

Dr. Abeykoon Jayalath Iresha Sandeepanie Rathnayake (BSc, MS, PhD)

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EDUCATION

PhD, Faculty of Medicine, University of Colombo, Sri Lanka.

MS. Wayne State University, Detroit MI, USA.

B.Sc. Special Degree in Biochemistry and Molecular Biology, (First Class Honors), Faculty of Science, University of Colombo.

CTHE, Awarded the Certificate in Teaching in Higher Education (CTHE) by the Staff Development Centre, General Sir John Kotelawala Defence University, Sri Lanka.

CURRENT APPOINTMENTS

- **Senior Lecturer in Biochemistry**, Department of Pre-Clinical Sciences, Faculty of Medicine, , *General Sir John Kotelawala Defence University* (July 2011- to date)
- **Head-Biochemistry**, Department of Pre-Clinical Sciences, Faculty of Medicine, , *General Sir John Kotelawala Defence University* (June 2019- to date)
- **Secretary, Ethics Review Committee**, Faculty of Medicine, *General Sir John Kotelawala Defence University* (January 2019- to date)
- **Visiting Lecturer, Biomedical Sciences Degree Program, Faculty of Engineering, General Sir John Kotelawala Defence University** (2013- to date)

PAST APPOINTMENTS

- **Assistant Lecturer**, Faculty of Science, University of Colombo
- **Graduate Teaching Instructor**, Wayne State University, Detroit , MI USA
- **Research Assistant**, Department of Biochemistry and Molecular Biology Faculty of Medicine, University of Colombo
- **Research Assistant**, Department of Chemistry, Faculty of Science, University of Colombo
- **Lecturer**, International Institute of Health Sciences
- **Trainee**, Vocational training- Molecular Biology Laboratory, Durdan's Hospital

MEMBERSHIPS/POSITIONS IN ASSOCIATIONS

- Life member, National Science Foundation (NSF), Sri Lanka
- Treasurer, Sri Lankan Student Association, Wayne State University, USA (May 2009- May 2010)
- Organizing subcommittee- KDU MAYO International conference
- Member of the steering committee for International Research Conference 2019.
- Member of the steering committee for the July Ball 2019
- Member of subcommittee to prepare posters/banners to display & video presentation for the open day –FOM KDU 2019.
- Member of subcommittee to prepare booklets/leaflets for the open day –FOM KDU 2018.
- Member of subcommittee to prepare booklets/leaflets for the open day –FOM KDU 2017.
- Coordinator of the Faculty of Medicine, International Research Conference 2014.

- Member of the Faculty subcommittee of FOM-KDU IRC 2016.
- Member of the committee to organize the introductory programme for MBBS cadets /intake 33.
- Member of the committee appointed to prepare the guidelines for Gold medals of FOM-KDU.
- Student member, Chemical Society, University of Colombo (2004-2006)
- Committee member, Senior Science Society, Visakha Vidyalaya (2000-2001)
- Member, Astronomical Club, Visakha Vidyalaya (2000-2001)

GRANTS/AWARDS/SCHOLARSHIPS

- **Award for the best oral presentation-** Next Generation Sequencing Analysis of Mesenchymal Stem Cells in a Sri Lankan Cohort of Myelodysplastic Syndromes Patients (2017) Sri Lanka College of Hematologists- Annual Scientific Sessions.
- **Award for the second place in the oral free paper category** – Annual research symposium of the Faculty of Medicine, Colombo (2017).
- **Grant No. RPHS/2016/Co4** SLR. 4,000,000/-. [2016] National Science Foundation – Research Programme on Health Science – 2016/2017. Project Title: Biomarker Discovery in Haematology – Myelodysplastic Syndrome. Co-investigator
- **NSF travelling fellowship** OSTP/2012/23
- **Graduate Teaching Assistantship**, Wayne state University, USA 2008-2010

