

CHANDIKA DAMESH GAMAGE BVSc (Hons)., Ph.D.
 MSLCM(SL), MRSTMH(UK), FSLCVS(SL), FRSPH(UK)
 45years old (B.D. 1977-01-25), Sri Lankan, male, married

6/4, Riverside Garden, Sirimalwaththa, Gunnepana, Kandy, Sri Lanka
 E-mail : chandika.gamage@med.pdn.ac.lk / gamagecd@gmail.com
 Tel : +94771661460 / +94704374050

LinkedIn : <https://www.linkedin.com/in/chandika-gamage/>



Career summary:

- Teaching and student mentoring - (Microbiology and immunology) 2+ Years as a Professor in Microbiology
6.5 Years as a Senior Lecturer in Microbiology
- Infectious diseases researcher - 11 Years
- Head of the Department in a higher education institute - 4+ Years
- Scholarly / Knowledge dissemination: 3 Ph.D., 3 MPhil, 5 MSc students completed
30 peer-reviewed indexed papers

As at 2022/05/22

Current Position and affiliation:

Professor in Microbiology

(December 2019 onward)

Faculty of Medicine, University of Peradeniya,
 Kandy, Sri Lanka

Head of the Department (June/ 2018 up to date)

Department of Microbiology, Faculty of Medicine, University
 of Peradeniya, Kandy, Sri Lanka

Immediate past position and affiliation:

Senior Lecturer (May/ 2013 – Dec /2019)

Department of Microbiology, Faculty of Medicine, University
 of Peradeniya, Kandy, Sri Lanka

Foreign Researcher (September 2018 to March 2019)

Graduate School of Medicine, University of the Ryukyus, Japan

Post-doctoral fellow (April/2011 –March/2013)

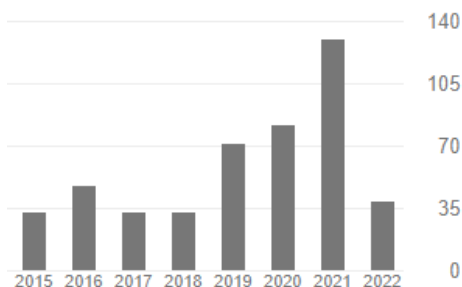
Laboratory of Infectious Diseases, Department of Microbiology,
 Hokkaido University Graduate School of Medicine, Sapporo, Hokkaido, Japan

Google Scholar

Chandika Gamage



	All	Since 2017
Citations	534	390
h-index	13	11
i10-index	18	14



EDUCATION:

Zoonosis Control Expert Certification by course work and research component.

Duration: 2 years (2009/April-2011/March) Effective date: 25th March 2011

Institute: Graduate School of Veterinary Medicine, Hokkaido University, Japan

PhD in Infectious Diseases Epidemiology by course work and research component

Duration: 4 years (2007/ April - 2011/March) Effective date: 24th March 2011

Institute: Graduate School of Medicine, Hokkaido University, Japan.

Dissertation Title: Surveillance and Epidemiology of Leptospirosis among Humans and Animals in Kandy, Sri Lanka: Search for Important Reservoirs

Bachelor in Veterinary Science (2nd Class Upper Division))by course work and research component

Duration: 4 years (1999/September - 2004/August) Effective date:11th August 2004

Institute: Faculty of Veterinary Medicine, University of Peradeniya, Kandy, Sri Lanka

Thesis Title: “Ornamental Birds’ Health and Nutritional Management: Veterinary Perspective”

Others academic qualifications:

Certificate in Zoonoses Control and Prevention, 2007, (Hokkaido University, Japan)

Certificate in Human Resource Management, 2002, (The Institute of Personnel Management, Sri Lanka)

International Diploma in Computer Studies, 1999, (National Computing Centre, United Kingdom)

ROLES HELD IN PROFESSIONAL, ACADEMIC AND/OR TECHNICAL ORGANISATIONS**Teaching and research:**

1. Postdoctoral Researcher (2011 -2013) – Graduate School of Medicine, Hokkaido University, Sapporo, Japan
2. Senior Lecturer in Microbiology (Teaching, Research, Administration and Service) – Faculty of Medicine, University of Peradeniya, Sri Lanka (2013 to 2019)
3. Visiting Lecturer (undergraduate teaching), Faculties of Allied Health Sciences, Dental and Veterinary Medicine and Animal Sciences, University of Peradeniya, Sri Lanka
4. Module Coordinator (Bacterial Infections – 2), Master in Science – Medical Microbiology, Postgraduate Institute of Science, University of Peradeniya, Sri Lanka
5. Panel of Teachers, Master in Science – Medical Microbiology, Postgraduate Institute of Science, University of Peradeniya, Sri Lanka
6. Member of the Board of Study in Microbiology, Postgraduate Institute of Medicine, University of Colombo (1st June 2018- 31st May 2021)
7. Visiting Foreign Researcher (September 2018 – March 2019) – Graduate School of Medicine, University of the Ryukyus, Japan

Administration / Honorary positions:

8. Head, Department of Microbiology, Faculty of Medicine, University of Peradeniya (3rd June 2018- to date)
9. Director, Research and Development Unit, Faculty of Medicine, University of Peradeniya, Sri Lanka (25th April 2018 to date)
10. Secretary, Peradeniya Faculty of Medicine Teachers' Association (July 2017 to date)
11. Student Counselor, Faculty of Medicine, University of Peradeniya, Sri Lanka (Since 2014~)
12. Member of Research Committee of the Joint Research and Demonstration Centre (JRDC) – University of Peradeniya, Sri Lanka (February 2020 to date)_

Research interests / themes:

My goal is to expand our knowledge of zoonotic infections and other emerging infectious diseases, which are frequently associated to poverty and poor living conditions. I focus on rodent-borne zoonoses (leptospirosis and hantavirus infection) and wastewater pathogens based epidemiology, I'm trying to figure out what factors influence transmission between humans and animals, as well as what interventions are best for low-resource groups especially targeting to develop low cost gene-diagnostic methods.

