Hasanga Rathnayake

Lecturer, Department of Biochemistry,

Faculty of Medicine, University of Ruhuna, Galle 80 000, Sri Lanka

Phone: +94 71 815 4005

Office: +94 912 234 801/Ext 210

Email: hasangamr@gmail.com, pramudi@med.ruh.ac.lk



Personal Details

Full Name	Munasing Rathnayake Pramudi Hasanga
Nationality	Sri Lankan (Sinhalese)
Religion	Buddhism
Residence	56/27 B, Sri Rewatha Mawatha, Heenpendala, Galle 80 000, Sri Lanka
Marital status	Married and blessed with a son
Education	

"Age related trends and population specific reference ranges of bone mineral		
density and bio markers of bone turnover in adult females"		
(Dept. of Biochemistry, Faculty of Medicine, University of Ruhuna)		
Principal supervisor: Prof. Sarath Lekamwaam		
Co-supervisors: Prof. Chandima M Wickramatilake and Prof. Janaka Lenora		
BSc Special (Second Class Honours Upper Division) Degree in Molecular		
Biology and Biotechnology, University of Peradeniya (14th Jan 2013)		
Final Grade Point Average (GPA) = $3.50/4.00$		
Biochemistry, Biotechnology, Bioinformatics, Biostatistics, Molecular		
Genetics, Molecular Immunology, Molecular Cell Biology, Recombinant		
DNA Technology, Evolution and Molecular Systematics, DNA and Forensic		
Medicine Laboratory, Cell and Tissue Culture, Enzymology, Microbiology		
and Molecular Virology, Bio-Physics, Inorganic Chemistry, Organic		
Chemistry, Physical Chemistry, Analytical Chemistry		
"Isolation, identification of lipolytic filamentous fungi and partial		
isolation, identification of inpolytic mamerious fungi and partial		
purification of lipase"		
1 7		
_		

Professional Experience

2013-present Lecturer (Probationary), Department of Biochemistry, Faculty of Medicine,

University of Ruhuna

2013 Demonstrator, Department of Molecular Biology and Biotechnology,

Faculty of Science, University of Peradeniya. (18.02.2013 - 14.09.2013)

Research

Skills & experience

Hands on experience in DNA extraction (from blood, animal tissues, plant tissues, bacteria and fungi), Recombinant DNA Technology, DNA separation using Agarose Gel Electrophoresis, Protein extraction, Protein separation using SDS-PAGE, Protein purification using Chromatographic methods, Enzyme Linked Immunosorbent Assay (ELISA), PCR Technique, Southern blotting, Northern blotting and Immunoblotting techniques, Cell and tissue culture technique, Handling of Laboratory animals (rat and mice), Isolation and identification of Microorganisms, Microbial susceptibility testing using disc diffusion assay and broth micro-dilution assay.

Special interests

Age related trends of bone turnover markers in adult women.

Relationship of bone turnover markers with serum vitamin D, systemic inflammation, nutrient intake, physical activity, bone mineral density (BMD) and trabecular bone score (TBS) in adult women.

Effect of bisphosphonates and vitamin D supplement on bone turnover markers in postmenopausal osteoporosis.

Screening of antimicrobial properties of Sri Lankan medicinal plants and lichens against human pathogens and screening of phytochemicals and isolation of active compounds using gas chromatography-mass spectrometry (GC-MS).

Training & Experience on Statistics

2018

Certificate course on "Computer Based Data Analysis (CBDA) Level I-General-Purpose Statistical Analysis using SPSS" conducted by the Faculty of Management Studies and Commerce, University of Sri Jayewardenepura. (03.02.2018 to 10.03.2018/ five weeks)

