

PULWANSHA THARIKA AMANDI THILAKARATHNA

Lecturer (Probationary)
Nuclear Medicine Unit
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Academic Qualifications

- Master of Philosophy (M.Phil.) (Reading)
University of Peradeniya
- Master of Medical Statistics
University of Kelaniya (2024–2025)
- Postgraduate Diploma in Laboratory Animal Science
University of Colombo (2021–2023)
- B.Sc. (Hons) Medical Laboratory Science, Second Class Upper Division (Gold Medalist/Batch Top)
University of Ruhuna (2015–2020)

Teaching & Professional Appointments

- Lecturer (Contract), Open University of Sri Lanka (2024–2026)
- Graduate Research Assistant, PGIS, University of Peradeniya (2022–2024)
- Temporary Demonstrator, University of Ruhuna (2020–2022)

Volunteering:

- Research Assistant (Volunteer), Sri Lanka–China Joint Research & Demonstration Centre (2022–2024)

Visiting Lecturing:

Asiri Academy of Health Sciences (2026)

Subjects: Clinical Biochemistry, Histopathology & Ethics and Professional Conduct

Awards

- Indian High Commissioner’s Annual Gold Medal for the best performance in the MLS 7th batch (2020)
- Sri Lanka Society for Microbiology Publication Award (2025) for SCIE publication titled “Spatio-temporal variation of microbial indicators of river water and treatment efficiencies of drinking water treatment plants along the upper Mahaweli River segment of Sri Lanka”
- Best Poster Presentation (Second Place), SLALAS Annual Scientific Sessions (2024)

Research Activities

Research Experiences

- **Characterization of the microbiota of water sources in selected CKDu endemic areas of Sri Lanka, and its association with water chemistry (2023)**

Objective: Assessment of the association between water chemistry and the water microbiota i.e. shiga-toxin producers, cyanobacteria and Hanta viruses in Chronic Kidney Disease endemic areas in comparison with non-endemic areas and to recommend an appropriate domestic water treatment method.

- **Evaluation of behavioural changes in Wistar rats on the sounds of mobile phones in the animal center of the Medical Research Institute (2023)**

Objective: Assessment of the changes in the behavior related to the sudden exposure to mobile phone ringing at the animal facilities to minimize the interference with animal-behavioural studies

- **Identification and quantification of chemical and microbial contaminations in the watershed of the Mahaweli River to ensure a safe drinking water supply (2022)**

Objective: Detection of chemical contaminants (heavy metals, pesticides and antibiotics) and microbial (*E.coli*, Cryptosporidium, Coronaviruses, Hepatitis A and E viruses, antibiotic-resistant bacteria) contaminants in river water and chlorinated water to ensure public safety

- **Acceptance and post-vaccination symptoms of COVID-19 vaccines among adults in Galle (2021)**

Objective: Identifying the factors related to the acceptance or rejection of COVID-19 vaccination and reported post-vaccination symptoms

- **In-vitro assessment of carbapenem susceptibility against clinical isolates of extended-spectrum beta-lactamase-producing Gram-negative bacteria in the Teaching Hospital Karapitiya (2021)**

Objective: Assessment of the use of carbapenem as an antibiotic for treating patients with septicemia caused by ESBL producers

- **Assessment and comparison of dilutional linearity of six common serum tumor markers using diluents and pooled serum on two different automated immunoassay platforms (2019-2020)**

Objective: Use of pooled human serum as an alternative diluent and assess suitable dilution factors for highly concentrated human samples for tumor marker assays

Publications

Published manuscripts in peer-reviewed journals

Thilakarathna, P.T.A. (2021). Impact of diabetes mellitus on life-threatening complications of COVID-19: a scoping review. Proceedings of the 4th National Library Research Symposium – 2021, Sri Lanka, pp.17-29.

Karunaratha, U., Yapa, P., Menike, A.A.I.S., Ganesh, L., Ganesh, K.S.V.A.B., **Thilakarathna, A.**, Gunatilake, M., Singh, V.P., Md Isa, M.L., Poosala, S. & Baumans, V. (2024). Religion-based perspective and influences on use of animals in research. Journal of Laboratory Animal Science, 7 (2), pp 54-68

Fareed F., **Thilakarathna, P.T.A.**, Karunaratne, S.H.P.P. & Noordeen, F. (2024) Cryptosporidium infections in Sri Lanka: A Systematic Review. Ceylon Journal of Science, 53 (2), pp 291-299.
<http://doi.org/10.4038/cjs.v53i2.8358> (IF:1.0/2025)