RESEARCH GRANT ENROLMENTS**International Grants****Principal Investigator:**

- 1) Project title: Development and evaluation of a point-of-care RT-LAMP for simultaneous detection of *Leptospira* spp. and dengue viruses
Duration: 1st January 2022 to 31st December 2022 (On going)
Project No: Terumo Life Science Foundation, Japan Value: Yen 3,000,000/-
- 2) Project title: Research Options for Control of Zoonoses in Sri Lanka
Duration: February 2016 to December 2016
Project No: FA-3-III DGD-ITM 2014-2016 Value: Euro. 8,000/-

Co-Investigator:

- 1) Project title: Development of a sewage pipeline deterioration prediction system for Sri Lanka based on wastewater quality information
Funded by: Japanese Society for Science Promotion (JSPS)
Duration: October 2021 to March 2024 (On going)
Project No: Kaken 21KK0069 Value: Yen 20,000,000/-
Principal Investigator: Prof. Daisuke Sano, Graduate School of Engineering, Tohoku University, Japan
- 2) Project title: Addressing the Global Burden of Leptospirosis in Two Endemic Countries”
Funded by: National Institute of Health (NIH), United State of America
Duration: September 2015 to February 2020.
Project No: 1U19AI115658-01 Value: US\$. 210,000/-
Principal Investigator: Prof. Suneth Agampodi, Faculty of Medicine and Allied Sciences, Rajarata University, Sri Lanka
- 3) Project title: Towards rabies eradication of Sri Lanka - One Health Approach from Central Province to Nationwide
Funded by: Japan society for the promotion of Science (JSPS), Japan
Duration: September 2013 – August 2015
Principal Investigator: Dr. Yoshihide Obayashi, Hokkaido University, Japan

Local Grants (Sri Lanka)**Principal Investigator:**

- 4) Project title: Investigation and characterization of hantavirus infection in selected Districts and enhancement of hantavirus diagnostic facilities in Sri Lanka.
Duration: May, 2021 to April/2023 (On going)
Funded by: National Research Council – Sri Lanka
Grant No: 020-073 Value: LKR 4,860,000/-
- 5) Project title: To identify the natural history, clinical manifestation, mortality and morbidity of CKD-u patients with two controlled groups (**Principal Investigator of Study – 3**)
Duration: 2017 to 2019
Funded by: National Science Foundation, Sri Lanka
Grant No: RPHS/2016/CKDu/06 Value: LKR 8 million (Whole project 47 million)
- 6) Project title: Development of an antigen capture ELISA for the detection of pathogenic leptospires during the early phase of infection (2013)
Duration: November 2013 to November 2015
Funded by: University Research Committee, University of Peradeniya, Sri Lanka
Grant No: RG/AF/2013/37/M Value: LKR 1,040,000/-

Co-Investigator:

- 7) Identification of the prevalence of methicillin-resistant Staphylococcus aureus (MRSA) in pig farms, farm employees and characterization of isolates in selected (2014)
Duration: 1 Year Funded by: National Research Council, Sri Lanka.
Grant no: NRC 14-105 Value: LKR 2,300,000/-
Principal Investigator: Dr. Ruwani Sagarika Kalupahana
- 8) Project Title: Characterization of Sri Lankan isolates of Mycobacterium bovis and assessing health status of potentially exposed farm workers
Duration: 2 Years
Grant no: NRC 15-110 Value: LKR 4,050,000/-
Principal Investigator: Dr. H.R.N. Jinadasa

Research collaborators (International)

- 1) Prof. Kumiko Yoshimatsu Ph.D. and team
 - a. Institute: Department of Microbiology, Graduate School of Medicine, Hokkaido University, Japan
 - b. Collaborative area : Hantavirus infection
 - c. Collective grants: Yes, for activities done in Sri Lanka, 2016, 2017, 2018
 - d. Collaboration starts: Year 2012Email: yosimatu@med.hokudai.ac.jp

- 2) Dr. Nobuo Koizumi Ph.D.
 - a. Institute: Department of Bacteriology, National Institute of Infectious Diseases, Japan
 - b. Collaborative area : Leptospirosis
 - c. Collective grants: Yes, for activities done in Sri Lanka, 2009, 2010
 - d. Collaboration starts: Year 2009Email: nkoizumi@niid.go.jp

- 3) Prof. Suzuki Yasuhiko Ph.D.
 - a. Institute: Center for Zoonosis Control (CZC), Faculty of Veterinary Medicine, Hokkaido University, Japan
 - b. Collaborative area : Zoonotic Tuberculosis / Human Tuberculosis
 - c. Collective grants: Yes, for activities done in Sri Lanka, 2013
 - d. Collaboration starts: Year 2012Email: suzuki@czc.hokudai.ac.jp

- 4) Prof. Joseph Vinetz MD, FACP, FIDSA, FASTMH, BS
 - a. Institute: Yale School of Medicine
 - b. Collaborative area : Leptospirosis
 - c. Collective grants: Yes, for activities done in Sri Lanka, 2015
 - d. Collaboration starts: Year 2014Email: joseph.vinetz@yale.edu

