# **Curriculum Vitae**

# **Personal information**

Name	: Prof Ruwani Punyakanthi Hewawasam
Date of Birth	: 24 <sup>th</sup> October 1973
Sex	: Female
Civil status	: Married
Nationality	: Sri Lankan
Permanent Address	: 568/24, Hirimbura Rd, Galle, Sri Lanka
Official address	: Department of Biochemistry, Faculty of Medicine,
	University of Ruhuna, Galle, Sri Lanka
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# **Educational Qualifications**

## **Primary/Secondary education;**

Southlands College, Galle, Sri Lanka (1979-1992)

## **Academic Qualifications**

1999	:	BSc (Hon) in Chemistry (University of Peradeniya, Sri Lanka)
2005	:	MPhil in Biochemistry (University of Ruhuna, Sri Lanka)
2012	:	PhD in Medical Sciences (The John Curtin School of Medical Research, The
		Australian National University, Australia)

# **Other qualifications**

- Fellow of the Institute of Chemistry, Ceylon
- Diploma in Computer Science.
- Followed a course on "Applied Environmental Toxicology" at the Postgraduate Institute of Science at Peradeniya.
- Passed National Certificate in English (NCE) exam with merit results.
- Followed an animal handling course at the Australian National University, Canberra, Australia



# Life membership in learned societies

- The Sri Lanka Association of Advancement of Science
- Young Scientists Forum (National Science & Technology Commission)
- Institute of Biology
- Galle Medical Association
- Institute of Chemistry, Ceylon
- College of Biochemists of Sri Lanka.
- Sri Lanka Association for Laboratory Animal Science
- Society for Alternatives to Animal Testing, Sri Lanka.

# Employment record/Positions held

- Temporary Assistant Lecturer in Chemistry at the Department of Chemistry Faculty of Science, University of Peradeniya. (April 1999 Oct 1999).
- Temporary Demonstrator in Biochemistry at the Department of Biochemistry Faculty of Medicine, University of Ruhuna. (Oct 1999 May 2001).
- Temporary Assistant Lecturer in Biochemistry at the Department of Biochemistry Faculty of Medicine, University of Ruhuna. (May 2001 May 2005).
- Probationary Lecturer, Department of Biochemistry, Faculty of Medicine, University of Ruhuna. (May 2005 - May 2008).
- Lecturer, Department of Biochemistry, Faculty of Medicine, University of Ruhuna. (May 2008 May 2010).
- Head, Department of Biochemistry, Faculty of Medicine, University of Ruhuna. (Jan 2013 Dec 2015).
- Senior Lecturer, Grade II, Department of Biochemistry, Faculty of Medicine, University of Ruhuna. (May 2010 May 2016).
- Senior Lecturer, Grade I, Department of Biochemistry, Faculty of Medicine, University of Ruhuna. (May 2016 August 2017).
- Professor in Biochemistry, Department of Biochemistry, Faculty of Medicine, University of Ruhuna. (August 2017 Todate).

## Teaching experience

- As an Assistant Lecture at the Department of Chemistry, Faculty of Science, Peradeniya, conducted Practical classes and tutorial for general Part 1 and part 11 students and Special final year students and tutorial classes for GSQ students.
- As an Assistant lecturer, probationary Lecturer, Lecturer, Senior Lecturer and Professor at the Department of Biochemistry, Faculty of Medicine, Ruhuna have been conducting lectures, tutorial classes and practical classes for 1<sup>st</sup> and 2<sup>nd</sup> year students.
- Conducted lectures on "Nutrition" for Public Health Inspector (PHI) trainees who followed a diploma at the Provincial Director, Health's office at Fort, Galle.
- Conduct lectures for undergraduates of the Department of Medical Laboratory Science, Faculty of Allied Sciences, University of Ruhuna on "Cell Biology and Biochemistry" and "Animal Research" modules.

