

KOBIKA THILLAINATHAN

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PERSONAL PROFILE

A self-driven and self-reliant young person with good interpersonal skills and methodical and rigorous approach to achieving tasks and objectives. Highly motivated, reliable with experience of working in medical and diagnostics sectors, keen on seeking opportunities, which will make best use of the existing skills and experience derived from Undergraduate and postgraduate degrees as well as work experience while enabling further personal and professional development.

EDUCATION

Higher Education -

Postgraduate

1. **MSc in Molecular Pathology (Part time)** *February 2018 - to date*
Awaiting for Final Research Viva & Graduation
Faculty of Medicine, University of Colombo, Sri Lanka

Undergraduate

1. **BSc (Special) in Medical Laboratory Sciences** *August 2015*
2nd Class Upper, GPA 3.5
Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka

Diploma

- Information Technology (External)** *October 2010*
University of Colombo School of Computing, Sri Lanka

WORK EXPERIENCE

1. **Lecturer [Probationary]** **Mar 2019-to date**
Department of Medical Laboratory Sciences,
Faculty of Allied Health Sciences,
University of Jaffna, Sri Lanka

Major Accomplishments

1. Secretary, Building and Planning Committee, Faculty of Allied Health Sciences, UoJ
2. Person-In Charge, Student supporting committee, Health Promotion Committee of Faculty of Allied Health Sciences, UoJ
3. In-charge of Learning Management System (LMS) for the Department of Medical Laboratory Sciences, Faculty of Allied Health Sciences, UoJ

4. Written Proposal to establish the Department of Human Biological Sciences at the Faculty of Allied Health Sciences, University of Jaffna
5. Member of Erasmus Plus Project for Developing Postgraduate courses in Transfusion medicine with the support of Asian Association of Transfusion Medicine (AATM) and Barcelona Autonomous University, Spain
6. Responsible for the eighth criteria of Self-Evaluation Report Writing (SER) of B. Sc. in Medical Laboratory Sciences submitted to Internal Quality Assurance Council of University Grants Commission.
7. Resource person for the Curriculum Revision of Medical Laboratory Sciences Degree Programme

Duties:

1. Preparing notes and delivering lectures, practical
2. Contributions to the department level as well as the faculty level activities.
3. Serve as examiner as well as invigilator for examinations.
4. Active participations in the meetings, workshops, sessions and staff development activities
5. Other student supportive activities related to student progress, evaluation, mentoring, surveys and active learning

2. Temporary Demonstrator

Jan 2018-Feb 2019

Department of Medical Laboratory Sciences,
Faculty of Health Sciences,
The Open University of Sri Lanka

Major Accomplishments

1. Served as the internal coordinator for courses and student research projects.
2. Developed course materials for. for Bachelor of Science in Medical Laboratory sciences and Bachelor of Pharmacy Degree Programmes of The Open University of Sri Lanka.

Duties:

1. Work related to routine teaching activities.
2. Course coordination, conducting/assisting in practicals and day schools.
3. Work related to development of course materials.
4. Develop and coordinate online supplementary courses (Moodle).
5. Secondary supervision and coordination of student research projects.
6. Contributions to the department level as well as the faculty level research and survey work.
7. Serve as invigilator for examinations.
8. Provision of Medical Laboratory Testing services for the students and staff of OUSL.

3. Scientific officer

April - Dec 2016

Department of Molecular Forensics,
Genetech - Molecular Diagnostics & School of Gene Technology, Sri Lanka.

Major Accomplishments:

- Actively engaged in establishing a supplemental laboratory setup for the Polyacrylamide gel electrophoresis in order to solve productivity issues.
- Created a computer-based solution for Random Match Probability (**RMP**) Calculation.

Key Responsibilities:

1. Engage in day-to-day activities of the laboratory including the formal acceptance of crime scene evidence, maintenance, retrieval and returning of samples, interaction and collaboration with external bodies.
2. Perform Polyacrylamide Gel Electrophoresis on a regular basis, perform staining upon completion of electrophoresis and perform genotyping of samples.
3. Running amplified DNA samples on Agarose gel electrophoresis and interpreting the results obtained.
4. Preparation of all solutions and buffers required for Polyacrylamide Gel Electrophoresis as well as preparation of Polyacrylamide gel itself.
5. Data entry, retrieval and maintenance of databases, preparation of reports and documents.
6. Assist in the work of other scientists, perform necessary supervisions and maintain personal networks.

4. Trainee Medical Laboratory Technologist**Jun - Dec 2015**

Department of Clinical Biochemistry,
Lanka Hospitals Diagnostics (Pvt) Ltd,
578, Elvitigala Mawatha, Colombo - 05,
Sri Lanka.