- 5) Prof. TuanyokApichai Ph.D.
 - a. Institute: Emerging Pathogens Institute ,University of Florida, USA
 - b. Collaborative area : Melioidosis
 - c. Collective grants: Not Yet
 - d. Collaboration starts: Year 2017Email: tuanyok@ufl.edu

TEACHING EXPERIENCES (2005 – to date):

- Professor in Microbiology: : Department of Microbiology,
(2019/Dec up today) Faculty of Medicine,
University of Peradeniya
- Senior Lecturer in Microbiology
(2013/05/13 to 2019/12/04): Department of Microbiology,
Faculty of Medicine,
University of Peradeniya
- Visiting Lecturer (Microbiology) (2013/05/13 up today): Faculty of Veterinary Medicine and
Animal Science,
Faculty of Dental Sciences and
Faculty of Allied Health, University of
Peradeniya,
- Visiting Lecturer (MSc in Medical Microbiology): Postgraduate Institute of Science
University of Peradeniya
- Teaching Assistant (04/2007 – 03/2009) : Department of Global Health and Epidemiology,
Graduate School of Medicine, Hokkaido University,
Japan
- Member of panel of teachers for : Faculty of Veterinary Medicine and Animal Science,
• MVSc program (03/2006) : University of Peradeniya, Sri Lanka
- Lecturer (Temp) (01/2005 – 12/2005) : Faculty of Veterinary Medicine and Animal Science,
University of Peradeniya, Sri Lanka.

POSTGRADUATE TRAINING SUPERVISOR (since 2013 May)
(MEDICINE, VETERINARY MEDICINE AND BIOMEDICAL SCIENCES)

- Doctoral studies (Ph.D.) : Completed: Three students Ongoing studies: one student
- Master in Philosophy (MPhil) : Three completed, two ongoing students
- Master in Medical Microbiology : Five completed students, four ongoing
- Master in Science: Three completed

AWARDS / FELLOWSHIPS:

- 2021/Oct Country Ambassador – Sri Lanka, Royal Society of Tropical Medicine and Hygiene, United Kingdom
- 2020/Jan Specially Appointed Associate Professor, Graduate School of Medicine, Hokkaido University, Sapporo, Japan
- 2018/19 Fellowship of foreign researcher, Graduate School of Medicine, University of the Ryukyus, Japan
- 2017 International Society of Leptospirosis Meeting travel fellowship for oral presentation worth of 1000NZD
- 2017 Sri Lankan Society for Microbiology (SSM) Scientific Publications Award
- 2016 Research Publication Award, Faculty of Medicine, University of Peradeniya, Sri Lanka
- 2015 National Research Council (NRC) Merit Award for Scientific Publication, Sri Lanka
- 2015 Research Publication Award, Faculty of Medicine, University of Peradeniya, Sri Lanka
- 2014/16 Country Investigator for Sri Lanka regarding the One Health research activity supported by the 3rd Framework Agreement Programme (FA3), established between the Belgian Directorate General for Development (DGD) and the Institute of Tropical Medicine (ITM), Antwerp.
- 2014 Recipient of a research grant from Japan-North American Medical Exchange Foundation for international collaborative research on Hantavirus infection and leptospirosis in Sri Lanka
- 2013 Recipient of fellowship (Visiting researcher) from Japan-North American Medical Exchange Foundation
- 2012 Recipient of a grant for postdoctoral research on leptospirosis, Global COE (Center of Excellence) Program "Establishment of International Collaboration Centers for Zoonosis Control", Hokkaido University, Japan
- 2011 Recipient of a grant for postdoctoral research on leptospirosis, Global COE (Center of Excellence) Program "Establishment of International Collaboration Centers for Zoonosis Control", Hokkaido University, Japan
- 2011 Postdoctoral fellowship, Global COE (Center of Excellence) Program "Establishment of International Collaboration Centers for Zoonosis Control", Hokkaido University, Japan

- 2009 Recipient of a grant for field epidemiological study, Global COE (Center of Excellence) Program "Establishment of International Collaboration Centers for Zoonosis Control", Hokkaido University, Japan
- 2007 Japanese Government scholarship (MONBU KAGAKU SHO) for doctoral studies in Hokkaido University

PROFESSIONAL MEMBERSHIPS / AFFILIATIONS:

- | | |
|--|--|
| A. Fellow of Royal Society of Public Health UK (2021) | E. Sri Lanka Veterinary Council (Reg. 1348 in July/ 2006) |
| B. Member of Royal Society of Tropical Medicine and Hygiene, UK (2021) | F. European Society of Clinical Microbiology and Infectious Diseases (ID: 57724) |
| C. Fellow of Sri Lanka College of Veterinary Surgeons (2014) | G. Japanese Society for Veterinary Epidemiology |
| D. Member of Sri Lanka College of Microbiologists (2013) | H. I. Sri Lanka Veterinary Association |

CV Referees:

- 1) Professor Yasuhiko Suzuki Ph.D. 鈴木 定彦
 Director, Hokkaido University International Institute for Zoonosis Control
 所長, 北海道大学人獣共通感染症国際共同研究所
 Professor, Division of Bioresources
 〒001-0020 札幌市北区北20条西10丁目
 Kita 20, Nishi 10, Kita-ku, Sapporo, 001-0020, Japan
 Tel 011-706-7315/Mobile 080-5620-4763/Fax 011-706-7310
 Email: suzuki@czc.hokudai.ac.jp

- 2) Professor Sanath Rajapakse Ph.D.
 Department of Molecular Biology and Biotechnology,
 Faculty of Science, University of Peradeniya,
 Peradeniya, Sri Lanka.
 Email: sanathr@sci.pdn.ac.lk