#### **Research experience**

#### **Thesis submitted**

MPhil in Biochemistry:	Antioxidative and hepatoprotective activity of some Sri Lankan medicinal plants against chemically induced hepatotoxicity in mice. (University of Ruhuna, Sri Lanka)
PhD in Medical Sciences:	Glutathione transferase derived compounds as therapeutic agents. (The Australian National University, Australia)

## Patents

A patent was granted by the National Intellectual Property office of Sri Lanka in 2013 to cover the plant extracts used in hepatoprotective and antioxidative activities for the MPhil project titled "Antioxidative and hepatoprotective activity of some Sri Lankan medicinal plants against chemically induced hepatotoxicity in mice".

## Orations

**Sir Nicholas Attygalle Oration** was awarded by the Sri Lanka Medical Association for the paper titled "Glutathione transferase derived compounds as potential therapeutics for the treatment of cardiac arrhythmias and heart failure" and the oration was delivered on the 29<sup>th</sup> Nov 2014.

**Prof N D W Lionel Memorial Oration** was awarded by the Sri Lanka Medical Association for the paper titled "Hepatoprotective effects of medicinal plants against chemically induced hepatotoxicity" and the oration will be delivered on the 25<sup>th</sup> July 2016.

#### Awards

- 1. "**President's award for Scientific Research**" by the President of Sri Lanka for the publications in journals cited in the science citation index for the year 2003. July 2010
- 2. **"President's award for Scientific Research**" by the President of Sri Lanka for the publications in journals cited in the science citation index for the year 2004. July 2010
- 3. **"Australian Postgraduate Award"** to read for the PhD at the John Curtin School of Medical Research, Australian National University. March, 2007.
- 4. **"Hiran Tillakaratne Award"** for the outstanding postgraduate research carried out during the period 2000-2006 in the field of Medicine, from the University Grants Commission, Sri Lanka. June 2007.
- "Special prize in cardiology" for the paper titled "GSTM2C terminal domain alters the contractility and Ca<sup>2+</sup> transients in cultured ventricular cardiomyocytes. Sri Lanka Medical Association 125<sup>th</sup> Anniversary International Medical Congress. 2-6 July 2012, Colombo, Sri Lanka.
- 6. **"Sri Lanka Heart Association Research Award for 2016**" was awarded by the Sri Lanka Heart Association for the paper titled "Therapeutic Potential of an Endogenous Enzyme in the treatment of Cardiac Arrhythmias and Heart Failure". June 2016.
- "G R Handy Award" 2017 for the best publication in cardiovascular research awarded by the Sri Lanka Medical Association for the article titled "The GST M2C-terminal domain depresses contractility and Ca<sup>2+</sup> transients in neonatal rat ventricular cardiomyocytes"
- Award for the "Best Scientific Paper" for the paper titled" Toxicity of the medicinal plant Vetiveria zizanioides (Sevendera): A reflection in haematological, histological and biochemical parameters" at the 63<sup>rd</sup> Annual Academic Sessions, Galle Medical Association (GMA), 2004.
- 9. Award for the "Best presenter in Oral Session in Medicine" for the paper titled "Corriandrum sativum: Does it protect the mouse liver in paracetamol poisoning?" At the Second Academic Sessions of the University of Ruhuna, 2004.
- 10. Award for the "**Best Scientific Paper**" for the paper titled "*Asparagus falcatus* improves the antioxidant enzyme status in mice overdosed with paracetamol. 64<sup>th</sup> Annual Academic Sessions, Galle Medical Association (GMA), 22<sup>nd</sup>-24<sup>th</sup> September 2005.
- 11. A **special commendation for oral presentation** for the paper titled "Dose response effect of *Nauclea orientalis* bark extract against doxorubicin induced cardiotoxicity in wistar rats" at the 76<sup>th</sup> Annual Academic Sessions of the Galle Medical Association, Oct 2017.
- 12. A **merit award** for the oral presentation on "Effect of *Murraya koenigii* leaf extract on antioxidant status, lipid peroxidation and myeloperoxidase activity in wistar rats treated with

doxorubicin" at the 01<sup>st</sup> Research Symposium of the Faculty of Allied Health Sciences, University of Ruhuna, November 2018.