2018	Certificate course on "Computer Based Data Analysis (CBDA) Level II-		
	Multivariate Statistical Analysis using AMOS and SmartPLS" conducted		
	the Faculty of Management Studies and Commerce, University of Sri		
	Jayewardenepura. (17.03.2018 to 28.04.2018/ four weeks)		
2018	Workshop on "Statistics Using EXCEL and SPSS in Research" conducted by		
	the Faculty of Fisheries and Marine Sciences, University of Ruhuna		
	(16.08.2018 & 17.08.2018) Resource person; Professor K. Marimuthu, AIMST		
	University, Malaysia.		
2017	"Workshop on SPSS" by Galle Medical Association, Teaching Hospital,		
	Karapitiya (07.11.2017)		
2016	Certificate course on "The Use of SPSS in Social Research" conducted by		
	the Faculty of Management and Finance, University of Ruhuna (27.07.2016 to		
	13.09.2016)		

Special Trainings

2020	Training on Ethics conducted by Ethics Review Committee, Faculty of		
	Medicine, University of Ruhuna		
2020	Training on animal ethics at the workshop entitled "Establishing a cultural		
	care for animal research through harmonization" conducted by the Sri		
	Lanka Association for Laboratory Animal Science (SLALAS) together with		
	the Ethics Review Committee of the Faculty of Medicine, University of		
	Colombo		
2016	Training course on "Laboratory Animal Science" at the Department of		
	Laboratory Animal Science in the Medical Research Institute (MRI), Colombo		
	8 (35hr training)		
2014	Certificate course in "Professional Development in Higher Education		
	(CCPDHE)" conducted by the staff development center, University of		
	Ruhuna.		

Awards/Achievements

Received Galle Medical Association (GMA) Postgraduate Research Award for the MPhil project titled "Age related trends and population specific reference ranges of bone mineral density and biomarkers of bone turnover in adult women" 2021

- Received 'Best Poster Presentation award' for the abstract 'Association of bone turnover markers with body composition and serum high sensitivity C-reactive protein levels in adult women' at Faculty of Medicine Academic Sessions 2020
 Received 'Best Oral Presentation award' for the abstract 'Association of protein intellegation with home wing and density and home turnover markers in community throlling.
- intake with bone mineral density and bone turnover markers in community dwelling adult women' at Annual scientific Sessions of The Nutrition Society of Sri Lanka 2021
- Received 'Finalist of Best Technologist Abstract Award' at the 25th Annual Scientific Meeting of the International Society for Clinical Densitometry (ISCD) on 23rd March 2019 in Malaysia for the abstract "Age related trends in trabecular bone score and its correlation with spine bone mineral density in Sri Lankan adult women"
- Received 'Merit award' at 2nd Research Symposium of the Faculty of Allied Health Sciences, University of Ruhuna 2019 for the abstract 'Assessment of trabecular bone score and its relationship with body composition in pre and postmenopausal women'
- Received 'Third place' at 2nd Research Symposium of the Faculty of Allied Health Sciences, University of Ruhuna 2019 for the co-authored abstract 'Antibacterial activity of crude hexane extract of Epaltes divaricata (Heen mudamahana) against methicillin-resistant Staphylococcus aureus clinical isolates'