TRAINING PROGRAMMES ATTENDED

- Passed “Research ethics” online course conducted by The Global Health Training Centre, 2019
- Passed “Ethics in Epidemics, Emergencies and Disasters: Research, Surveillance and Patient Care” ” online course conducted by The Global Health Training Centre, 2019
- Next Generation Sequencing Technology by Illumina, USA, 2015
- Trainee in the “Human Subjects Protection Course” organized by the forum for Ethical Review Committees in the Asian & Western Pacific Region (4th – 6th August 2014)
- Cytogenetics and Fluorescence in situ hybridization conducted by Human Genetics Unit, University of Colombo in collaboration with Kings College London (February 2014)
- Short term training programme in “stem cells and regenerative medicine” conducted by Manipal Institute of Regenerative Medicine, Bangalore, India (15th-30th January 2013)
- 12th FERCAP International conference conducted by Forum for Ethical Review Committees in Asia and the Western Pacific Region (18th-21st of November 2012)
- Stem Cell course conducted by Institute of Biochemistry, Molecular Biology and Biotechnology, University of Colombo. (November 2012)
- Indo-Sri Lanka Joint workshop on basics and clinical application of human postnatal mesenchymal cells, Faculty of Medicine, University of Colombo, Sri Lanka (2012)
- 13th annual academic sessions of the Sri Lanka College of Haematologists. (10th-11th of August 2012)
- Workshop on “An Introduction to Quality Assurance in Genetic Diagnostic Laboratories -Molecular Genetics, Cytogenetics, Biochemical Genetics & Newborn screening” Organized by the Human Genetics Unit, Faculty of Medicine, University of Colombo, Sri Lanka in collaboration with the European Molecular Genetics Quality Network (6th and 7th of February 2012)
- Course of training for Radiological Health/ Radiation Safety, Health Physics Office, Wayne State University, USA

RESEARCH EXPERIENCE

- Faculty of Medicine, University of Colombo (PhD)

Thesis title: Molecular Characterization of Mesenchymal Stem Cells of Patients with Myelodysplastic Syndrome in a Sri Lankan Population.

- Department of Chemistry, Wayne State University, USA (MS)

Thesis title: The Roles of RhlE and Hfq In sRNA-Dependent Gene Regulation

Gene expression regulation by non-coding RNAs (ncRNA) and RNA – Protein interactions

- Department of Chemistry, Faculty of Science, University of Colombo (BSc)

Thesis title: Isolation and characterization of *rne* gene from *Corenebacterium glutamicum*

- Faculty of Medicine, General Sir John Kotelawala Defence University

Research title: Assessment of the effects of military training on health parameters

- Department of Chemistry, Faculty of Science, University of Colombo.

Research title: Isolation of Lambda phage DNA and preparation of Lambda markers

- Department of Biochemistry and Molecular Biology, Faculty of Medicine, University of Colombo.

Research title: Isolation of the gene encoding a nematode specific fatty acid and retinol binding protein (*far-1*), from filarial parasite *Seatria digitata*.