RESEARCH PUBLICATIONS:

Book chapters:

1. **Chandika D. Gamage**, Hiko Tamashiro, Makoto Ohnishi and Nobuo Koizumi (2012). Epidemiology, Surveillance and Laboratory Diagnosis of Leptospirosis in the WHO South-East Asia Region, Zoonosis, Dr. Jacob Lorenzo-Morales (Ed.), ISBN: 978-953-51-0479-7, InTech, Available from: <http://www.intechopen.com/books/zoonosis/epidemiology-surveillance-and-laboratory-diagnosis-of-leptospirosis-in-the-who-south-east-asia-regio>
2. Kalupahana, KM Verstappen, **CD Gamage**, N Dissanayake, L Ranatunga, H Graveland, B Duim, JA Wagenaar (2017), “Methicillin,-resistant staphylococci in animals: epidemiology and interventions” Chapter titled: MRSA in pigs, farm employees, and the environment in pig-dense areas of Sri Lanka Pages 81-95, ISBN 978-90-393-6747-6, Publisher: ©Utrecht University
3. **Gamage, C.**, Sarathkumara, Y. and Muthugala, R., 2021. Hantavirus Infection. In: K. Maduwage, S. Wickramasinghe and S. Kularatne, ed., Tropical Medicine with Special Reference to Sri Lanka, 1st ed. Peradeniya: Centre for Research in Tropical Medicine, Faculty of Medicine, University of Peradeniya, Sri Lanka, ISBN 978-955-589-295-7, pp.33-55.

Peer-reviewed Indexed Journals:

- 1) Athapattu T, Fernando R, Abayawansa R, Fernando P, Fuward M, Samarakoon N, Koizumi N, **Gamage C**. Carrier Status of *Leptospira* spp. in Healthy Companion Dogs in Sri Lanka. Vector Borne Zoonotic Dis. 2022 Feb;22(2):93-100. doi: 10.1089/vbz.2021.0065. Epub 2022 Jan 28. PMID: 35099292.
- 2) Muthusinghe DS, Shimizu K, Lokupathirage SMW, Wei Z, Sarathkumara YD, Fonseka GRA, Senarathne P, Koizumi N, Kawakami T, Koizumi A, Wickramasinghe C, Ebihara H, Matsuno K, Tsuda Y, Arikawa J, **Gamage CD**, Yoshimatsu K, (2021) Identification of Novel Rodent-Borne Orthohantaviruses in an Endemic Area of Chronic Kidney Disease of Unknown Etiology (CKDu) in Sri Lanka. Viruses. 2021 Oct 2;13(10):1984. doi: 10.3390/v13101984
- 3) Jayasundara D, **Gamage C**, Senavirathna I, Warnasekara J, Matthias MA, Vinetz JM, Agampodi S, (2021) Optimizing the microscopic agglutination test (MAT) panel for the diagnosis of Leptospirosis in a low resource, hyper-endemic setting with varied microgeographic variation in reactivity., PLoS Negl Trop Dis. 2021 Jul 1;15(7):e0009565. doi: 10.1371/journal.pntd.0009565. eCollection 2021 Jul.
- 4) Nisansala T, Weerasekera M, Ranasinghe N, Marasinghe C, **Gamage C**, Fernando N, Gunasekara C, (2021) Contributing role of TNF, IL-10, sTNFR1 and TNF gene polymorphisms

- in disease severity of leptospirosis. *Med Microbiol Immunol.* 2021 Aug;210(4):211-219. doi: 10.1007/s00430-021-00714-5. Epub 2021 Jun 23
- 5) Nisansala, T., Weerasekera, M., Ranasinghe, N., Marasinghe, C., **Gamage, C.**, Fernando, N. and Gunasekara, C., 2021. Importance of KIM-1 and MCP-1 in Determining the Leptospirosis-Associated AKI: A Sri Lankan Study. *BioMed Research International*, 2021, pp.1-11.
 - 6) Jayasundara, D., Senavirathna, I., Warnasekara, J., **Gamage, C.**, Siribaddana, S., Kularatne, S., Matthias, M., Mariet, J., Picardeau, M., Agampodi, S. and M. Vinetz, J., 2021. 12 Novel clonal groups of *Leptospira* infecting humans in multiple contrasting epidemiological contexts in Sri Lanka. *PLOS Neglected Tropical Diseases*, 15(3), p.e0009272.
 - 7) **Gamage, C.**, Sato, Y., Kimura, R., Yamashiro, T. and Toma, C., 2020. Understanding leptospirosis eco-epidemiology by environmental DNA metabarcoding of irrigation water from two agro-ecological regions of Sri Lanka. *PLOS Neglected Tropical Diseases*, 14(7), p.e0008437.
 - 8) Kikuchi, F., Aoki, K., Ohdachi, S., Tsuchiya, K., Motokawa, M., Jogahara, T., Son, N., Bawm, S., Lin, K., Thwe, T., **Gamage, C.**, Ranoroso, M., Omar, H., Maryanto, I., Suzuki, H., Tanaka-Taya, K., Morikawa, S., Mizutani, T., Suzuki, M., Yanagihara, R. and Arai, S., 2020. Genetic Diversity and Phylogeography of Thottapalayam thottimvirus (Hantaviridae) in Asian House Shrew (*Suncus murinus*) in Eurasia. *Frontiers in Cellular and Infection Microbiology*, 10.
 - 9) Karunanayake, L., **Gamage, C.**, Gunasekara, C., De Silva, S., Izumiya, H., Morita, M., Muthusinghe, D., Yoshimatsu, K., Niloofa, R., Karunanayake, P., Uluwattage, W., Ohnishi, M. and Koizumi, N., 2020. Multilocus sequence typing reveals diverse known and novel genotypes of *Leptospira* spp. circulating in Sri Lanka. *PLOS Neglected Tropical Diseases*, 14(8), p.e0008573.
 - 10) Wei, Z., Shimizu, K., Nishigami, K., Tsuda, Y., Sarathukumara, Y., Muthusinghe, D., **Gamage, C.**, Granathne, L., Lokupathirage, S., Nanayakkara, N., Arikawa, J., Kikuchi, F., Tanaka-Taya, K., Suzuki, M., Morikawa, S., Arai, S. and Yoshimatsu, K., 2020. Serological methods for detection of infection with shrew-borne hantaviruses: Thottapalayam, Seewis, Altai, and Asama viruses. *Archives of Virology*, 166(1), pp.275-280.
 - 11) Dahanayake, M., **Gamage, C.**, Sirimuthu, N. and Jayasundera, A., 2020. A novel approach for qualitative biosensing of anti-leptospiral IgG antibodies in human sera using functionalised silver nanoparticles. *Journal of the National Science Foundation of Sri Lanka*, 48(4), p.437.
 - 12) Sarathkumara YD, **Gamage CD**, Lokupathirage S, Muthusinghe DS, Nanayakkara N, Gunarathne L, Shimizu K, Tsuda Y, Arikawa J, Yoshimatsu K.(2019), Exposure to Hantavirus is

