

Curriculum Vitae
Nisha Prabhashinie Shalika Kumburegama

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EDUCATION:

<u>PhD program</u>	University of Hawaii at Manoa Honolulu, USA	2009 (Ph.D.)
<u>Undergraduate</u>	University of Peradeniya Peradeniya	2001 (B.Sc) First Class Honors

RESEARCH:

<u>Date</u>	<u>Institution</u>	<u>Project</u>
2014-present	University of Peradeniya	Reproductive behavior and embryonic development in native and endemic freshwater fish
2013-2015	University of Peradeniya	Identification of a new species of Hump-nosed pit viper
05-2014 – 08-2014	University of Miami (Short-term Postdoctoral Scholar)	Research on evolutionary developmental biology of a cnidarian, <i>Nematostella vectensis</i>
01.07.2012 – 30.06.2014	University of Peradeniya	A survey of freshwater snails in Kandy, Matale and Kegalle Districts
01.07.2011 – 30.06.2012	University of Peradeniya	Morphological and Molecular Phylogenetic analysis of the freshwater snail genus <i>Paludomus</i>
2007-2009 2003-2007	University of Miami University of Hawaii	Wnt Signaling and germ layer formation in the cnidarian <i>Nematostella vectensis</i>

2000-2001	University of Peradeniya	A survey of pest snails and slugs in vegetable growing areas of Nuwara Eliya, Badulla and Matale Districts in Sri Lanka
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EMPLOYMENT:

10.11.2015 to present	Senior Lecturer Grade I University of Peradeniya, Peradeniya
10.11.2009 to 09.11.2015	Senior Lecturer Grade II University of Peradeniya, Peradeniya
14.10.2002 to 27.08.2010	Lecturer University of Peradeniya, Peradeniya
02.05.2001 to 13.10.2002	Temporary Lecturer University of Peradeniya, Peradeniya

UNDERGRADUATE COURSES TAUGHT:

University of Peradeniya
 BL 102 – Plant and Animal Form and Function
 ZL 201 – Animal Embryology
 ZL 206 – Invertebrate Diversity
 ZL 302 – Comparative Anatomy and Animal Physiology
 ZL 312 – Developmental Biology

GRANTS/AWARDS:

- National Science Foundation – Distribution of terrestrial gastropod pests, their seasonal abundance and degree of damage to crops in agricultural lands in the Nuwara Eliya District (2017). Rs. 2,181,100.00
- University Research Grant, University of Peradeniya – Thermal environment and parental care during development of chicks of the Sri Lanka Whistling Thrush (*Myophonus blighi*) (2016). Rs. 300,000.
- Small Grant Research Program – 2016 (Ministry of Mahaweli Development and Environment, Biodiversity Secretariat) – A faunal survey in a proposed environmentally sensitive area along the Mahaweli River at Warathenna, Kandy. Rs. 250,000.

- UNDP/GEF Project on Strengthening Capacity to Control the Introduction and Spread of Invasive Alien Species (IAS) in Sri Lanka, Ministry of Mahaweli Development and Environment – Identification and distribution of invasive alien gastropod pests in the Kandy District. (2016) Rs. 311,900.
- Idea Wild Grant – Taxonomic identification and distribution mapping of a new species of hump-nosed pit viper (Family Viperidae) in the Knuckles Natural World Heritage Site, Sri Lanka (2015). US\$ 400.
- University Research Grant, University of Peradeniya – A survey of freshwater snails in Kandy, Matale and Kegalle Districts (2012). Rs. 200,000.
- University Research Grant, University of Peradeniya – Morphological and Molecular Phylogenetic analysis of the freshwater snail genus *Paludomus* (2011). Rs. 75,000.
- Best Overall Award: for poster presentation on ‘Evolution of the germ layers: insight from Wnt signaling in a cnidarian, *Nematostella vectensis*’ at the John A. Burns School of Medicine and Biomedical Sciences (13th March, 2007)
- GSO Grant, University of Hawaii at Manoa, Honolulu, USA (2006). US \$ 2,444.
- The Charles R. and Margaret B. Edmondson Research Fund, Department of Zoology, University of Hawaii at Manoa, Honolulu, USA (2006). US\$ 1,225.
- Commendable Presentation: for ‘Economic importance of pest snails and slugs in vegetable growing areas of Sri Lanka’ at the Annual Research Sessions (2002)
- University Scholarship, University of Peradeniya (2001).
- Commendable Presentation: for ‘Identification of pest snails and slugs of vegetable crops in four districts of Sri Lanka’ at the Annual Research Sessions (2001).

