

Curriculum Vitae
E. M. U. ANURADHA EKANAYAKE

Educational Qualifications

M.Phil. (Reading)

(November, 2016 Onwards)
University of Colombo,
Sri Lanka

BSc. (Honours) Biomedical Science

(2014)

Second class- Upper division

Northumbria University,
Newcastle upon Tyne,
United Kingdom

HND in Biomedical Science (EDEXCEL)

(2013)

Merit

Northumbria University Regional Centre,
School of science,
Business Management School,
Colombo 06,
Sri Lanka

Advanced Level

(2011)

(Biology, Chemistry, Physics)

St. Joseph's Balika Maha Vidyalaya,
Kegalle,
Sri Lanka

Ordinary level

(2006)

St. Joseph's Balika Maha Vidyalaya,
Kegalle,
Sri Lanka

Professional Qualifications

Research Assistant (Grade II) – May, 2016 Onwards

Molecular Microbiology & Human Diseases Research Group
National Institute of Fundamental Studies, Sri Lanka

Techniques Practicing

- Microbiological techniques (Mycobacterial culturing, staining and media preparation)
- DNA extraction (CTAB, BOOM'S methods)
- Agarose gel electrophoresis
- PCR
- Real-time PCR

Relevant research experience

Research assistant (Volunteer)

National Institute of Fundamental Studies, Sri Lanka – (March, 2015 to May, 2016)

Cell biology Research group under Department of Molecular biology and genetics

Responsibilities and techniques practicing:

- Mycobacterial/ bacterial culturing
- DNA extraction and purification
- PCR, Real-time PCR
- Agarose gel electrophoresis
- Antibiotic sensitivity testing(ABST)
- Maintaining details of research records
- Routine laboratory and equipment maintaining

Undergraduate final year research project

Faculty of Health and Life Sciences, Northumbria University, UK

T-cell responses in inflammatory arthritis, investigating biological factors that facilitate the release of epitopes from cartilage.

Supervised by: *Dr. Jane Falconer*

Research summary

- Cartilage processing from bovine nasal septum and incubate chips of cartilage in cell culture medium.
- Stimulating chondrocytes within the cartilage with two biological agents (individually and in combination).
- Measurement of the aggrecan fragments, containing epitopes that are released into the culture medium.
- Test whether the released epitopes have the ability to activate immortalized aggrecan specific T cell clones.

Research project for HND

Faculty of Medicine, University of Colombo, Sri Lanka

Optimisation of PCR amplification of msp-1 and csp genes of the Plasmodium cynomolgi.

Supervised by: *Dr. Sisira Pathirana*

Research summary

- DNA extraction by phenol chloroform method (Malaria DNA)
- Setting up PCR (Gradient and conventional)
- Agarose gel electrophoresis
- Optimisation of PCR by alteration of annealing temperatures and primer concentrations
- Troubleshooting PCR

Work Based Assignment

CEYGEN biotech, Durdans Hospital, Colombo 3, Sri Lanka– (December, 2012- January, 2013)

Molecular detection and diagnosis using molecular biology techniques related nucleic acid based techniques of Infectious diseases, Cancers and Haematological disorders

- DNA extraction and purification
- PCR, RT-PCR, multiplex-PCR
- RFLP
- Agarose gel electrophoresis

Other relevant experience

Lecturer (Certificate course: Medical Laboratory Sciences) – November, 2015 – July, 2016

Vision International Vocational Academy, Kandy, Sri Lanka

Subjects –

- Haematology
- ABO and Rh Blood Grouping, Serology and Enzymology
- Clinical Biochemistry
- Medical Microbiology
- Introduction to DNA
- Laboratory Management

Practical scientific skills

- DNA extraction
- PCR techniques
- Cell culture, Bacterial cell culture
- Antibiotic sensitivity testing
- Data analysis
- ELISA
- Enzyme assay
- Scientific research and writing

Scholarships

Fee scholarship worth of **1500 GBP** for the final year at Northumbria University, upon successful completion with an overall *MERIT* for the Higher National Diploma including *MERIT* for the compulsory subject: *Biology of Disease*.

Workshops attended

Certificate of Participation for the workshop; ‘**Thesis, Report and Scientific Paper (manuscript) Writing for Higher Degree Students, Academics and Clinicians**’, organised by Research Committee, Faculty of Medicine, University of Peradeniya

Software and operating systems

- Graphpad PRISM6.0
- IBM SPSS
- Minitab
- Microsoft windows XP, 7, 8, 8.1, 10
- Microsoft office 2007, 2010, 2013, 2016 -Word, PowerPoint, Excel

Societies and Memberships

- American Society for Microbiology (2017- onwards)
- Sri Lanka Association for the Advancement of Science (2017- onwards)
- Sri Lankan Society for Microbiology (2015- onwards)
- Alumni association, Northumbria University, UK (2014- onwards)
- Science Society, St. Joseph’s Balika Maha Vidyalaya, Kegalle (2004- 2009)

Abstracts in Conference Proceedings

Ekanayake, A., Magana-Arachchi, D., Weerasekara, D., Madegedara, D. and Dissanayake, N. 'Determination of Rifampin resistance in a group of tuberculosis patients' *Annual scientific sessions of Sri Lankan Society for Microbiology*, 21st October, 2016

Sivagnanasundaram, P., Amarasekara, R.W.K., Madegedara, R.M.D., Ekanayake, E.M.U.A. and Magana-Arachchi, D.N. (2017). Quantification of airborne bacterial and fungal communities in selected areas of kandy teaching hospital, srilanka - a preliminary study. *Proceedings PGIS Research Congress*. 8th& 9th September, 2017

Weerarathne, W.B.C.P., Balasooriya, B.L.W.K., Amarasekara, R.W.K., Ekanayake, E.M.U.K. and Magana-Arachchi, D.N. (2017). Isolation and characterisation of *Bacillus thuringensis* from animal farm soils of Sri Lanka. *Proceedings of 16th agricultural research symposium, Wayamba University of Sri Lanka*. 9th& 10th November, 2017

Rajakaruna, D.R.S.V., Balasooriya, B.L.W.K., Sivagnanasundaram, P., Amarasekara, R.W.K., Ekanayake, E.M.U.A. and Magana-Arachchi, D.N. (2017). Isolation, enumeration and molecular identification of in a hospital setting in Sri Lanka. *Proceedings of 16th agricultural research symposium, Wayamba University of Sri Lanka*. 9th& 10th November, 2017

Ekanayake, A., Madegedara, D. and Magana-Arachchi, D. (2017). Identification of bacteria in patients with bronchiectasis and suspected lung cancer; A Preliminary Study. *73rd Annual Scientific Sessions of SLAAS*. 6th -8th December, 2017

Personal information

Sex : Female
Marital status : Single
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Telephone : +94769379310

I do hereby certify that the above mentioned particulars are true and accurate to the best of my knowledge.

E. M. U. A. Ekanayake