Major Accomplishments:

1. Successfully conducted tests for the external quality assurance programmes. (CAP QA & RIQAS QA).
2. Successfully carried out independent tasks and succeeded in handling night work which includes all emergency biochemistry services.

Key Responsibilities:

1. Maintains quality results by running standards and controls, verifying equipment function through routine equipment maintenance and advanced trouble shooting; calibrating equipment utilizing approved testing procedures; monitoring quality control measures and protocols.
2. Participates in External Quality control Programmes; namely the RIQAS external QA programme and CAP Proficiency testing.
3. Process patient samples and provides test results for patient diagnosis and treatment by operating biochemistry equipment; performing hand chemistries.
4. Identifies and communicates abnormal patient conditions by alerting supervisory personnel, the pathologist, the patient physician, or nurse; reporting mandated information to the designated officials.
5. Participates in validation and verification processes.
6. Serves as technical resource by participating in staff training; answering questions of other professionals; participating in educational opportunities; reading professional publications; maintaining personal networks; participating in professional organizations.

TRAINING & VOLUNTARY SERVICE

In the subject areas including but not limited to Clinical Biochemistry, Haematology, Clinical Microbiology & Immunology, Pathology, Laboratory Management and Quality Control & Quality Assurance.

1) Internship**Feb - Mar 2014**

Homagama Base Hospital and Colombo South Teaching Hospital

- 2) **In-Course Work Experience** **Mar - Nov 2013**
Sri Jayewardenepura General Hospital
- 3) **Technical Skills Training** **Jan - Feb 2013**
University of Sri Jayewardenepura and Sri Jayewardenepura General Hospital
- 4) **Voluntary service** **2013 - 2017**
Gonaduwa and Galpatha peripheral units to serve the low income community in Kalutara District AND
Diabetes Association of Sri Lanka, National Diabetes Centre

RESEARCH & PUBLICATIONS

Publications (Abstract):

- Thillainathan K, Wetthasinghe TK, Noordeen N, Dissanayake VHW. Design and implementation of novel pharmacogenomic assays for clinically important CYP2C19 variants to predict the response to clopidogrel in a cohort of Sri Lankan population. *Annual Research Symposium 2020, Faculty of Medicine, University of Colombo.*
- Thillainathan K, Noordeen N, Wetthasinghe TK, Sirisena ND, Dissanayake VHW. Design and implementation of novel pharmacogenomic assays for CYP2C19*17 variant to predict response to clopidogrel therapy in patients. *THE CEYLON MEDICAL JOURNAL. Volume 64, Supplement 1 July 2020 Quarterly ISSN 0009-0875.*
- Kandage, I. K., Sedara, W. R., Kalubowila, K. D. C. T., De Zoysa, D. N., Thillainathan, K., & De Silva, B. S. S. (2019). Patients' Experiences of Intensive Care Following Cardiac Surgery. *In Singapore Prevention & Cardiac rehabilitation Symposium (SPCRS 2019): Contemporary Cardiac Rehabilitation: Special Situations, Novel Measures* (p. 42). Singapore
- K.Thillainathan, I.Uluwaduge. A Comparison between sodium fluoride and acidified blood samples to prevent in-vitro reduction of blood glucose. *In proceedings of the Peradeniya University International Research Sessions, Sri Lanka, Volume 19*
- L.D.M.I.SamanKumari, K.A.U.S.U. Kalansooriya, K.D.T.K.Rathnayaka, R.H. Wijenayake, K. Thillainathan, B.S.S. De Silva. End of life experiences of patients with cancer. *In International Critical Care Nursing Conference.*
- Thillainathan, K., & Uluwaduge, I. The impact of Sodium fluoride (NaF) and citric acid as preservatives for in-vitro blood glucose and the impact in diabetic diagnosis. *In South Asia Conference on Multidisciplinary Research 2018 (SAMR'18).*

Ongoing publication work:

Journal Publications:

- Clinically important CYP2C19 variants in Sri Lankan population - Implications for clinical implementation of pharmacogenomics - In Progress
- Effectiveness of sodium fluoride and acidifying blood samples in the in vitro preservation of blood glucose and the impact on diabetic diagnosis - Submission in Progress (Journal - Clinical Chemistry)

Book / Book Chapter Publication:

- D.Inoka Uluwaduge and Kobika Thillainathan. Palmyrah Research in Sri Lanka: A Way Forward. **ISBN : 978-624-95037-0-0**
- Eighteen (18) Book Chapters in the course materials for Bachelor of Science in Medical Laboratory sciences and Bachelor of Pharmacy Degree Programmes of The Open University of Sri Lanka.