- 13. A **special commendation for oral presentation** for the paper titled "Assessment of potential toxicological effects of *Murraya Koenigii* leaf extract in Wistar rats" at the 77<sup>th</sup> Annual Academic Sessions of the Galle Medical Association, Oct 2018.
- 14. NRC Merit award for scientific publication-2016 for the article published in the journal "Plos One" on "Effect of GSTM2-2C terminal domain and mutants, F157A and Y160A, on contractility and Ca<sup>2+</sup> transients in neonatal ventricular cardiomyocytes in rats".
- 15. Award for the "**Best oral platform presentation of the congress**" for the paper titled "Nonalcoholic fatty liver disease in a cohort of obese children in Southern Sri Lanka. 22<sup>nd</sup> Annual Congress of the Sri Lanka College of Paediatricians. 29<sup>th</sup> -31<sup>st</sup> August 2019.
- 16. Award for the "**Best Oral presentation**" for the paper titled "Dyslipidaemia and fatty liver disease in a cohort of obese children from Southern Sri Lanka. 78<sup>th</sup> Annual Academic Sessions of the Galle Medical Association. 4<sup>th</sup> -6<sup>th</sup> Oct 2019.
- 17. Award for the "Best presentation in Medicine and Allied Health Sciences" at the 16<sup>th</sup> Academic Sessions and the 15<sup>th</sup> Vice Chancellor's Awards Ceremony, University of Ruhuna, March 2019, for the abstract titled "Protective effect of *Murraya koenigii* leaf extract against doxorubicin induced cardiotoxicity".
- 18. Award for the "Best presentation in Pharmacology" at the Sri Lanka Medical Association 133<sup>rd</sup> Anniversary International Medical Congress 2020 – July 2020, for the oral presentation titled "Echocardiographic evaluation of anthracycline-induced cardiotoxicity in breast cancer patients from Southern Sri Lanka".
- 19. Award for the "Best oral platform presentation of the congress" for the paper titled "Fatty liver index: Can it be used as a predictor of non-alcoholic fatty liver disease in Sri Lankan overweight and obese children?" 23<sup>rd</sup> Annual Congress of the Sri Lanka College of Paediatricians. 30<sup>th</sup> -31<sup>st</sup> January 2021.

## Publications in journals indexed in SCI/SCIE & Pub Med/Medline

- 1. R P Hewawasam, K A P W Jayatilaka, C Pathirana, L K B Mudduwa. (2003) Protective effect of *Asteracantha longifolia* extract in mouse liver injury induced by carbon tetrachloride and paracetamol. **Journal of Pharmacy and Pharmacology**. 55: 1413-1418.
- R P Hewawasam, K A P W Jayatilaka, C Pathirana, L K B Mudduwa. (2004) Studies on the preventive and curative effects of *Epaltes divaricata* (Family-Compositae) extract on carbon tetrachloride induced hepatotoxicity in mice. Indian Journal of Medical Research. 120: July: 30-34.