 Authors; De Zoyza MHN, Hasanga MRP, Hewawasam RP, Wijayaratne WMDGB

Manuscripts

- 1. **Rathnayake H,** Lekamwasam S, Wickramatilake CM, De Zoyza E & Lenora J; Age related trends and reference intervals of cross linked C-telopeptide of type I collagen and procollagen type I N-propeptide from a reference population of Sri Lankan adult women. *Accepted to publish in Archives of osteoporosis*.
- 2. **Rathnayake H,** Wickramatilake CM & Senanayake D W; Knowledge, attitudes and practices on diet and nutrition in a group of national-level athletes in the developing world. *Medicina Dello Sport*; *Rivista di Fisiopatologia Dello Sport*, 2021; 74(1):56-65
- 3. Rathnayake N, Lekamwasam S & **Rathnayake H**; Prediction of appendicular skeletal muscle mass of older women using anthropometry-based equations (Brief report). *Ceylon Medical Journal* 2021; 66: 50-52
- 4. Chandima MW, **Hasanga R**, Madhujith T, Champa JW, Thamlini J. Food Supply, Consumption, and Food Safety Behavior Among a Group of Sri Lankans During Early COVID-19 Pandemic in 2020. *Asia Pac J Public Health*. 2021;33(5):638-640. doi: 10.1177/10105395211014704.
- 5. Shiromi PSAI, Hewawasam RP, Jayalal RGU, **Rathnayake H**, Wijayaratne WMDGB, Wanniarachchi D; Chemical Composition and Antimicrobial Activity of Two Sri Lankan Lichens, *Parmotrema rampoddense*, and *Parmotrema tinctorum* against Methicillin-Sensitive and Methicillin-Resistant *Staphylococcus aureus*. Evid Based Complement Alternat Med. 2021 Jun 1;2021:9985325. doi: 10.1155/2021/9985325.
- 6. **Rathnayake H,** De Zoysa MHN, Hewawasam RP and Wijayaratne WMDGB, Comparison of *In Vitro* Antibacterial Activity of *Epaltes divaricata* and *Vetiveria zizanioides* against Methicillin-Resistant *Staphylococcus aureus*. *Scientifica*, **2020**: 8239053

- 7. Lekamwasam S, Karunanayaka M, Kaluarachchi V, Chandran M, **Rathnayake H**, Subasinghe S, Ability of FRAX Sri Lanka adjusted for trabecular bone score to discriminate between postmenopausal women with a recent fracture and without a fracture. Osteoporosis and Sarcopenia **2020**: 6(3):106-110
- 8. **Rathnayake H**, Lekamwasam S, Wickramatilake CM, Lenora J; Variation of urinary and serum bone turnover marker reference values among pre and postmenopausal women in Asia: A systematic review; accepted by *Archives of Osteoporosis*. **2020:**15:57
- 9. Janesha UGS, **Rathnayake H**, Hewawasam RP and Wijayaratne WMDGB, 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.* **2020:** 29;9:21
- 10. **Rathnayake H**, Lekamwasam S, Wickramatilake C, Lenora J; 'TBS and BMD reference data for women aged 20-70 years and the effect of local reference data on the prevalence of postmenopausal osteoporosis; a cross-sectional study from Sri Lanka' *Archives of Osteoporosis*. **2019**: 20;14(1):91
- 11. De Zoysa MHN, **Rathnayake H,** Hewawasam RP and Wijayaratne WMDGB, Determination of *in vitro* antimicrobial activity of five Sri Lankan medicinal plants against selected human pathogenic bacteria; *International Journal of Microbiology*. **2019**:6;7431439

Abstracts & Conference Proceedings

- 1. <u>Harshika WAK</u>, Wickramatilake C M, **Rathnayake H**, Wijesinghe C J, Goonesinghe S Anti-urolithic Effect of Watermelon (Citrullus lanatus) Juice in Patients with Urolithiasis: A clinical trial; *Accepted to publish in Annual Scientific Sessions of The Nutrition Society of Sri Lanka*, 2022
- 2. Rathnayake H, Lekamwasam S, Wickramatilake C M and Lenora J; Effect of alendronate and vitamin D₃ treatment on bone turnover markers in postmenopausal women with high fracture risk: A double-blind, randomized controlled trial. 80th Annual Academic Sessions of the GMA-2021
- 3. **Rathnayake H**, Lekamwasam S, Wickramatilake C M, De Zoysa E and Lenora J. Association of Serum Vitamin D with Bone Turnover Markers, Trabecular Bone Score and Bone Mineral Density in a Group of Community Living Adult Women in Bope Poddala MOH Area. *18th Academic Sessions* **2021**, *University of Ruhuna*
- 4. Rathnayake H, Lekamwasam S, Wickramatilake C M, Lenora J and De Zoysa E, Association of bone turnover markers with body composition and serum high sensitivity C-reactive protein levels in adult women' at *Faculty of Medicine Academic Sessions (FMAS)* 2020
- 5. <u>Rathnnayake H</u>, Lekamwasam S, Wickramatilake C M and Lenora J, Association of protein intake with bone turnover markers and bone mineral density in a group of community dwelling adult women. *Annual Scientific Sessions of The Nutrition Society of Sri Lanka*, **2021**
- 6. Wickramatilake C M, <u>Rathnayake H</u>, Madhujith T, Wijesinghe C J and Joshepkumar T. Household food security, food consumption behaviour and food safety during the COVID-19 pandemic and lockdown period during early 2020 in Sri Lanka. *Annual Scientific Sessions of The Nutrition Society of Sri Lanka*, **2021**