Thilakarathna, P.A., Fareed, F., Makehelwala, M., Weragoda, S.K., Fernando, R., Premachandra, T., Rajapakse, M., Wei, Y., Yang, M., & Karunaratne, S.H.P.P. (2024). Land-Use Pattern-Based Spatial Variation of Physicochemical Parameters and Efficacy of Safe Drinking Water Supply along the Mahaweli River, Sri Lanka. Water, 16 (18): 2644. <https://doi.org/10.3390/w16182644> (IF: 3.0/2025)

Thilakarathna, P. T. A., Fareed, F., Athukorala, S. N. P., Jinadasa, R., Premachandra, T., Noordeen, F., Gamage, C. D., Makehelwala, M., Weragoda, S. K., Fernando, B. R., Zhang, Y., Wei, Y., Yang, M., & Karunaratne, P. (2025). Spatio-temporal variation of microbial indicators of river water and treatment efficiencies of drinking water treatment plants along the upper Mahaweli River segment of Sri Lanka. Environmental Pollution, 367, 125628–125628. 125628. <https://doi.org/10.1016/j.envpol.2025.125628> (IF: 7.3/2025)

Thilakarathna, P. T. A., Prabodhi, H. L. K., & Bandara, W. V. R. T. D. G. (2025). Prevalence, severity and duration of post-vaccination symptoms following COVID-19 vaccination in a working-aged population in Galle district, Sri Lanka. Ceylon Journal of Science, 54(1), 261–270. <https://doi.org/10.4038/cjs.v54i1.8343> (IF: 1.0/2025)

Thilakarathna P.T.A., Gunatilake, M, Thammitiyagodage, M.G. & Karunakaran, R. &. Behavioral Alterations in Wistar Rats Induced by Mobile Phone Auditory Stimuli in a Controlled Setting (2026). Journal of Laboratory Animal Science, 9(2), 25-34.

Abstracts (presented at National/International conferences)

Thilakarathna, P.T.A., Dissanayake, M., Gunawardana, K.B. & Akalanka, H.M.K. (2020). Assessment of dilution linearity of six common serum tumor markers using commercial diluents and pooled serum on automated immunoassay platforms. Proceedings of the 3rd Research Symposium of the Faculty of Allied Health Sciences, University of Ruhuna, Sri Lanka. October 2nd, 2020: 17p.

Thilakarathna, P.T.A. (2021). Analytical performance of glucometers as point of care testing devices in management of diabetes mellitus: a scoping review. Proceedings of the 30th Anniversary Academic Sessions, Faculty of Medicine, University of Kelaniya, Sri Lanka. October 28th – 31st, 2021: 72p.

Thilakarathna, P.T.A., Prabodhi, H.L.K. & Bandara, W.V.R.T.D.G. (2022). Post-vaccination symptoms of COVID-19 vaccines among adults in Galle. Galle Medical Journal, 27(1): 17p.

Wickramasinghe, S.S., Wickramasuriya, H., Piyasiri, D.L.B., **Thilakarathna, P.T.A.**, Nagahawatte, A.D.E.S., Wijayarathne, G.B., Weerasinghe, N.P., Gunasena, S., Thabrew, H., Padmini, J.L. & Dharmasiri, G.N.T. (2022). In-vitro assessment of carbapenem susceptibility against clinical isolates of extended-spectrum beta-lactamase-producing Gram-negative bacteria in the Teaching Hospital Karapitiya. *Ruhuna Journal of Medicine*, 10 (1): 34p.

Karunaratne, S.H.P.P., **Thilakarathna, P.T.A.**, Fareed, F., Makehelwala, M., Premachandra, T.N., Weragoda, S.K., Jinadasa, R., Athukorala, A.D.S.N.P., Noordeen, F., Rajapakse, M., Fernando, B.R., Gamage, C., Wei, Y. & Yang, M. (2022). Study on microbial and chemical pollution of the Mahaweli water at water treatment plants located between Kotmale and Victoria reservoirs. *Proceedings of the 13th International Conference on Sustainable Built Environment - 2022*, Kandy, Sri Lanka. December 16th – 18th, 2022: 162p.

Thilakarathna, P.T.A., Prabodhi, H.L.K. & Bandara, W.V.R.T.D.G. (2023). Acceptance and perception of COVID-19 vaccination among adults in the Galle district. *Proceedings of the 11th YSF Symposium – 2023*. January 27th, 2023: 130p.

S.S. Wickramasinghe, H. Wickramasuriya, D.L.B. Piyasiri, **P.T.A. Thilakarathna**, A. de S. Nagahawatte, G.B. Wijayarathne, N.P. Weerasinghe, S. Gunasena & H. Thabrew (2023). Antibiotic sensitivity of multidrug-resistant bacteria isolated among patients admitted to a Tertiary Care Centre in Southern Sri Lanka. *Proceedings of 20th Academic Sessions of University of Ruhuna, Sri Lanka – 2023*. June 7th, 2023: 116p.