- a Risk Factor Associated with Kidney Diseases in Sri Lanka: A Cross Sectional Study., *Viruses*. 2019 Jul 31;11(8). pii: E700. doi: 10.3390/v11080700.
- 13) Lokupathirage SMW, Muthusinghe DS, Shimizu K, Nishigami K, Noda K, Tsuda Y, Sarathkumara YD, Gunawardana S, Arikawa J, **Gamage CD**, Yoshimatsu K. (2019), Serological Evidence of Thailand Orthohantavirus or Antigenically Related Virus Infection Among Rodents in a Chronic Kidney Disease of Unknown Etiology Endemic Area, Girandurukotte, Sri Lanka. *Vector Borne Zoonotic Dis*. 2019 Jul 24. doi: 10.1089/vbz.2018.2429.
 - 14) Mendis C, Thevanesam V, Kumara A, Wickramasinghe S, Madagedara D, **Gamage C**, Gordon SV, Suzuki Y, Ratnatunga C, Nakajima C. Insight into genetic diversity of Mycobacterium tuberculosis in Kandy, Sri Lanka reveals predominance of the Euro-American lineage. *Int J Infect Dis*. 2019 Jul 9. pii: S1201-9712(19)30276-0. doi: 10.1016/j.ijid.2019.07.001.
 - 15) Kalupahana, R., Duim, B., Verstappen, K., **Gamage, C.**, Dissanayake, N., Ranatunga, L., Graveland, H. and Wagenaar, J. (2019). MRSA in Pigs and the Environment as a Risk for Employees in Pig-Dense Areas of Sri Lanka. *Frontiers in Sustainable Food Systems*, 3.
 - 16) Athapattu TPJ, Fernando BR, Koizumi N, **Gamage CD.**, Detection of pathogenic leptospires in the urine of domesticated elephants in Sri Lanka. *Acta Trop*. 2019 Jul;195:78-82. doi: 10.1016/j.actatropica.2019.04.029. Epub 2019 Apr 29. PMID:31047864
 - 17) **Gamage C**, Sarathkumara Y, Weerakkodi V, Shiokawa K, Yoshimatsu K, Arikawa J, Koizumi N. (2018). Development and evaluation of monoclonal antibody-based antigen capture enzyme-linked immunosorbent assay for the diagnosis of acute leptospirosis in humans. *J Immunol Methods*. 2018 Sep 11. pii: S0022-1759(18)30280-1. doi: 10.1016/j.jim.2018.09.006. [Epub ahead of print]
 - 18) Nisansala GGT, Muthusinghe D, Gunasekara TDCP, Weerasekera MM, Fernando SSN, Ranasinghe KNP, Marasinghe MGCP, Fernando PS, Koizumi N, **Gamage CD** (2018). Isolation and characterization of Leptospira interrogans from two patients with leptospirosis in Western Province, Sri Lanka. *J Med Microbiol*. 2018 Sep;67(9):1249-1252. doi: 10.1099/jmm.0.000800. Epub 2018 Jul 19.
 - 19) **Gamage CD**, Yoshimatsu K, Sarathkumara YD, Kulendiran T, Nanayakkara N, Arikawa J. (2017). Serological evidence of hantavirus infection in Girandurukotte, an area endemic for chronic kidney disease of unknown aetiology (CKDu) in Sri Lanka. *Int J Infect Dis*. 2017 Apr;57:77-78. doi: 10.1016/j.ijid.2017.02.004. Epub 2017 Feb 14
 - 20) **Gamage, CD** and Sarathkumara, YD (2016), Chronic kidney disease of uncertain etiology in Sri Lanka: Are leptospirosis and Hantaviral infection likely causes? *Medical Hypotheses*, 91, pp.16-19.
 - 21) Shiokawa K, **Gamage CD**, Koizumi N, Sakoda Y, Shimizu K, Tsuda Y, Yoshimatsu K, Arikawa J., Evaluation of truncated LipL32 expressed by Escherichia coli and Pichia pastoris for