- 7. <u>Harshika WAK</u>, Wickramatilake CM, **Rathnayake H**, Wijesinghe CJ, Goonesinghe S Nutritional Status, Macronutrients and Water intake in a Group of Patients with Urolithiasis Managed at Teaching Hospital, Karapitiya. *Annual Scientific Sessions of The Nutrition Society of Sri Lanka*, **2021**
- 8. <u>Rathnayake H</u>, De Zoyza MHN, Hewawasam RP, Wijayaratne WMDGB, Comparative effect of crude extracts of two Sri Lankan medicinal plants (*Epaltes divaricata* and *Vetiveria zizanioides*) against methicillin-resistant *Staphylococcus aureus*. *Sri Lanka Medical Association 133rd Anniversary International Medical Congress*, **2020**
- 9. <u>Rathnayake H</u>, Lekamwasam S, Wickramatilake CM, Lenora J; Reference intervals and age related trends of bone turnover markers in adult women. *Sri Lanka Medical Association* 133rd Anniversary International Medical Congress, 2020
- 10. <u>Hasanga MRP</u>, Lekamwasam S, Wickramatilake CM, Lenora J; Assessment of trabecular bone score and its relationship with body composition in pre and postmenopausal women. Presented (oral) at 2nd Research Symposium of the Faculty of Allied Health Sciences, University of Ruhuna 2019
- 11. <u>Harshika WAK</u>, Wickramatilake CM, **Rathnayake H**, Shiromi PSAI, Wijesinghe CJ and Goonesinghe S, Risk factor profile and rate of overweight/obesity in patients with urolithiasis attending a tertiary care hospital: A preliminary survey. *Ruhunu Clinical Society Annual Academic Sessions* **2019**
- 12. <u>De Zoyza MHN</u>, **Hasanga MRP**, Hewawasam RP, Wijayaratne WMDGB; Antibacterial activity of crude hexane extract of *Epaltes divaricata* (Heen mudamahana) against methicillin-resistant Staphylococcus aureus clinical isolates; Presented (oral) at 2nd Research Symposium of the Faculty of Allied Health Sciences, University of Ruhuna **2019**
- 13. <u>Shiromi PSAI</u>, **Hasanga MRP**, Hewawasam RP, Wijayaratne WMDGB and Jayalal RGU; Screening of antibacterial activities of crude extracts of the lichen, *Parmotrema tinctorum* against gram positive and negative pathogenic bacteria; 7th International Conference of Sabaragamuwa University of Sri Lanka 2019
- 14. <u>Shiromi PSAI</u>, **Hasanga MRP**, Hewawasam RP, Wijayaratne WMDGB and Jayalal RGU; Antimicrobial activity of ethanol, hexane and aqueous extracts of a newly reported Sri Lankan lichen, *Parmotrema defectum* against human pathogenic bacteria; Presented (poster) at 75th SLAAS Annual Sessions 2019
- 15. <u>Janesha UGS</u>, **Hasanga MRP**, Hewawasam RP and Wijayaratne WMDGB; Antibacterial potential of ethanol leaf extracts of Listea iteodaphne ("Kalu Nika") against selected human pathogens, Presented (poster) at 75th SLAAS Annual Sessions 2019
- 16. <u>Hasanga MRP</u>, Lekamwasam S, Wickramatilake CM, Lenora J; Bone mineral density and bone quality in obese/overweight postmenopausal women; Presented (poster) at 3rd *Annual Academic Sessions of Sri Lanka College of Internal Medicine* **2019**
- 17. Shiromi PSAI, <u>Hasanga MRP</u>, Hewawasam RP, Wijayaratne WMDGB, Jayalal RGU; Antibacterial activity of the crude extracts of Sri Lankan lichen *Parmotrema rampoddense* against clinically important pathogenic bacteria; Presented (oral) at 78th Annual Academic Sessions of Galle Medical Association *2019*
- 18. <u>Janesha UGS</u>, **Hasanga MRP**, Hewawasam RP and Wijayaratne WMDGB; Comparison of in vitro antibacterial activity of *Listea iteodaphne* extracts against selected gram positive and

