

Ishani Gammama Liyanage

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Educational Qualifications

Graduate studies

M.Sc in molecular life Sciences at the Institute of Biochemistry, Molecular Biology and Biotechnology (IBMBB), University of Colombo, Sri Lanka (February, 2010 – July, 2012).

Distinction pass (Awarded the Prof. Eric Karunanayake Gold medal for the Best Student in Molecular Life Sciences)

Undergraduate studies

B.A in Biology/Chemistry at Earlham College, Richmond, IN 47374, U.S.A (2005 - 2009)

College honors

Secondary education

International Baccalaureate (IB) diploma from Li Po Chun United World College of Hong Kong (2003 – 2005)

Distinction pass for the certificate course in human resource management, conducted by the Institute of Personnel Management (IPM) – November, 2010 – February, 2011)

Research Experience

M. Sc Research project

- Evaluated the apoptotic potential of an aqueous herbal extract of *F. leucopyrus* on endometrial carcinoma cell line by (a) light and fluorescent microscopic observations and (b) DNA fragmentation analysis. Further, the decoctions' effects on the expression of apoptotic related genes (Bax and Bcl-2) were evaluated by RT-PCR analysis.

Research Intern, Smell and Taste Center of the University of Pennsylvania, Fall 2008

- Involved in a histological analysis of various transgenic mouse lines, where I was responsible for sectioning mice brains and staining the limbic related brain regions for beta amyloid and tau proteins.
- Took part in a data collection and analysis for a human clinical study on the influences of olfactory disturbance on food preference.
- Volunteered at monthly Clinics for patients with smell and taste dysfunctions, where I learned how to administer a range of chemosensory tests.
- Prepared a research proposal to investigate the effect of chronic exposure to xenobiotic heavy metals such as Mn and Cd via olfactory pathway, on the development of AD pathology in the brains of the transgenic mouse lines.

Researcher, Earlham College, Summer 2008

- Participated in an on-going Inorganic Chemistry research Project focusing on the synthesis of novel unsaturated Organometallic compounds of tungsten containing N-heterocyclic carbene ligands with oxo and imido groups.

International peer reviewed articles

- Sameera R Samarakoon, Saman B Kotigala, **Ishani Gammama-Liyanage**, Ira Thabrew, Kamani H Tennekoon, Menuka Arawwawala and Asitha Siriwardana. Anti-carcinogenic effects of a standardized *Fluggea leucopyrus* (aerial parts) decoction on human endometrial carcinoma (AN3CA) cells. Biomed Central Complementary and Alternative Medicine – awaiting acceptance

Abstracts and international conferences

- Saman B Kotigala, **Ishani Gammama-Liyanage**, Sameera R Samarakoon, Ira Thabrew, Kamani H Tennekoon In vitro anti-carcinogenic effects of a decoction of *Fluggea leucopyrus* (aerial parts) on human endometrial carcinoma (AN3CA) cells. The 3rd International conference on medicinal plants and herbal products (December, 2011).
- **Gammama-Liyanage IMP**, Samarakoon SR, Thabrew I. Effect of a herbal extract on Bcl-2 and Bax gene expression in endometrial carcinoma cells. 5th annual scientific sessions at the Institute of Biochemistry, Molecular Biology and Biotechnology (IBMBB), University of Colombo. (April, 2012)