PUBLICATIONS

Referred Journal Articles

- WMMS Bandara and **AJIS Rathnayake**, Morning Vs Evening Exercises: Which Gives A Better Outcome? Emergency Medicine and Critical Care, 3 (9), (2019) 601-609
- WMMS Bandara and **AJIS Rathnayake**, The Effect of Duration of Physical Exercises on Biochemical Parameters: A South Asian Perspective”. Chronicle of Medicine and Surgery 2 (5) (2018) 254-262
- W M Manoj Senaka Bandara, **A J Iresha Sandeepanie Rathnayake**, Korotta Gamage Somasiri, The effect of long term physical exercises on plasma cortisol levels, International Journal of Medicine, 5 (2) (2017) 239-242.
- **A. J. I. S. Rathnayake**, H. W. W. Goonasekera, and V. H. W. Dissanayake, Phenotypic and Cytogenetic Characterization of Mesenchymal Stromal Cells in De Novo Myelodysplastic Syndromes, Analytical Cellular Pathology, vol. 2016, Article ID 8012716, 11 pages, 2016. doi:10.1155/2016/8012716
- Bandara WMMS, **Rathnayake AJIS**, Goonasekera HWW and Dissanayake VHW. (May 2016), Development of Cytogenetic Abnormalities in Myelodysplastic Syndromes. J Mol Genet Med; 10(2):pp10002171-5.
- M K O K De Silva, K G Somasiri, BWMTJ Basnayake, EPDR Edirisinghe, WMMS Bandara, **AJIS Rathnayake** (2014) Title : Reliability and Validity of the Sinhala translation of the Lakaev Academic Stress Response Scale (LASRS-S) (accepted for Poster Presentation at the 127th Anniversary International Medical Congress of the Sri Lanka Medical Association)
- WMMS Bandara, **AJIS Rathnayake**, BWMTJ Basnayake, MKOK De Silva, D Edirisinghe, BCIJN Nanayakkara and KG Somasiri (2014) Military Training Improves Lipid Profile. Proceedings of International Research Symposium, General Sir John Kotelawela Defence University (2014).

- The roles of RhlE and HFQ in sRNA-dependent gene regulation. **Rathnayake, A.J.I.S.** ETD Collection for WSU. AAI 1483812, p 41 (2010).

Communications at Scientific Meetings Published as Abstracts

- Genetic Variations in Hematopoietic and Mesenchymal Stem Cells in de novo Myelodysplastic Syndromes. Manoj S. Bandara, Iresha Rathnayake, Nilaksha Neththikumara, Hemali Goonasekara, Vajira Dissanayake (2019), European Society for Medical Oncology Congress, Singapore
- Genetic bio-marker discovery in de novo Myelodysplastic Syndromes. Bandara, WMMS, Rathnayake, AJIS, Neththikumara, NF, Goonasekera, HWW and Dissanayake, VHW. National Health Research Symposium (2017), Ministry of Health Nutrition & Indigenous Medicine. pp177
- Next generation sequencing study of Mesenchymal Stem cells in de novo Myelodysplastic Syndromes, A.J.I S Rathnayake, N.F Neththikumara, , V. H. W. Dissanayake, H. W. W. Goonasekera, Annual research symposium (2017), University of Colombo, p 225
- Next Generation Sequencing Analysis of Mesenchymal Stem Cells in a Sri Lankan Cohort of Myelodysplastic Syndromes Patients. AJIS Rathnayake, NF Neththikumara, WMMS Bandara, VHW Dissanayake, HWW Goonasekera (2017) Sri Lanka College of Hematologists- Annual Scientific Sessions.
- Molecular characterization of mesenchymal stem cells of patients with Myelodysplastic Syndrome in Sri Lanka. Rathnayake I, Dissanayake VHW, Goonasekera HWW. (2016), 2nd International Conference on Natural Products Genomics and Drug discovery.
- Cytogenetic Characteristics of Mesenchymal Stromal Cells in Myelodysplastic Syndromes. Rathnayake I, Dissanayake VHW, Goonasekera HWW. (2015), Proceedings of 9th UK Mesenchymal Stem Cell Meeting- Manchester 2015; poster.
- Comparison of Physical Health Parameters of Cadets and Day Scholars in General Sir John Kotelawala Defence University (KDU), K G Somasiri, BWMTJ Basnayake, MKOK De Silva, WMMS Bandara, AJIS Rathnayake, EPDR Edirisinghe. (2015) International research conference, Kotelawela Defence University.
- Isolation and characterization of RNase E (rne) encoding gene from *Corenebacterium glutamicum*. Rathnayake, AJIS and Wijayarathna, C.D. Book of abstracts; University of Colombo. ISBN 978-955-9021-53-7,(2007).
- Isolation of RNase E encoding gene from *Corynebacterium glutamicum*. 2008; Annual Research Symposium, University of Colombo, p 116. Rathnayake A. J. I.S., Wijayarathna C. D.