Fareed, F., **Thilakarathna, P.T.A.**, Noordeen, F., Bandara, D.R.L.N., Jinadasa, R., Premachandra, T.N., Makehelwala, M., Fernando, R., Gamage, C., Rajapakse, M., Weragoda, S.K. & Karunaratne, S.H.P.P. (2023). *Cryptosporidium* species contamination in waters treated at selected treatment plants along the Mahaweli River. *Proceedings of the Third International Conference of the Centre for Environmental Sustainability 2023*, University of Peradeniya, Sri Lanka. August 25th, 2023: 26p.

Thilakarathna, P.T.A., Fareed, F., Athukorala, S., Premachandra, T.N., Noordeen, F., Rajapakse, M., Weragoda, S.K. & Karunaratne, S.H.P.P. (2023). Enumeration of heterotrophic bacteria in raw and treated water of the river Mahaweli – A culture-based approach. *Proceedings of the Peradeniya University International Research Sessions (iPURSE) 2023*, University of Peradeniya, Sri Lanka. September 20th and 21st, 2023: 203p.

Thilakarathna, P.T.A., Fareed, F., Athukorala, S., Premachandra, T.N., Noordeen, F., Makehelwala, M., Fernando, R., Gamage, C., Rajapakse, M., Weragoda, S.K. & Karunaratne, S.H.P.P. (2023). Monitoring coliform contamination at Mahaweli river water intakes to ensure safe drinking water supply. *Proceedings of the 12th Annual Conference and Scientific Sessions of Sri Lanka Society for Microbiology*, Sri Lanka. October 27th, 2023: 25p.

Fareed, F., Suganya, T., **Thilakarathna, P.T.A.**, Jinadasa, R., Premachandra, T.N., Weragoda, S.K. & Karunaratne, S.H.P.P. (2023). Prevalence of antibiotic-resistant bacteria along the Mahaweli river segment between Kotagala and Balagolla. *Proceedings of PGIS Research Congress 2023*, Postgraduate Institute of Science, University of Peradeniya, Sri Lanka. November 3rd and 4th, 2023: 16p.

Thilakarathna, P.T.A., Fareed, F., Makehelwela, M., Premachandra, T.N., Weragoda, S.K. & Karunaratne, S.H.P.P. (2023). Physico-chemical characteristics of inlet and outlet water in water treatment plants along the Mahaweli River between Kotmale and Victoria reservoirs. Proceedings of PGIS Research Congress 2023, Postgraduate Institute of Science, University of Peradeniya, Sri Lanka. November 3rd and 4th, 2023: 17p.

F. Fareed, F. Noordeen, **P.T.A. Thilakarathna**, T.N. Premachandra, S.K. Weragoda, Yuansong Wei, Zhang Yu, Min Yang and S.H.P.P. Karunaratne (2023). Detection of Cryptosporidium and coronavirus in influent and effluent water in selected water treatment plants along the Mahaweli River in Kandy district. Proceedings of the 14th International Conference on Sustainable Built Environment - 2023, Kandy, Sri Lanka. December 16th – 18th, 2023: 199p.

P.T.A. Thilakarathna, S. Athukorala, F. Fareed, R.N. Jinadasa, T.N. Premachandra, M. Makehelwela, B.R. Fernando, S.K. Weragoda, Yawei Wang, Zhang Yu, Min Yang and S.H.P.P. Karunaratne (2023). Diversity and antibiotic resistance of heterotrophic bacteria in drinking water: A study along the Mahaweli river water treatment plants from Kotagala to Balagolla. Proceedings of the 14th International Conference on Sustainable Built Environment - 2023, Kandy, Sri Lanka. December 16th – 18th, 2023: 200p.

Thilakarathna P.T.A., Thammitiyagodage, M.G., Karunakaran, R. & Gunatilake, M. (2024) Evaluation of behavioural changes in Wistar rats on sounds of mobile phones. Proceedings of 11th Annual Scientific Sessions and International Conference of Sri Lanka Association for Laboratory Animal Science – 2024, Colombo, Sri Lanka. January 20th – 21st, 2024: 63p.

Fareed, F., **Thilakarathna, P.T.A.**, Jinadasa, R., Noordeen, F., Weragoda, S.K., Wang, Y., Wei, Y., Zhang, Y., Yang, M. & Karunaratne, S.H.P.P. Antibiotic resistance spectra of E. coli along the upper Mahaweli river segment of Sri Lanka. 15th International Conference on Sustainable Built Environment - 2024, Kandy, Sri Lanka, 2024: 222p.

Thilakarathna, P.T.A., Fareed, F., Athukorala, S., Jinadasa, R.N., Noordeen, F., Rajapakse, M., Weragoda, S.K. & Karunaratne, S.H.P.P. Antibigrams and Multi-Antibiotic Resistance of Staphylococcus and Micrococcus species isolated from chlorinated drinking water supply of the Mahaweli River, Sri Lanka. 29th International Forestry and Environment Symposium – 2025, University of Sri Jayewardenepura, Sri Lanka, 2025: 30p.

