Shanelle A. Wikramanayake

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Education

Colorado State University (CSU), Fort Collins Sep 2023 – expected May 2028
Graduate Degree Program in Ecology (GDPE) and Department of Biology, PhD PI: W. Chris Funk

California State University, Northridge (CSUN) Sep 2020 – June 2023
M.S., Biology with Distinction PI: Jeanne N. Robertson

University of Washington (UW), Seattle Sep 2016 – June 2020
B.S. Biology Research advisor: Adam D. Leaché

Publications

Davis, H. R., Nashriq, I., Woytek, K. S., **Wikramanayake, S. A**., Bauer, A. M., Karin, B. R., Brennan, I. G., Iskandar, D. T., Das, I. (2023). Genomic analysis of Bornean geckos (Gekkonidae: *Cyrtodactylus*) reveals need for updated Taxonomy. *Zoologica Scripta.* https://doi.org/10.1111/zsc.12575

Wikramanayake, S. A., (2022). [Review of *A Photographic Field Guide to the Amphibians of Sri Lanka*, by A. de Silva, K. Ukuwela, and D. Chathuranga]. *Herpetological review*, 53, 355– 356.

Wikramanayake, S. A., Wikramanayake, E. D., Pallewatta, N., & Leaché, A. D. (2021). Integration of genetic structure into conservation of an endangered, endemic lizard, *Ceratophora aspera*: A case study from Sri Lanka. *Biotropica*, 00, 1– 15. https://doi.org/10.1111/btp.12970

Wikramanayake, E. D, Fernando, S., Wickramaratne, C., Akbarally, Z., **Wikramanayake, S. A.** (2020) Sri Lankan Moist Forests Ecoregions: An imperiled Island Rainforest., *Earth Systems and Environmental Sciences.* https://doi.org/10.1016/B978-0-12-821139-7.00004-0

Wikramanyake, S. A., "*Bromeliohyla bromeliacia*: Bromeliad Tree Frog". *AmphibiaWeb*, University of California, Berkeley, CA, USA, http://amphibiaweb.org/species/745. Accessed 19 November 2020.

Research Grants

Roger Conant Grants in Herpetology, Society for the Study of Amphibians and Reptiles ($500) 2024
Integrating genetics into conservation planning of tropical lizards in an imperiled ecosystem

GDPE Research Grant, CSU, Fort Collins ($1500) 2024
Characterizing the thermal niches of tropical lizards facing climate change in an imperiled ecosystem for conservation

Exploration Fund Grant, The Explorers Club ($4,000) 2022
The effect of forest fragmentation and degradation on genetic structure of and connectivity among populations: Exploring a case study of four endemic island species in an imperilled rainforest ecosystem.

California State University, Northridge Graduate Thesis Support Grant ($600) 2020
Understanding the relative contributions of multiple modes of sexual signal to pre-mating isolation and lineage divergence.

Walter and Margaret Sargent Endowed Scholarship Fund, UW ($1600) 2019
Genetic structure of an endemic endangered agamid lizard from Sri Lanka (*Ceratophora aspera*) and its implications for conservation.

Mary Gates Research Scholarship, UW ($5000) 2018
A phylogeographic approach to conserving a rare and endangered Sri Lankan lizard.

Walter and Margaret Sargent Endowed Scholarship Fund, UW ($1500) 2018
A phylogeographic approach to conserving the endangered Sri Lankan Rough-nose horned lizard *(Ceratophora aspera).*

Honors and Awards

- Department of Biology Conference Travel Award, CSU, Fort Collins 2024
- Colorado State Graduate Fellowship, CSU, Fort Collins ($2000) 2023
- Inclusive Excellence Fellowship Award, CSU, Fort Collins 2023
- Nathan O. Freedman Memorial Award for Outstanding Graduate Student, CSUN ($3000) 2023
- Distinguished Thesis/Graduate Project Competition, CSUN ($1500) 2023
- International Graduate Student Award, CSUN ($700) 2022
- Robert H. Schiffman Memorial Award for Outstanding Research Promise, CSUN ($700) 2021
- California State University, Northridge Tuition Fee Waiver Sep 2020 – June 2023
- Dean's List, UW, Seattle 4 Quarters
- John and Dorothy Franco Award, UW, Seattle ($1400) 2020
  Best scientific paper submitted by an undergraduate involved in research

Professional Presentations

Wikramanayake, S. A., Espinoza, R. E., Funk, W. C., (2024). Persistence vs. extinction of tropical lizards in a changing world. CSU, Fort Collins Graduate Student Showcase. (*poster; **Top Scholars for University-Wide Graduate Programs 2nd place winner)***

Wikramanayake, S. A., Espinoza, R. E., Funk, W. C., (2024). Persistence vs. extinction in a warming, fragmenting world: Can Sri Lankan rainforest lizards cope?. 10th World Congress of Herpetology. (*poster*)

