

## Shanelle A. Wikramanayake

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### Education

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<b>California State University, Northridge (CSUN)</b>	expected June 2023
Department of Biology, MSc	

<b>University of Washington (UW), Seattle</b>	September 2016 – June 2020
BS, Biology	

### Research Interests

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Evolutionary Ecology, Conservation genetics, Population Genetics, Phylogenetics, Evolutionary Physiology, Herpetology

### Research Experience

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<b>Department of Biology, CSUN</b>	2020 – Present
PI: Jeanne M. Robertson	
Investigating the neurological basis of female mate-choice on speciation in a polymorphic tree frog ( <i>Agalychnis callidryas</i> ).	
<b>Department of Biology, UW, Seattle</b>	2017 – 2020
PI: Adam D. Leaché	
Integration of genetic structure into conservation of an endangered, endemic lizard, <i>Ceratophora aspera</i> .	
<b>Burke Museum of Natural History and Culture, UW, Seattle, Washington</b>	2019
Herpetology Collections Manager: Peter Miller	
Identifying and organizing historical specimens of <i>Thamnophis</i> species to understand changes in distribution in the Pacific Northwest.	
<b>Biology Department/ School of Aquatic and Fishery Sciences, UW, Seattle</b>	2018
Graduate Student: Christopher D. Wells	
Quantifying morphometrics of cup corals ( <i>Balanophyllia</i> ) to assess environmental effects on growth.	
<b>Predator Ecology Lab, School of Environmental and Forest Sciences, UW, Seattle</b>	2017
Graduate Student: Carolyn Shores	
Analyzing camera trap data to understand predator-prey interactions in the Pacific Northwest.	

## Research Grants

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<b>Exploration Fund Grant, The Explorers Club (\$4,000)</b>	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	
<b>California State University, Northridge Graduate Thesis Support Grant (\$600)</b>	2020
Understanding the relative contributions of multiple modes of sexual signal to pre-mating isolation and lineage divergence	
<b>Walter and Margaret Sargent Endowed Scholarship Fund (\$1600)</b>	2019
Genetic structure of an endemic endangered agamid lizard from Sri Lanka ( <i>Ceratophora aspera</i> ) and its implications for conservation	
<b>Mary Gates Research Scholarship (\$5000)</b>	2018
A phylogeographic approach to conserving a rare and endangered Sri Lankan lizard	
<b>Walter and Margaret Sargent Endowed Scholarship Fund (\$1500)</b>	2018
A phylogeographic approach to conserving the endangered Sri Lankan Rough-nose horned lizard ( <i>Ceratophora aspera</i> )	

## Honors and Awards

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• <b>International Graduate Student Award, CSUN (\$700)</b>	2022
• <b>Robert H. Schiffman Memorial Award for Outstanding Research Promise, CSUN (\$700)</b>	2021
• <b>California State University, Northridge Tuition Fee Waiver</b>	2020
• <b>Dean's List, UW, Seattle</b>	4 Quarters
• <b>John and Dorothy Franco Award (\$1400)</b>	2020
Best scientific paper submitted by an undergraduate involved in research	

## Professional Presentations

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**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)

**Wikramanayake, S.A.,** Wikramanayake, E.D., Pallewatte, N., Leaché A.D. (2020). Genetic Structure of an Endemic Endangered Agamid 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)

## Publications

**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.

## Teaching and Outreach Experience

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**Teaching Associate, CSUN** 2020 – 2022

Class: General Biology Lab for non-major students (BIOL 101L)

**Hy-Flex Instructional Student Assistant, CSUN** 2021

Assisting with bridging the disconnect between virtual and in-person students in a Hy-Flex classroom setting

**STEM Outreach, CSUN** 2020, 2022

STEM related outreach activities for 2<sup>nd</sup> and 3<sup>rd</sup> grade students at the Multicultural Learning Center, Canoga Park, CA

**Burke Museum of Natural History and Culture, UW, Seattle, Washington** 2019

Outreach activities for Herpetology Department, including presenting collection and specimen preparation for public viewing

**Peer Facilitator, UW, Seattle** 2018

Class: Introductory Biology for Biology majors (BIOL 220)

## Professional Work Experience

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**Vivarium Assistant** 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 preparation and case study preparation for protected areas in Sri Lanka, by conducting site visits, literature searches and interviews

## Professional Service

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**Ad-hoc reviewer: “Reptiles & Amphibians”** October 2022

**Ad-hoc reviewer: “Scientific Reports”** November 2021

**Ad-hoc reviewer: “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: 969

Species: 559

Identifications: 527

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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|---|-------------|
| • <b>President, CSUN, Behavior, Ecology and Evolution Research (BEER) Club</b>      | 2021        |
| • <b>Vice President, CSUN, Behavior, Ecology and Evolution Research (BEER) Club</b> | 2020        |
| • <b>Representative, CSUN Women in Science (CSUN WiS)</b>                           | 2020        |
| • <b>Society for Integrative and Comparative Biology (SICB)</b>                     | 2020        |
| • <b>American Society of Ichthyologists and Herpetologists (ASIH)</b>               | 2020 – 2022 |
| • <b>Society for the Study of Amphibians and Reptiles (SSAR)</b>                    | 2020 – 2022 |
| • <b>Association for Tropical Biology and Conservation (ATBC)</b>                   | 2019 – 2022 |

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

- English
- Sinhala (native tongue)

**Computer language:** Intermediate

- Python
- R
- Linux command line

**Phylogenetics:** Intermediate

- Sequence assembly (Geneious, MEGA, iPyrad)
- Phylogeny estimation (BEAST, RAxML, BPP, PAUP)
- Biogeographic analysis (VCFTools, Arlequin)

**Miscellaneous:**

- ImageJ
- QGIS
- PADI Open Water Certification