- serodiagnosis of *Leptospira* infection in rodents. *J Vet Med Sci.* 2016 Feb;78(2):221-30. doi: 10.1292/jvms.15-0325.
- 22) Kanda K, Obayashi Y, Jayasinghe A, de S Gunawardena GS, Delpitiya NY, Priyadarshani NG, **Gamage CD**, Arai A, Tamashiro H. Outcomes of a school-based intervention on rabies prevention among school children in rural Sri Lanka. *Int Health.* 2014 Dec 30. pii: ihu098. [Epub ahead of print] PubMed PMID: 25549632.
- 23) Amada T, Yoshimatsu K, Koma T, Shimizu K, **Gamage CD**, Shiokawa K, Nishio S, Ahlm C, Arikawa J. Development of an immunochromatography strip test based on truncated nucleocapsid antigens of three representative hantaviruses. *Virol J.* 2014 May 14;11:87. doi: 10.1186/1743-422X-11-87. PubMed PMID: 24885901; PubMed Central PMCID: PMC4047433.
- 24) Yasuda SP, **Gamage CD**, Koizumi N, Nishio S, Isozumi R, Shimizu K, Koma T, Amada T, Suzuki H, Yoshimatsu K, Arikawa J. Distinct genetic characteristics of Sri Lankan *Rattus* and *Bandicota* (Murinae, Rodentia) inferred from mitochondrial and nuclear markers. *Genes Genet Syst.* 2014;89(2):71-80. PubMed PMID: 25224973
- 25) Amada T, Yoshimatsu K, Yasuda SP, Shimizu K, Koma T, Hayashimoto N, **Gamage CD**, Nishio S, Takakura A, Arikawa J. Rapid, whole blood diagnostic test for detecting anti-hantavirus antibody in rats. *J Virol Methods.* 2013 Oct;193(1):42-9. doi: 10.1016/j.jviromet.2013.04.021. Epub 2013 May 15. PubMed PMID: 23684845
- 26) Kanda K, Jayasinghe A, Silva KT, Priyadarshani NG, Delpitiya NY, Obayashi Y, Arai A, **Gamage CD**, Tamashiro H. Religious leaders as potential advocates for HIV/AIDS prevention among the general population in Sri Lanka. *Glob Public Health.* 2013;8(2):159-73. doi: 10.1080/17441692.2012.745892. Epub 2012 Dec 3. PubMed PMID: 23205515.
- 27) Nwafor-Okoli C, Koizumi N, Kularatne SA, Rajapakse J, **Gamage CD**, Muto M, Suzuki M, Lee RB, Kanda K, Obayashi Y, Tamashiro H. *Leptospira* infection at the University of Peradeniya Teaching Hospital, Sri Lanka: clinical and laboratory investigations. *Southeast Asian J Trop Med Public Health.* 2012 Jul;43(4):943-50. PubMed PMID: 23077817.
- 28) **Gamage CD**, Amarasekera J, Palihawadana P, Samaraweera S, Mendis D, Janakan N, Lee RB, Obayashi Y, Tamashiro H. Analysis of hospital-based sentinel surveillance data on leptospirosis in Sri Lanka, 2005-2008. *Jpn J Infect Dis.* 2012;65(2):157-61. PubMed PMID: 22446124.

- 29) **Gamage CD**, Koizumi N, Muto M, Nwafor-Okoli C, Kurukurusuriya S, Rajapakse JR, Kularatne SA, Kanda K, Lee RB, Obayashi Y, Watanabe H, Tamashiro H. Prevalence and carrier status of leptospirosis in smallholder dairy cattle and peridomestic rodents in Kandy, Sri Lanka. *Vector Borne Zoonotic Dis.* 2011 Aug;11(8):1041-7. doi: 10.1089/vbz.2010.0153. Epub 2011 Feb 1. PubMed PMID: 21284522.
- 30) **Gamage CD**, Yasuda SP, Nishio S, Kularatne SA, Weerakoon K, Rajapakse J, Nwafor-Okoli C, Lee RB, Obayashi Y, Yoshimatsu K, Arikawa J, Tamashiro H. Serological evidence of Thailand virus-related hantavirus infection among suspected leptospirosis patients in Kandy, Sri Lanka. *Jpn J Infect Dis.* 2011;64(1):72-5. PubMed PMID: 21266762.
- 31) Koizumi N, **Gamage CD**, Muto M, Kularatne SA, Budagoda BD, Rajapakse RP, Tamashiro H, Watanabe H. Serological and genetic analysis of leptospirosis in patients with acute febrile illness in kandy, srilanka. *Jpn J Infect Dis.* 2009 Nov;62(6):474-5. PubMed PMID: 19934544.

Conference papers (Peer reviewed and selected):

1. **Chandika D. Gamage**, JanakanNavaratnasingam, ChinyereNwafor, Gino C. Matibag, Hiko Tamashiro., Epidemiology of Human Leptospirosis in Sri Lanka., Hokkaido Journal of Public Health., 2008., 22(1), 140-141., ISSN 0914-2630
2. **Chandika D. Gamage**, SudathSamaraweera, Gino C. Matibag, Yoshihide Obayashi, Hiko Tamashiro., Leptospirosis Surveillance in Sri Lanka, 2005-2008., Journal of Veterinary Epidemiology., 2009., 13(1), ISSN 1343-2583
3. **Chandika D. Gamage**, DavikaMendis, PabaPalihawadana, ChinyereNwafor, Yoshihide Obayashi, Hiko Tamashiro., Descriptive Epidemiology of Leptospirosis in Sri Lanka: From Sentinel Site Surveillance., Hokkaido Journal of Public Health., 2009., 23(1), ISSN 0914-2630
4. C. Nwafor-Okoli, S. Kularatne, **C. Gamage**, R. Rajapaske, Y. Obayashi, H. Tamashiro., Knowledge of Leptospirosis among community-based rural residents in Kandy, Sri Lanka: Implications for intervention., *International Journal of Infectious Diseases*, 2010., 14 Supplement 1, e390
5. **Chandika D. Gamage**, SudathSamaraweera, A.K.S.B.De. Alwis, Katsutoshi Nagano, Koji Kanda, Romeo B. Lee, Yoshihide Obayashi, Hiko Tamashiro., Human Tuberculosis in Sri Lanka, 2004 –

