

Project 2 (NEW)

Project Title:	A spheroid-based pre-clinical model of human breast cancer: unravelling the effects of tocotrienol isoforms and anti-cancer drugs (e.g. tamoxifen, paclitaxel)	
Project Description:	In the last two decades, there has been a lot of research on BC, which had allowed a lot of progress in the treatment and public awareness of this condition. Cell lines played a major role in helping scientists understand the basic molecular mechanisms as well as effects of certain drugs on these cancers. However, the complex mechanism of the malignant tumour, effects of the common anti-cancer drugs have not been fully elucidated. This is because cell lines cannot reflect the events that are taking place in the tumour microenvironment as these are mainly two-dimensional (2-D). A better approach would be to use organoids, which is also known as 3-D multicellular BC spheroids. The BC spheroids are considered to be one of the best models to study BC. It is reported that there is up to 80% resemblance between cultured organoid and the original tumour.	
Supervisory Team:	PhD Main Supervisor:	Prof Ammu K Radhakrishnan
	PhD Co-Supervisor:	Assoc Prof Dr Uma Devi Palanisamy
		Dr Premdass Ramdas (IMU)
Eligibility:	<i>Candidates must meet the minimum admission requirements (for academic and English language proficiency) to be offered admission in the PhD degree. For consideration of scholarship, candidates must possess academic standing equivalent to a high distinction average (H1 or First Class Honours) from a recognised university. Selection for a scholarship will be based on comprehensive ranking of academic achievement, research publications, and research experience or research-related awards as determined by Monash University Malaysia.</i>	
Required Skills:	Basic research skills including ability to use basic laboratory equipment; possess a Good Clinical Practice (GCP) certificate; Evidence of scientific writing skills, IT literacy,	
Academic Background:	BSc (Hons) and/MSc in the area of BioMedical Sciences, Food Science, Nutrition, Biochemistry, Pharmacy,	
Source of Funding:	Will be funded by FRGS grant obtained by Dr Premdass Ramdas	