Wikramanayake, S. A., Pietti, A. D., Mendez, J., Hoke, K., Vega, A., Chan, L. M., Gompert, Z., Gray, D. A., Robertson, J. M., (2024). Investigating the role of premating behavioural reproductive isolation along a speciation continuum in a polymorphic neotropical treefrog, *Agalychnis callidryas*. Front Range Student Ecology Symposium (FRSES) 2024. (*Oral)*

Wikramanayake, S. A., Pascal, F.J., Hoke, K., Vega, A., Robertson, J. M., (2023). An integrative approach to elucidate the underlying mechanisms of speciation in a polymorphic neotropical treefrog, *Agalychnis callidryas.* Southern California Academy of Sciences Annual Meeting. (*Oral)*

Wikramanayake, S. A., Pascal, F.J., Hoke, K., Vega, A., Robertson, J. M., (2023). Investigating the neurological basis of speciation in a polymorphic neotropical treefrog, *Agalychnis callidryas*. CSUNposium. (*Oral; **1st place winner***)

Wikramanayake, S. A., Gompert, Z., Robertson, J. M., Chan, L. M., (2022) Using genetic simulation models to assess the effects of mate-choice and epistasis on speciation of divergent inter-specific populations. CSUNposium. (*Lightning talk*)

Wikramanayake, S. A., Pascal, F.J., Hoke, K., Vega, A., Robertson, J. M., (2021). The neural basis of premating isolation in the Red-eyed treefrog (*Agalychnis callidryas*). Annual Southwest Regional Meeting of Organismal Biologists. (*Oral*)

Wikramanayake, S. A., Pascal, F.J., Hoke, K., Vega, A., Robertson, J. M., (2021). The neural basis of premating isolation in the Red-eyed treefrog (*Agalychnis callidryas*). Joint Meeting of Ichthyologists and Herpetologists. (*Poster*)

Wikramanayake, S.A., Wikramanayake, E.D., Pallewatte, N., Leaché A.D. (2021). Integration of genetic structure into conservation of an endangered, endemic lizard, *Ceratophora aspera*: A case study from Sri Lanka. Virtual meeting of the Association for Tropical Biology and Conservation. (*Lightning talk)*

Wikramanayake, S. A., Pascal, F.J., Hoke, K., Vega, A., Robertson, J. M., (2021). The neurological basis of premating isolation in the Red-eyed treefrog (*Agalychnis callidryas*). CSUNposium. (*Poster; **2nd place winner***)

Wikramanayake, S.A., Wikramanayake, E.D., Pallewatte, N., Leaché A.D. (2020). Genetic Structure of an endemic endangered lizard from Sri Lanka (*Ceratophora aspera*) and its implications for conservation. Undergraduate Research Symposium, UW, Seattle, Washington. (*Poster)*

Wikramanayake, S.A., Wikramanayake, E.D., Pallewatte, N., Leaché A.D. (2019). A phylogeographic approach to conserving the endangered Sri Lankan Rough-nose horned lizard (*Ceratophora aspera*). Association for Tropical Biodiversity- Asia Pacific Chapter Meeting, Sri Lanka, 2019. (*Oral)*

Wikramanayake, S.A., Wikramanayake, E.D., Pallewatte, N., Leaché A.D. (2019). A phylogeographic approach to conserving the endangered Sri Lankan Rough-nose horned lizard (*Ceratophora aspera*). Undergraduate Research Symposium, UW, Seattle, Washington. *(Oral)*

Research Experience

Graduate Degree Program in Ecology (GDPE) and Department of Biology, CSU, Fort Collins
PI: W. Chris Funk Sep 2023 – present
Persistence vs. extinction in a warming, fragmented world: An integrative, conservation genomics approach using tropical island lizards.

Department of Biology, CSUN Sep 2020 – June 2023
PI: Jeanne M. Robertson
- Investigating the neurological basis of female mate-choice on speciation in a polymorphic tree frog *(Agalychnis callidryas).*
- A modeling approach to understanding the factors driving the speciation continuum.

Department of Biology, UW, Seattle 2017 – 2020
PI: Adam D. Leaché
Integration of genetic structure into conservation of an endangered, endemic lizard, *Ceratophora aspera*.

Burke Museum of Natural History and Culture, UW, Seattle, Washington 2019
Herpetology Collections Manager: Peter Miller
Identifying historical *Thamnophis* specimens to understand changes in distribution in the Pacific Northwest.

Biology Department/ School of Aquatic and Fishery Sciences, UW, Seattle 2018
Graduate Student: Christopher D. Wells
Quantifying morphometrics of cup corals *(Balanophyllia)* to assess environmental effects on growth.