PUBLICATIONS:

1. Gimhani, W. G. N., Hirimuthugoda, G. N. and Kumburegama, S. Distinctive shell and radula features of the native apple snail, *Pila gobosa* and the exotic alien invasive species of golden apple snail, *Pomacea diffusa* in Sri Lanka (*In Press.*)
2. Samarawickrama, V.A.M.P.K., Samarawickrama, D.R.N.S. and Kumburegama, S. (2012). Herpetofauna in the Kaluganga upper catchment of the Knuckles Forest Reserve, Sri Lanka. *Amphibian and Reptile Conservation*. **5(2)**:81-89.
3. Kumburegama S., Wijesena, N., Xu, R. and Wikramanayake, A. H. (2011). Strabismus-mediated primary archenteron invagination is uncoupled from Wnt/ β -catenin-dependent endoderm cell fate specification in *Nematostella*

- vectensis (Anthozoa, Cnidaria): Implications for the evolution of gastrulation. *EvoDevo*.
4. Kumburegama S: Evolution of germ layers: insight from Wnt signaling in a cnidarian, *Nematostella vectensis*. Ph.D. thesis University of Hawaii at Manoa, Zoology Department; 2009.
 5. Kumburegama, S. and Wikramanayake, A. H. (2008) Wnt signaling in the early sea urchin embryo. *Methods in Molec. Biol.* **469**:187-199.
 6. Kumburegama, S., Wijesena, N. and Wikramanayake, A. H. (2008) Detection of expression patterns of Wnt pathway components in *Nematostella vectensis* embryos. *Methods in Molec. Biol.* **469**:55-67.
 7. Lee, P., Kumburegama, S., Marlowe, H., Martindale, M.Q. and Wikramanayake, A.H. (2007). Asymmetric developmental potential along the animal-vegetal axis in the anthozoan cnidarian, *Nematostella vectensis*, is mediated by Disheveled. *Dev. Biol.* **310**:169-186.
 8. Kumburegama, S. and Wikramanayake, A. H. (2007). Specification and patterning of the animal-vegetal axis in sea urchins by the canonical Wnt signaling pathway. *Signal Transduction* **7**: 164-173.
 9. Naggs F., D. C. Raheem, P. B. Mordan, B. Grimm, K. B. Ranawana, and N. P. S. Kumburegama (2003). Ancient relicts and contemporary exotics: faunal change and survivorship in Sri Lanka's snail fauna. Slugs & Snails: Agricultural, Veterinary & Environmental Perspectives. *British Crop Protection Council, Symposium Proceedings* No. 80: 103 -108.
 10. Peter Morden, Fred Naggs, Kithsiri Ranawana, Shalika Kumburegama, and Brigitte Grimm (2003). A guide to the PEST and EXOTIC GASTROPODS of SRI LANKA. Department of Zoology, Natural History Museum, London: Ten Page Folding Guide.

ABSTRACTS:

- Gimhani, W.G.N., Hirimuthugoda, G.N. and Kumburegama, S. (2017). Identification of the exotic species of Apple Snail from selected locations in Sri Lanka using shell characteristics and radula morphology. *Proceedings of the National Symposium on Invasive Alien Species 2017*. Pg. 17
- Maheshini, P.W. D.B., Hirimuthugoda, G.N. and Kumburegama, S. (2017). A short survey of pest gastropods and their potential threats to local agriculture in the Kandy District. *Proceedings of the National Symposium on Invasive Alien Species 2017*. Pg. 30 (Poster)
- Thilakerathne, T.D.K, Hirimuthugoda, G.N., Lakkana, P.H.T. and Kumburegama, S. (2016). Embryogenesis in two aquarium fish: Angelfish (*Pterophyllum scalare*)

- and Golden Carp (*Cyprinus carpio*). *Proceedings of the PGIS Research Congress, Sri Lanka*. Pg. 98.
- Sumathipala, S., Hirimuthugoda, G.N. and Kumburegama, S. (2015). Reproductive behavior and embryonic development in the Giant Danio, *Devario malabaricus*. *iPURSE 2015*. 19:338.

ORAL PRESENTATIONS:

- Kumburegama, S. and Wikramanayake, A. H. (2007). Evolution of the germ layers: insight from Wnt signaling in a cnidarian, *Nematostella vectensis*. Poster. John A. Burns School of Medicine and Biomedical Sciences Symposium, Honolulu, USA.
- Kumburegama, S. (2007). Evolution of germ layers: insight from Wnt signaling in a cnidarian, *Nematostella vectensis*. Presentation. 32nd Annual Albert L. Tester Memorial Symposium, Honolulu, USA.
- Kumburegama, S. (2006). Evolution of axial polarity: insight from Wnt signaling in a cnidarian, *Nematostella vectensis*. Presentation. 31st Annual Albert L. Tester Memorial Symposium, Honolulu, USA.
- Kumburegama, S. (2005). The role of Wnt signaling in pattern formation in cnidarian embryos. Presentation. 30th Annual Albert L. Tester Memorial Symposium, Honolulu, USA.
- Kumburegama, S. and Wikramanayake, A. H. (2005). The role of Wnt signaling in pattern formation in cnidarian embryos. Poster. Society of Developmental Biology Meeting, San Francisco, USA.
- Kumburegama, S. and Wikramanayake A. H. (2005). Evolution of the animal-vegetal axis: insight from early Wnt signaling in a cnidarian. Presentation. Development Biology of the Sea Urchin Meeting XVII, Woods Hole, MA, USA.
- Kumburegama, S. and Ranawana, K. B. (2002). Economic importance of pest snails and slugs in vegetable growing areas of Sri Lanka. Annual Research Sessions, University of Peradeniya, Peradeniya.
- Kumburegama, S. (2001). Identification of pest snails and slugs of vegetable crops in four districts of Sri Lanka. Annual Research Sessions, University of Peradeniya, Peradeniya.