- gram negative pathogenic bacteria; Presented (oral) 78th Annual Academic Sessions of Galle Medical Association 2019
- 19. Wickramatilake CM, Wijesinghe CJ, Herath HMM, <u>Hasanga MRP</u>, Dissanayake M, Mohideen MR; Association of sodium and potassium intake with blood pressure and anthropometric indices among healthy community dwellers; Presented (poster) 7th Faculty of Medicine Academic Sessions 2019
- 20. Wickramatilake CM, De Silva B, <u>Hasanga MRP</u>, Nanayakkara T, Nanayakkara R, Gayashani KPK; Health characteristics and living standards of prison inmates in Southern Sri Lanka; Presented (poster) at 7th Faculty of Medicine Academic Sessions 2019
- 21. <u>De Zoyza MHN</u>, **Hasanga MRP**, Hewawasam RP, Wijayaratne WMDGB; *Invitro* antibacterial activity of root extracts of *Vetiveria zizanioides* against methicillin resistant Staphyllococcus aureus; Presented (oral) at 132th International Medical Congress of the Sri Lanka Medical Associations 2019
- 22. <u>Hasanga MRP</u>, Lekamwasam S, Wickramatilake CM, Lenora J; 'Age related trends in trabecular bone score and its correlation with spine bone mineral density in Sri Lankan adult women; Presented (oral) at 25th Annual Scientific Meeting of the International Society for Clinical Densitometry, Malaysia 2019
- 23. <u>Hasanga MRP</u>, Lekamwasam S, Wickramatilake CM, Lenora J; 'Association between anthropometric indices and total body bone mineral density (TBBMD) in pre- and post-menopausal females; Presented (oral) at *Annual Academic Sessions of University of Ruhuna-* 2019
- 24. <u>De Zoyza MHN</u>, **Hasanga MRP**, Hewawasam RP, Wijayaratne WMDGB; '*In vitro* antibacterial activity of five Sri Lankan medicinal plants against clinically important pathogens; Presented (poster) at *Proceedings of Asian Symposium on Medicinal Plants*, *Spices and Other Natural Products XVI* **2018**
- 25. <u>Hasanga MRP</u>, Lekamwasam S, Wickramatilake CM, Lenora J; 'Age-related trends of fasting serum glucose and total cholesterol in community living adult females; Presented (poster) at 131st Anniversary International Medical Congress of the SLMA 2018
- 26. <u>Hasanga MRP</u>, Lekamwasam S, Wickramatilake CM, Lenora RSJ Age-related trends in nutritional status reflected by body mass index, waist circumference in a group of community dwelling adult females; *Annual academic sessions of the Galle Medical Association* **2017**
- 27. <u>Hasanga MRP</u>, Lekamwasam S, Wickramatilake CM, Lenora J; 'Age-related trends in protein and total energy intake in a group of community dwelling adult females; Presented (poster) at 50th Annual academic Sessions of Ceylon College of Physicians 2017
- 28. <u>Hasanga MRP</u>, Lekamwasam S, Wickramatilake CM, Lenora J; 'Variation of bone turnover marker (BTM) reference values among Asians; Presented (poster) at *IOF Regionals 6th Asia-Pacific Osteoporosis Meeting* **2016**
- 29. <u>Hasanga MRP</u>, Hewawasam RP; 'Phytochemical screening of five Sri Lankan medicinal plants with hepatoprotective activity; Presented (oral) at 127th International Medical Congress of the Sri Lanka Medical Association (SLMA) 2014
- 30. <u>Hasanga MRP</u>, Samaraweera P; 'Isolation and identification of lipase producing fungi and partial characterization of their lipase' was presented (oral) at *Peradeniya University Research Sessions (PURSE)* **2012**