- 3. R P Hewawasam, K A P W Jayatilaka, C Pathirana, (2008) Effect of *Asparagus falcatus* on acetaminophen toxicity in mice: A comparison of antioxidative effect with N-acetyl cysteine. **Journal of dietary supplements**. 5(1): 1-19.
- 4. D Liu, R Hewawasam, SM Pace, EM Gallant, MG Casarotto, AF Dulhunty, PG Board. (2009) Dissection of the inhibition of cardiac ryanodine receptors by human glutathione transferase GSTM2-2. **Biochemical Pharmacology** 77(7):1181-93.
- 5. R Hewawasam, D Liu, MG Casarotto, AF Dulhunty, PG Board (2010) The structure of the C-terminal helical bundle in glutathione transferase M2-2 determines its ability to inhibit the cardiac ryanodine receptor. **Biochemical Pharmacology**. 80(3): 381-88.
- 6. A F Dulhunty, R Hewawasam , D Liu , MG Casarotto , PG Board (2011) Regulation of cardiac muscle ryanodine receptor by glutathione transferases. **Drug Metabolism Reviews**. 43(2): 236-52.
- 7. D Liu , R Hewawasam , MG Casarotto , AF Dulhunty , PG Board. (2012) The inhibitory GSTM2 binding site is located in divergent region 3 of the cardiac ryanodine receptor. **Biochemical Pharmacology.** 83(11):1523-9.
- R P Hewawasam, D Liu, MG Casarotto, AF Dulhunty, PG Board (2016) Effect of GSTM2-2C terminal domain and mutants, F157A and Y160A, on contractility and Ca<sup>2+</sup> transients in neonatal ventricular cardiomyocytes in rats. **Plos One** 11, 9.
- 9 R P Hewawasam, K A P W Jayatilaka, L K B Mudduwa, C Pathirana. (2017) Ameliorative effects of *Asparagus falcatus* and *Vetiveria zizaniodes* on carbon tetrachloride induced oxidative stress in mice. **Indian Journal of Traditional Knowledge**. 16(3): 1-8.
- A A D S Amarasinghe, M F F Nasrina, R P Hewawasam, M H A D de Silva, M A G Iresha (2018). Effect of maternal lipid levels during late pregnancy on the birth of large for gestational age newborns in a tertiary care setting in Southern Sri Lanka. Journal of Clinical and Diagnostic Research. 12(6): SC09-SC14.
- 11. M H N De Zoysa, H Rathnayake, R P Hewawasam, W M D G B Wijayaratne. (2019) Determination of in vitro antimicrobial activity of five Sri Lankan medicinal plants against selected human pathogenic bacteria. **International Journal of Microbiology**. Article ID 7431439. 8 pages.
- 12. M H A D de Silva, R P Hewawasam, M A G Iresha. (2019) Cord leptin, C-peptide and insulin levels in umbilical cord blood from children born large for gestational age: A preliminary study from Southern Sri Lanka. **International Journal of Paediatrics**. Article ID 4268658, 7 pages.
- J A N Sandamali, R P Hewawasam, K A P W Jayatilaka, L K B Mudduwa (2020). Cardioprotective Potential of *Murraya koenigii* (L) Spreng Leaf Extract against Doxorubicin Induced Cardiotoxicity in Rats. Evidence Based Complementary and Alternative Medicine. Article ID 6023737, 16 pages.
- 14. U G S Janesha, M R P. Hasanga, R P Hewawasam, W M D G B Wijayaratne. (2020) In vitro evaluation of the antimicrobial activity of leaf extracts of *Listea iteodaphne* against a

selected group of bacteria including methicillin resistant Staphylococcus aureus (MRSA). Advanced Biomedical Research. 9:21.

- H Rathnayake, M H N De Zoysa, R P Hewawasam, W M D G B Wijayaratne. (2020) Comparison of in vitro antibacterial activity of *Epaltes divaricata* and *Vetiveria zizanioides* against methicillin-resistant *Staphylococcus aureus*. Scientifica. Article ID 8239053. 8 pages.
- 16. J A N Sandamali, R P Hewawasam, M.A.C.S.S Fernando, K.A.P.W. Jayatilaka, R D Madurawe, P P Sathananthan, U Ekanayake, J Horadugoda. (2020) Anthracycline induced cardiotoxicity in breast cancer patients from Southern Sri Lanka: An echocardiographic analysis. **BioMed Research International.** Article ID 1847159. 8 pages.
- M H A D de Silva, R P Hewawasam, S Lekamwasam. Concordance between body composition indices measured with dual energy X-ray absorptiometry and bioelectrical impedance analysis in obese children aged 5-15 years. International Journal of Paediatrics. Article ID: 638057.
- 18. J A N Sandamali, R P Hewawasam, K A P W Jayatilaka, L K B Mudduwa. (2021) Cinnamomum zeylanicum Blume (Ceylon cinnamon) bark extract attenuates doxorubicin induced cardiotoxicity in rats via suppression of oxidative stress, myeloperoxidase activity and reduction in structural cardiomyocyte changes. Saudi Pharmaceutical Journal. 29(8): 820-832.
- 19. P S A I Shiromi, R P Hewawasam, R G U Jayalal, M R P. Hasanga, W M D G B Wijayaratne, D Wanniarachchi. (2021) Chemical composition and antimicrobial activity of two Sri Lankan lichens, *Parmotrema rampoddense* and *Parmotrema tinctorum* against methicillin-sensitive and methicillin-resistant *Staphylococcus aureus*. Evidence Based Complementary and Alternative Medicine. Article ID 9985325, 18 pages

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