Thilakarathna, P.T.A., Fareed, F., Athukorala, S.N.P., Jinadasa, R.N., Weragoda, S.K. & Karunaratne, S.H.P.P. Persistence of antibiotic-resistant genes in chlorinated drinking water: evidence from Mahaweli River water treatment plants. 3rd International Research Symposium of the Faculty of Allied Health Sciences, University of Ruhuna, Galle, Sri Lanka, 2025: 24p.

Thoradeniya, T.R.G.S.D, Rathnaweera, H.W.T.N., Fareed, F., **Thilakarathna, P.T.A.**, Noordeen, F. & Karunaratne, S.H.P.P. Monitoring Cryptosporidium and Coronaviruses in livestock farm water: A Study at NLDB Farm Haragama, Kandy District, Sri Lanka. Peradeniya University International Research Symposium and Exposition 2025, Peradeniya, Sri Lanka, 2025: 255p.

Thilakarathna, P.T.A., Fareed, F., Gunathilake, R., Danthanarayana, P.R., Premachandra T.N., Athukorala, S.N.P., Noordeen, F., Karunaratne, S.H.P.P. & Jinadasa, R.N. Coliform contamination in groundwater sources of CKDu-endemic regions in Sri Lanka. Peradeniya University International Research Symposium and Exposition 2025, Peradeniya, Sri Lanka, 2025: 345p.

Fareed, F., **Thilakarathna, P.T.A.**, Jinadasa, R.N., Weragoda S.K., Noordeen, F. & Karunaratne, S.H.P.P. Detection of antibiotic resistance genes in the upper segment of Mahaweli River. Peradeniya University International Research Symposium and Exposition 2025, Peradeniya, Sri Lanka, 2025: 350p.

Rathnaweera, H.W.T.N., Thoradeniya, T.R.G.S.D, Fareed, F., **Thilakarathna, P.T.A.**, Jinadasa, H.R.N. & Karunaratne, S.H.P.P. Prevalence and genetic characterization of antibiotic-resistant *Escherichia coli* in selected locations along the Mahaweli River in Kandy, Sri Lanka. Peradeniya University International Research Symposium and Exposition 2025, Peradeniya, Sri Lanka, 2025: 373p.

Thilakarathna, P.T.A., Fareed, F., Gunathilake, R., Danthanarayana, P.R., Premachandra, T.N., Athukorala, S.N.P., Noordeen, F., Wang, C., Zhang, Y., Karunaratne, S.H.P.P. and Jinadasa, R.N. (2026). Bacterial community divergence in groundwaters across a CKDu-endemic risk continuum in Sri Lanka. 14th Annual Conference and Scientific Sessions of Sri Lanka Society for Microbiology, Sri Lanka, January 31st 2026: 15 (7):S14

Thilakarathna, P.T.A., Krishanthini, N., Fareed, F., Gunathilake, R., Danthanarayana, P.R., Premachandra, T.N., Athukorala, S.N., Noordeen, F., Karunaratne, S.H.P.P. and Jinadasa, R.N. (2026). Antibiotic resistance profiles of *Escherichia coli* isolated from groundwaters in CKDu-endemic region of Sri Lanka. In: 14th Annual Conference and Scientific Sessions of Sri Lanka Society for Microbiology, Sri Lanka, January 31st 2026: 15 (7):S15

Nishadha, N.P., Chamini, R.A., Rajawasam, P.P. & **Thilakarathna P.T.A.** (2026). Prevalence and Microbial Profile of Pediatric Urinary Tract Infections at Base Hospital Puttalam in Sri Lanka (2026). Proceedings of the 2nd Research Conference of the Faculty of Health Sciences, The Open University of Sri Lanka (OuFHSRC 2026).

Shariha, M.Y.S., Jayasundara, J.M.N.T., Jayawardhana, D. & **Thilakarathna, P.T.A.** (2026). Association Between C-Reactive Protein to Albumin Ratio (CAR) and Severity of Acute Bacterial Infections (2026). Proceedings of the 2nd Research Conference of the Faculty of Health Sciences, The Open University of Sri Lanka (OuFHSRC 2026).

Research Profiles

Google Scholar: <https://scholar.google.com/citations?hl=en&user=Z9f9fkIAAAAJ>

ResearchGate: https://www.researchgate.net/profile/Pulwansha-T-Amandi-Thilakarathna?ev=hdr_xprf

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Professional Memberships

- Sri Lanka Association for Laboratory Animal Science (Life Member)
- Young Scientists Forum
- Sri Lanka Society for Microbiology

Referees

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