Other Publications

Article on "Celebrate; but be cautious" for Newsletter of The Nutrition Society of Sri Lanka, Volume 01 – April, 2020

Cartoon for Newsletter of The Nutrition Society of Sri Lanka, Volume 01 – April, 2020

Professional and Society Memberships

2019-present	Life member of Sri Lanka Association for the Advancement of Science	
	(SLAAS)	
2016-present	Member of National Science Foundation, Sri Lanka (NSF/STMIS/10/7771)	
2016-present	Life member of Nutrition Society of Sri Lanka	
2013-present	Life Member of Galle Medical Association (GMA), Sri Lanka	
2013-present	Member of Ruhuna Faculty of Medicine Teacher's Association (RFMTA)	

National Services

Council member of Nutrition Society of Sri Lanka (NSSL) 2020-2022

Special duties assigned/completed (2020-2021)

- Overall coordinator of "NutriCa" island-wide arts competition **2021** for school children in collaboration with Ministry of Education (ongoing)
- Overall coordinator of the workshop titled "Starting up a Quality Biomedical Research" (completed successfully on 21st of May 2021)
- Overall coordinator of "NutriCa" island-wide arts competition **2020** for school children in collaboration with Ministry of Education (successfully completed)
- Contributed to raise the funds for Annual Scientific Sessions of NSSL 2021 (January)

Institutional Services

- PIC of registration desk committee of FMAS, Faculty of Medicine, University of Ruhuna, 2021
- Member of Inauguration Committee of Academic Sessions of University of Ruhuna, 2021
- FMAS registration desk committee, Faculty of Medicine, University of Ruhuna 2018, 2019, 2020
- Member of Ethics Review Committee of the Faculty of Medicine, University of Ruhuna (2020-present)

- Member of Ethics Review Committee of the Faculty of Medicine, University of Ruhuna (2014-2017)
- Member of Research Committee, Faculty of Medicine, University of Ruhuna (2014-2017)
- Member of Housing Committee, Faculty of Medicine, University of Ruhuna (2014-2017)
- Member of Research Committee, Faculty of Medicine, University of Ruhuna (2014-2017)
- Member of Library Committee, Faculty of Medicine, University of Ruhuna (2014-2017)

Undergraduate Research Project Supervision

0		
2019	De Zoyza MHN, Department of Medical Laboratory Science, Faculty of	
	Allied Health Sciences, University of Ruhuna	
	Thesis title: Determination of in vitro Antimicrobial Activity of Five Sri	
	Lankan Medicinal Plants against Selected Human Pathogenic Bacteria	
2020	Shiromi PSAI, Department of Natural Sciences, Faculty of Science,	
	Sabaragamuwa University of Sri Lanka	
	Thesis title: Antimicrobial properties of selected lichen species found in	
	Belihuloya, Sri lanka	
	•	

Special Interests

Painting & Swimming

Mrs. Hasanga Rathnayake

Date: September 2021

Referees

Prof. Sarath Lekamwasam	Prof. Chandima Madhu Wickramatilake
Senior Professor of Medicine	Senior Lecturer in Biochemistry
Department of Medicine	Department of Biochemistry
Faculty of Medicine,	Faculty of Medicine,
University of Ruhuna, Galle	University of Ruhuna, Galle
091 2234801,091 2234803, 091 2222314	091 2234801,091 2234803, 091 2222314
Mobile: 0777275360	chandimadhu@live.com

slekamwasam@gmail.com