2008: Notifications and Treatment Outcomes., The Japanese Journal of Health and Human Ecology, Sept.2010 Vol 75, ISSN: 0368-9365

6. ChinyereNwafor-Okoli, Hiroko Yamashina, S.A.M. Kularatne, **ChandikaGamage**, R.P.V.J Rajapakse, Nobuo Koizumi, Romeo B. Lee, Koji Kanda, Yoshihide Obayashi, Hiko Tamashiro., Knowledge and behavioral risk factors related to leptospirosis among rural residents of Kandy, Sri Lanka : Do occupation, education and residence matter?., The Japanese Journal of Health and Human Ecology, Sept.2010 Vol 75, ISSN: 0368-9365
7. **C. D. Gamage**, S.Yasuda, S.Nishiro, S.Kularathne, K.Weerakoon, J. Rajapakse, C.Nwafor-Okoli, R. Lee, Y.Obayashi, K.Yoshimatsu, J.Arikawa, H.Tamashiro., Hantavirus Infections in Sri Lanka: A Preliminary Study., International Conference on Emerging Infectious Diseases., July 2010 , ISBN # 978-1-55581-637-7
8. Yoshimatsu K, Shimizu K, Yasuda S, Endo R, Koma T, Ibrahim IN, Perwitasari D, Yunianto A, Pattamadilok S, Kumperasart S, Luan VD, Huong VTQ, Chandy S, Sridharan G, NinhT,Kularante S, Rajapakse J, **Gamage C**, Tamashiro H and Arikawa J. Prevalence of Hantaviruses in Humans and Rodents in Southeast and South Asia., VIII International conference on HFRS,HPS & Hantaviruses., Divani Palace Acropolis Hotel, Athens, Greece., May 20-22, 2010
9. Kumiko Yoshimatsu, Kenta Shimizu, Shumpei Yasuda, Rika Endo, TakaakiKoma, Ima Nurisa Ibrahim, Dian Perwitasari, Andre Yunianto, SirimaPattamadilok, SanitKumperasart, Vu Dinh Luan, Vu Thi Que Huong, Sara Chandy, GopalanSridharan, Truong Ninh, SenanayakeKularatne, JayantheRajapakse, **ChandikaGamage**, Hiko Tamashiro, and Jiro Arikawa., Hantavirus infection in East Asian countries., Emerging and Re-emerging Vector-Borne and Zoonotic Viral Infectious Diseases in Southeast Asia., Hanoi, Vietnam., September 9-10, 2010
10. **Chandika D. Gamage**, KanaeShiokawa, Nobuo Koizumi, Senanayake A. M. Kularatne, Jayanthe R. P. V. Rajapakse, ChinyereNwafor-Okoli, Kumiko Yoshimatsu, Jiro Arikawa., The impact of two recombinant antigens base ELISA assay to diagnose leptospirosis., 8th Scientific Meeting of International Leptospirosis Society, Fukuoka Japan, October, 2013.
11. KanaeShiokawa, **Chandika D.Gamage**, Nobuo Koizumi, SanaeNishio, Yu Koarashi, Yoshimi Tsuda, Kenta Shimizu, Kumiko Yoshimatsu, Jiro Arikawa., Application of recombinant LigA and LipL32 to the lateral flow immunoassay for the detection of pathogenic Leptospira spp. specific IgG in rodent sera., 8th Scientific Meeting of International Leptospirosis Society, Fukuoka Japan, October, 2013.
12. Nishadi N. Perara, **Chandika D. Gamage**, ThilakanjaliGamage, KanaeShiokawa, Chie Nakajima, Kumiko Yoshimatsu, Nobuo Koizumi, Yasuhiko Suzuki and Jiro Arikawa., leptospirosis carrier status among free-roaming goats in Central Province of Sri Lanka., One Health International Conference, 5-6 September 2014, Kandy, Sri Lanka