Communications to Learned Societies:

Oral Presentations:

- A Comparison between sodium fluoride and acidified blood samples to prevent in-vitro reduction of blood glucose. Peradeniya University International Research Sessions **2015; 5th & 6th November 2015.**
- The impact of Sodium fluoride (NaF) and citric acid as preservatives for in- vitro blood glucose and the impact in diabetic diagnosis. In South Asia Conference on Multidisciplinary Research 2018 (SAMR'18); **5th & 6th November 2018**

Poster Presentations:

- Thillainathan K, Wetthasinghe TK, Noordeen N, Dissanayake VHW. Design and implementation of novel pharmacogenomic assays for clinically important CYP2C19 variants to predict the response to clopidogrel in a cohort of Sri Lankan population. *Annual Research Symposium 2020, Faculty of Medicine, University of Colombo.*
- Thillainathan K, Noordeen N, Wetthasinghe TK, Sirisena ND, Dissanayake VHW. Design and implementation of novel pharmacogenomic assays for CYP2C19*17 variant to predict response to clopidogrel therapy in patients. In the Sri Lanka Medical Association 133rd Anniversary International Medical Congress; **24th – 26th July 2020.**
- End of life experiences of patients with cancer. International Critical Care Nursing Conference Sessions; **16th July 2018.**
- Patients' Experiences of Intensive Care Following Cardiac Surgery. In Singapore Prevention & Cardiac rehabilitation Symposium (SPCRS 2019); **18th & 19th October 2019**

Relevant research experience

Undergraduate research:

My undergraduate research focused on bringing an awareness on the blood collection practice in Sri Lanka for the measurement of Fasting Blood Sugar which was the widely used testing in Sri Lanka for the purpose of diabetic diagnosis, monitoring and treatment especially due to the lack of availability and affordability of the test in most parts of Sri Lanka by then (2015). This study tried to show the inefficacy of the existing practice of blood glucose preservation in vitro while causing a problem in identification of cases majorly in those having blood glucose concentrations in the pre-diabetic range. In turn it tried to propose an affordable simple replacement of collection technique based on its point of action on glycolytic pathway that could minimize the risk of misidentification of cases.

Masters research project:

My masters research (MSc) focused on the loss-of-function and gain-of-function CYP2C19 gene polymorphisms which have a significant role on the metabolism of most of the commonly prescribed drugs including antiplatelet drugs such as clopidogrel, proton pump inhibitors such as omeprazole, antiepileptic agents and certain antidepressants etc. It is believed that the findings of the research along with a suitably designed genotyping assay (Tetra-ARMS-PCR, RFLP-PCR validated by Sequencing) would help to estimate the efficacy of drugs in individuals and personalize the therapeutic dose of pharmacologically important drugs.

Further, the aforementioned project has given me a great opportunity to get experience in working with various molecular techniques.

Individual project:

During my internship period at Genetech - Molecular Diagnostics & School of Gene Technology, Sri Lanka (2016), I had conducted an individual project to evaluate the possibility or practicality of using the ACB-PCR assay method as a JAK2 V617F mutation detection method since it is said to be one of the easy to perform, rapid, sensitive and cost effective method. This study tried to find out the simplicity and feasibility to be used with the available resources in the local diagnostic setting.

AWARDS

- 2nd Runner up prize for poster presentation in *Annual Research Symposium 2020, Faculty of Medicine, University of Colombo.*

PROFESSIONAL REGISTRATION

1. SRI LANKA MEDICAL COUNCIL (SLMC) Registration
2. Membership of the SRI LANKAN SOCIETY FOR MICROBIOLOGY

COMPUTER LITERACY

- BTEC Diploma in ICT - IDM Computer Studies (PVT) Ltd - Familiar with Word, Excel, Windows and Photoshop
- Statistical software: Familiar with SPSS and Minitab
- Programming Languages - Familiar with C#, Java and basic knowledge in other languages with familiarity with VB.Net Framework

LANGUAGE FLUENCY

IELTS Test Score : Overall Band Score 7.0

February 2020

IELTS Test Score : Overall Band Score 7.5

June 2017

LEADERSHIP POSITIONS

- Person-In Charge, Student supporting committee, Health Promotion Committee of Faculty of Allied Health Sciences, University of Jaffna. **(2020 onwards)**
- Secretary, Building and Planning Committee, Faculty of Allied Health Sciences, University of Jaffna. **(2020 onwards)**
- In-charge of Learning Management System (LMS) for the Department of Medical Laboratory Sciences, Faculty of Allied Health Sciences, University of Jaffna. **(2020 onwards)**
- Chairperson for the Curriculum Revision of Medical Laboratory Sciences Degree Programme **(2019)**
- Subject Coordinator – BSc in Medical Laboratory Sciences Degree Programme, The Open University of Sri Lanka **(2018-2019)**