

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
Department of Biology, MSc
PI: Jeanne M. Robertson

University of Washington (UW), Seattle Sep 2016 – June 2020
BS, Biology
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. (2024). Third time's the charm: nomenclatural availability provided to the nomina of two Bornean *Cyrtodactylus* (Squamata, Gekkonidae). *Bionomina*, 39, 29-32.
[10.11646/bionomina.39.1.7](https://doi.org/10.11646/bionomina.39.1.7)

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). Redescription of two Bornean gekkonid lizard species of the *Cyrtodactylus consobrinus* (Peters, 1871) complex with comments on online supplementary material. *Bionomina*, 35, 9-19. <https://doi.org/10.11646/bionomina.35.1.2>

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*, 52, 249-263. <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

Micheal Dee Grant, Herpetological Conservation International (\$1200)	2025
A genomics approach to characterizing functional connectivity and natural history to conserve a threatened lizard in an imperiled landscape	
1st Rufford Small Grant, The Rufford Foundation (£7000)	2025
Strategic management of plantations for conservation and persistence of endemic Sri Lankan rainforest lizards informed by physiology, ecology, and behaviour	
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 (<i>Ceratophora aspera</i>) 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 (<i>Ceratophora aspera</i>).	

Honors and Awards

• Second place winner, CSU Graduate Studies and Vice President of Research 3-minute thesis talk challenge	2025
• 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	Sep2020 – 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., (2025). Making things tolerable: A thermal physiological approach to reforestation in a warming, fragmented biodiversity hotspot. Front Range Student Ecology Symposium 2025: Back to our roots (*poster*)

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 2024: Niches to networks. (*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

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| • Guest lecturer, CSU, Fort Collins | Spring 2024 |
| Class: Introduction to Evolution (BZ220), “ <i>Evolution and conservation</i> ” | 11 th March |
| • Guest co-lecturer, CSU, Fort Collins | Spring 2025 |
| Class: Introduction to Evolution (BZ220) | |
| “ <i>Natural selection and population genetics</i> ” | 13 th Feb |
| “ <i>Adaptation</i> ” | 25 th March |
| • Graduate Teaching Assistance (GTA), CSU, Fort Collins | Spring 2025 |
| Class: Introduction to Evolution (BZ220) | |
| • Guest lecturer, CSU, Fort Collins | Fall 2024 |
| Class: Introduction to Evolution (BZ220), “ <i>Human evolution</i> ” | 3 rd Nov, |
| • 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** 2019
Organized herpetology collection
- **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 2025 2024-2025
- 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 Front Range Student Ecology Symposium 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,
 - “Biotropica” Dec 2024
 - “Molecular Ecology” Nov2024
 - “Reptiles & Amphibians” Oct 2022, March 2023
 - “Scientific Reports” Nov 2021
 - “Mitochondrial DNA Part B” May, July 2020
- Participant, Sri Lanka Reptile Red List Assessment Sep 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

- Assistant, 18th Conference of the Parties to the Convention on International Trade in Endangered Species (CITES CoP18) Aug 2019
 - Provided data for first listing of *Ceratophora aspera* (*Appendix II*) under CITES
- Member and contributor to iNaturalist (Handle: [shanelle97](#))
 - Observations: 1227
 - Species: 675
 - 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

• 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 – 2024
• 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

R, Python, Unix, bioinformatics

GIS: Intermediate

- QGIS, ArcGIS Pro

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