13. **Chandika D. Gamage**, Kumiko Yoshimatsu, VijithaVaratharajan, R. P. V. J. Rajapakse, S. A. M Kularathne, ChinyereNwafor-Okoli, TakaakiKomaa, Takako Amadaa, Kenta Shimizu, Yoshihide Obayashi, Hiko Tamashiro and Jiro Arikawa,. Endorsement of the existence of hantavirus infection and circulation of Thailand virus like virus in Kandy, Sri Lanka., One Health International Conference, 5-6 September 2014, Kandy, Sri Lanka
14. KanaeShiokawa, SameeraRathnayake, IsharaKarunadasa, ThilakanjaleeGamage,**Chandika D. Gamage**, Kumiko Yoshimatsu, Jiro Arikawa., Prevalence of Leptospire in Peridomestic Rodents and Shrews in Kandy District, Sri Lanka., 9th Scientific Meeting of International Leptospirosis Society 2015, 7-10 October 2015, Semarang, Indonesia. ISBN 978-979-097-393-0
15. SarathkumaraYomani, **GamageChandika**, Daulagala, Pavithra, Yoshimatsu Kumiko, Arikawa Jiro,. Asymptomatic Hantavirus Infection among Apparently Healthy Residents., In Kandy District, Sri Lanka., Third International Conference on Global Public Health 2015., 10-11th December, 2015, Colombo, Sri Lanka., ISBN 978-955-4543-31-7
16. **ChandikaGamage**, DevindaMuthusinghe, ThilakanjaliGamage, Nobuo Koizumi, Palika Fernando and SanathRajapakse, Detection of pathogenic leptospire among swine slaughtered for human consumption in Sri Lanka, presented at Sri Lanka Japan Collaborative Research Sessions, 2016, held on 19-21 August 2016, Kandy, Sri Lanka
17. M.Jagatheesan, AC Karawita, DS Muthusinghe, LGS Lokugalapatti, TK Bollinger, PdeSGunawardena, Nuobo Koizumi, **CD Gamage**., “Identifying the presence of pathogenic Leptospiraspp in Indian Flying Foxes (Pteropusmedius), Sri Lanka”- Abstract – Fifth Annual Sessions Sri Lankan Society for Microbiology 2016 (conference)
18. HMST Nawarathne, MGCM Jayasinghe, D Muthusinghe, T Gamage, HMHS Ariyaratna, KK Sumanasekara, A Dangolla, N Koizumi, **CD Gamage**., Carrier Status of Pathogenic Leptospire in Wild Mammals Inhabit in Kandy District, Sri Lanka – Abstract – Fifth Annual Sessions Sri Lankan Society for Microbiology 2016 (conference), Kandy
19. Fonseka GRA, Senarathne P, **Gamage CD**, Dayarathne MGKP, Sarathkumara YD, Muthusinghe BDS, Lokupathirage S, Kumara A, Nanayakkara N, Gunaratne L, Yoshimatsu K, Koizumi N. Evaluation of leptospirosis seroprevalence among residents in Girandurukotte, Sri Lanka. Proceedings at the International Conference of Health Sciences, October 2019.
20. Waniarachchi D, Dayaratne MGKP, Fonseka GRA, Senarathne P, Kumara A, Muthusinghe BDS and **Gamage CD**. Comparison of recombinant and whole-cell leptospiral antigen based ELISAs for detection of human IgG anti-leptospiral antibodies. Proceedings at the 8th Annual Conference & Scientific sessions of the Sri Lankan Society for Microbiology, August 2019.

21. Muthusinghe D.S., Lokupathirage S.M., Wei Z., Yoshimatsu K., Shimizu K., Tsuda Y., Arikawa J., Fonseka GRA., Senarathne P., **Gamage C.D.**, Wickramasinghe C., Ebihara H., Matsuno K. Identification of novel rodent-borne hantaviruses in an endemic area of chronic kidney disease of unknown etiology (CKDu) in Sri Lanka. Presented at the 2020 Zoom ASV Workshop, June 2020.
22. Karunadasa AKUI, Toma C, Senaratne KMPH, Kumara KGRA, **Gamage CD**. Leptospiral 3-hydroxyacyl-CoA dehydrogenase as an early urinary biomarker of leptospirosis in a Sri Lankan setting – Interim results. Sri Lankan Society for Microbiology (SSM) 10th Annual Conference and Scientific Sessions 2021. 9;26
23. Senarathne P, Fonseka A, Kumara A, Muthusinghe D, Koizumi N, Yoshimatsu K, **Gamage CD**. An escalation of disease burden of hantavirus infection in a hospital setting among the leptospirosis suspected patients. Proceedings at the Research Conference on Health Sciences 2021, University of Sri Jayawardenepura, March 2021.
24. Fonseka GRA, Senarathne P, Mallikaarachchi MADKS, Muthusinghe BDS, Nanayakkara N, Gunaratne L, Yoshimatsu K, Koizumi N, **Gamage CD**. Burden of leptospirosis in renal and non-renal patients within Girandurukotte, Sri Lanka. Proceedings at the Research Conference on Health Sciences 2021, University of Sri Jayawardenepura, March 2021.
25. Fonseka GRA, Senarathne P, Dayarathne MGKP, Sarathkumara YD, Muthusinghe BDS, Lokupathirage S, Kumara A, Nanayakkara N, Gunaratne L, **Gamage CD**. Leptospirosis seroprevalence among a cohort of renal patients and healthy individuals of two Districts in Sri Lanka: An interim analysis. Sri Lankan Journal of Infectious Diseases 2021 Vol 11 (Supplement) S2:8. (DOI:<http://doi.org/10.4038/sljid.v11i0.8386>)
26. SGMSD Senanayaka, P Senarathne, GRA Fonseka, K Dayarathne, C Toma, Y Sato, N Koizumi, S Rajapakse and **CD Gamage**. Environmental occurrence of pathogenic and intermediate pathogenic *Leptospira* spp. in two Divisional Secretariats of the Kandy District. Sri Lankan Journal of Infectious Diseases 2021 Vol 11 (Supplement) S2:8. (DOI:<http://doi.org/10.4038/sljid.v11i0.8371>)
27. Fonseka GRA, Senarathne P, Thilakarathne HMRM, Karunadasa AKUI, Muthusinghe BDS, Nanayakkara N, Gunaratne L, Yoshimatsu K, Koizumi N, **Gamage CD**. Urinary excretion of intermediate pathogenic leptospires among renal patients of Girandurukotte, Sri Lanka: An interim result. Proceedings at the 10th Annual Conference & Scientific sessions of the Sri Lankan Society for Microbiology, October 2021.