presentation to American-Indonesian Exchange Foundation, Jakarta, Indonesia
- 2016 **Larson TR**. Brief discussion of Herpetology. Guest lecture for Ecology at Universitas Mulawarman, Samarinda, Kalimantan Timur, Indonesia. Prepared by Larson, T. (2 classes)
- 2016 **Larson TR**. Moderator for Biodiversity Parallel Session. 2016 Midyear Enrichment Conference for US Fulbright Scholars in Southeast Asia: Issues in

Southeast Asian Studies: Society, Environment and Culture, Jakarta, Indonesia

- 2014 **Larson TR.** Guest lecture for Genetics at the University of Texas at El Paso. Course and slides prepared by Dr. Eli Greenbaum
- 2014 **Larson TR,** Greenbaum E, Castro D. 2014. Systematics of the African river frog genus *Amietia* (Anura: Pyxicephalidae) in eastern Democratic Republic of the Congo. 2014 Joint Meetings of Ichthyologists and Herpetologists, Chattanooga, TN
- 2013 **Larson TR,** Greenbaum E. 2013. Genetic diversity of the African river frog genus *Amietia* (Anura: Pyxicephalidae) in eastern Democratic Republic of the Congo. 2013 Graduate Research Expo. Volume El Paso, TX

Poster Presentations

- 2021 **Larson TR,** Kiny PB, Jacobs JL, Hamidy A, Kurniawan N, Smith EN. Intrasexual selection drives differences in male skull morphology of closely related species within the *Limnonectes kuhlii* complex (Anura: Dicroglossidae), 2021 Joint Meetings of Ichthyologists and Herpetologists, Phoenix, AZ.
- 2020 **Larson TR,** Jacobs JL, Smith EN. Sexual dimorphism in the fanged-frog genus *Limnonectes* (Anura: Dicroglossidae): skull differences between males and females, 2020 The Society for Integrative & Comparative Biology Annual Meeting, Austin, TX.
- 2019 **Larson TR,** JL Jacobs, Smith EN. Sexual dimorphism of the skull in the fanged-frog genus *Limnonectes* (Anura: Dicroglossidae), 2019 Kansas Herpetological Society Annual Meeting, Hays, KS.
- 2016 **Larson TR.** Amphibian and reptile survey in Kalimantan, 2016 Midyear Enrichment Conference for US Fulbright Scholars in Southeast Asia: Issues in Southeast Asian Studies: Society, Environment and Culture, Jakarta, Indonesia
- 2014 Stewart S, **Larson TR,** Greenbaum E. "Systematics of the genus *Lygodactylus* from Democratic Republic of the Congo." 4th Annual COURI Symposium, Spring 2014. University of Texas at El Paso, El Paso, TX
- 2014 **Larson TR,** Lukefahr WD, Franco GR, Johnson J. Demographics of two species of whiptail lizards, *Aspidocelis marmorata* and *Aspidocelis tessellata* (Teiidae) from 2010 to 2013 at Indio Mountains Research Station in Hudspeth County, Texas. 61st Annual Meeting of Southwestern Association of Naturalists, Oklahoma State University, Stillwater, OK
- 2013 **Larson TR,** Greenbaum E, Castro D. Systematics of the African Frog Genus *Amietia* (Anura: Pyxicephalidae) in eastern Democratic Republic of the

Congo. 2013 Joint Meetings of Ichthyologists and Herpetologists, Albuquerque, NM

Workshops

2019 **Larson, T.** Undergraduate Misconceptions in Biology, 2019 CIRT Learning Community. Weekly meetings to discuss undergraduate education in STEM. September-November. Meeting Leader

Field Experience

2018 – 2019 **United States**, Lithobates tadpole collection across Dallas/Fort Worth, TX area for diet comparisons across an urban landscape.

2017 **United States**, Photographic collection of amphibian and reptile species at Camp Napowan, Wildrose, Wisconsin. Included education of Boy Scouts in proper capture techniques and good photography practices.

2016 **Indonesia**, Amphibian and Reptile collections across Kalimantan Timur and one site in Yogyakarta. Included formalin fixation, permitting, mentoring of students, collection of specimens, and tissue sampling.

2016 **Malaysia**, Short photographic survey of frogs of Lambir Hills National Park, Sarawak, Malaysia.

2014 **Indonesia**, Fieldwork was conducted at different secondary forest sites in East Kalimantan, Indonesia. Fieldwork included photography of frogs and lizards and assisting communities in sustainable farming and water filtration and purification.

2013 **United States**, Fieldwork conducted at different Chihuahuan desert sites. Included the collection of lizards and snakes for lab of Dr. Jerry Johnson.

2010 **United States**, field note collection of species of the Red River Gorge, KY.

Computer Skills

GIS software (ARC-GIS, QGIS, Google Earth)

Coding languages (Python, R, Bash)

Adobe Suite (specifically Illustrator, Photoshop, Lightroom, Audition, Premiere, Acrobat)

Microsoft Office Suite (including Access)

ImageJ

Meshmixer

Meshlab

Stratovan Checkpoint

YouTube video recording and uploading

Professional Associations

Herpetologists' League
Society for the Study of Amphibians and Reptiles
American Society of Ichthyologists and Herpetologists
American Society of Naturalists
Society for Integrative and Comparative Biology
Southwestern Association of Naturalists
Society of Systematic Biologists
Chicago Herpetological Society
Kansas Herpetological Society

Languages

English – fluent written and spoken
Bahasa Indonesia – moderately fluent written and spoken
Spanish – beginner written and spoken

References

Dr. Eric N. Smith

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Curator, Amphibian and Reptile Diversity Research Center
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Office: 817-272-3616

Dr. Eli Greenbaum

Professor, Department of Biological Sciences
Director, Biodiversity Collections
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Dr. Jonathan Campbell

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Former Director of UTA Herpetology Collection
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