Predator Ecology Lab, School of Environmental and Forest Sciences, UW, Seattle 2017
Graduate Student: Carolyn Shores
Analyzing camera trap data to understand predator-prey interactions in the Pacific Northwest.

Teaching and Outreach Experience

- **Guest lecturer, CSU, Fort Collins** 3rd Nov (Fall) 2024
  "*Human evolution"* lecture for Introduction to Evolution (BZ220)
- **Graduate Teaching Assistance (GTA), CSU, Fort Collins** Fall 2024
  Class: Introduction to Evolution (BZ220)
- **International Graduate GTA Excellence in Teaching certificate, CSU Fort Collins** Fall 2023
- **Graduate Associate, CSUN** Spring 2023
  Class: Molecular Markers in Evolutionary Studies and Lab (BIOL452/452L)
- **Teaching Associate, CSUN** 2020 – 2022
  Class: General Biology Lab for non-major students (BIOL 101L)
- **Hy-Flex Instructional Student Assistant, CSUN** 2021
  Assistance in Hy-Flex classroom setting
- **STEM Outreach, CSUN** 2020, 2022
  STEM related outreach activities for 2nd and 3rd grade students at the Multicultural Learning Center, Canoga Park, CA
- **Burke Museum of Natural History and Culture, UW, Seattle, Washington** 2019
  Collection and specimen preparation in herpetology department for public viewing
- **Peer Facilitator, UW, Seattle** 2018
  Class: Introductory Biology for Biology majors (BIOL 220)

Professional Work Experience

- **Graduate Assistant,** CSUN Spring 2023
  Classes: Herpetology (BIOL412)
- **Vivarium Technician** 2020 – 2022
  Animal care (mammals, fish, reptiles, and amphibians)
- **Curatorial Assistant, Burke Museum of Natural History and Culture, UW, Seattle, Washington**
  Organized herpetology collection 2019
- **Intern, Convention on Biological Diversity**, **Sri Lanka** 2018
  Data analysis
- **Intern, Environmental Foundation Limited**, **Colombo, Sri Lanka** 2017
  Project report and case study preparation for Protected Areas in Sri Lanka, by conducting site visits, literature searches and interviews.

Professional Service

- Treasurer, 31st Front Range Student Ecology Symposium (FRSES) 2025 2024
- Mentor, GDPE Mentor-Mentee program 2024
- Mentor, Global Women in Herpetology Mentorship program 2024
- Workshop co-lead, "*Introduction to vector graphics for scientific illustration*" for GDPE 2024
- Graduate student presentation and abstract judge, Multicultural Undergraduate Research Art and Leadership Symposium (MURALS), CSU, Fort Collins 2024
- Workshop organizer and day of volunteer, 30th FRSES 2024 2024
- Contributing Author, "*Women in Herpetology: 50 Stories from Around the World."* Edited by Umilaela Arifin, Itzue Wendolin Caviedes-Solis, Sinlan Poo 2023

- Member, ASIH Diversity, Equity, Inclusion, and Belonging committee 2022-2024
- Ad- hoc reviewer,
  - "Molecular Ecology" November 2024
  - "Reptiles & Amphibians" October 2022, March 2023
  - "Scientific Reports" November 2021
  - "Mitochondrial DNA Part B" May, July 2020
- Participant, Sri Lanka Reptile Red List Assessment September 2019
  - Provided data for listing species under IUCN Red List, compiles species accounts and contributed to "*The conservation action planning for the snakes and lizards of Sri Lanka*" report.
- Assistant, 18th Conference of the Parties to the Convention on International Trade in Endangered Species (CITES CoP18) August 2019
  - Provided data for the first listing of *Ceratophora aspera* (*Appendix II*) under CITES
- Member and contributor to iNaturalist (Handle: shanelle97)
  - Observations: 1221
  - Species: 668
  - Observation of the day: https://www.inaturalist.org/observations/105020170
  - Feature in "*Sri Lanka - iNaturalist World Tour"*: https://www.inaturalist.org/blog/26809-sri-lanka-inaturalist-world-tour

Society Memberships

- President, CSUN, Behavior, Ecology and Evolution Research Club 2021
- Vice President, CSUN, Behavior, Ecology and Evolution Research Club 2020
- Representative, CSUN Women in Science 2020
- American Society of Ichthyologists and Herpetologists (ASIH) 2020 –2024
- Society for the Study of Amphibians and Reptiles (SSAR) 2020 – 2022

Skills

Language: Fluent
- English, Sinhala (native tongue)

GIS: Intermediate
- QGIS, ArcGIS Pro

Computer programing: Intermediate
- R, Python, Unix, bioinformatics

Miscellaneous: ImageJ, Raven Pro, PADI Advance, Open Water Certification, Adobe Illustrator