

## Shanelle A. Wikramanayake

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### Education

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

**California State University, Northridge (CSUN)** September 2020 – June 2023  
Department of Biology, MSc  
PI: Jeanne Robertson

**University of Washington (UW), Seattle** September 2016 – June 2020  
BS, Biology  
Advisor: Adam 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.**, “*Bromeliophyla 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

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- **Department of Biology Conference Travel Award, CSU, Fort Collins** 2024
  - **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** 2020
  - **Dean's List, UW, Seattle** 4 Quarters
  - **John and Dorothy Franco Award** (\$1400) 2020  
Best scientific paper submitted by an undergraduate involved in research

### Professional Presentations

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**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. (*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; First 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; **Second 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

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**Department of Biology, CSUN** 2020 – Present

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

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**International Graduate GTA Excellence in Teaching certificate, CSU Fort Collins** Fall 2023

Wikramanayake	2024
<b>Graduate Associate, CSUN</b> Class: Molecular Markers in Evolutionary Studies and Lab (BIOL452/452L)	Spring 2023
<b>Teaching Associate, CSUN</b> Class: General Biology Lab for non-major students (BIOL 101L)	2020 – 2022
<b>Hy-Flex Instructional Student Assistant, CSUN</b> Assistance in Hy-Flex classroom setting	2021
<b>STEM Outreach, CSUN</b> STEM related outreach activities for 2 <sup>nd</sup> and 3 <sup>rd</sup> grade students at the Multicultural Learning Center, Canoga Park, CA	2020, 2022
<b>Burke Museum of Natural History and Culture, UW, Seattle, Washington</b> Collection and specimen preparation in herpetology department for public viewing	2019
<b>Peer Facilitator, UW, Seattle</b> Class: Introductory Biology for Biology majors (BIOL 220)	2018
<b>Professional Work Experience</b>	
<b>Graduate Assistant, CSUN</b> Classes: Molecular Markers, Herpetology	Spring 2023
<b>Vivarium Assistant</b> Animal care (mammals, fish, reptiles, and amphibians)	2020 – 2022
<b>Curatorial Assistant, Burke Museum of Natural History and Culture, UW, Seattle, Washington</b> Organized herpetology collection	2019
<b>Intern, Convention on Biological Diversity, Sri Lanka</b> Data analysis	2018
<b>Intern, Environmental Foundation Limited, Colombo, Sri Lanka</b> Project report and case study preparation for protected areas in Sri Lanka, by conducting site visits, literature searches and interviews.	2017
<b>Professional Service</b>	
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, Front Range Student Ecology Symposium	2024
Member, ASIH Diversity, Equity, Inclusion, and Belonging committee	2022-2024
Ad- hoc reviewer,	
- “Reptiles & Amphibians”	October 2022, March 2023
- “Scientific Reports”	November 2021
- “Mitochondrial DNA Part B”	May, July 2020

## Sri Lanka Reptile Red List Assessment

September 2019

- Provided data for listing species under the IUCN Red List, compiled species accounts and contributed to the conservation action planning for the snakes and lizards of Sri Lanka

18<sup>th</sup> Conference of the Parties to the Convention on International Trade in Endangered Species (CITES CoP18)

August 2019

- Provided data for first listing of *Ceratophora aspera* (Appendix II) under CITES

Member and contributor to iNaturalist (Handle: [shanelle97](#))

- Observations: 1106
- Species: 624
- Observation of the day: <https://www.inaturalist.org/observations/105020170>
- Sri Lanka - iNaturalist World Tour: <https://www.inaturalist.org/blog/26809-sri-lanka-inaturalist-world-tour>

**Society Memberships**

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|---|-------------|
| • 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        |
| • Society for Integrative and Comparative Biology (SICB)              | 2020        |
| • American Society of Ichthyologists and Herpetologists (ASIH)        | 2020 – 2022 |
| • Society for the Study of Amphibians and Reptiles (SSAR)             | 2020 – 2022 |
| • Association for Tropical Biology and Conservation (ATBC)            | 2019 – 2022 |

**Skills****Language:** Fluent

- English
- Sinhala (native tongue)

**Computer language:** Intermediate

- Python
- R
- Linux command line

**Miscellaneous:**

- ImageJ
- QGIS
- Raven Pro
- PADI Advance Open Water Certification