The Singapore Bioimaging Consortium (SBIC)
presents a seminar on

"Non-Invasive wide-field functional assessment of tissue using Spatial Frequency Domain Imaging (SFDI)"

Speaker: **Dr Amaan Mazhar**
VP, Research and Development
Modulated Imaging Inc
Host : **Prof Malini Olivo**
Date : **Thursday, 29 November 2018**
Time : **2.00pm – 3.00pm**
Venue : **SBIC Seminar Room**
11 Biopolis Way
Level 2, Helios Building, Singapore 138667
(Please enter via Level 1)

Abstract

Quantitative assessment of tissue structure and function is one of the most challenging problems in biomedical imaging. Spatial Frequency Domain Imaging (SFDI) is a non-contact optical method developed at the Beckman Laser Institute at the University of California, Irvine to address this need. SFDI enables quantitative assessment of tissue structure and function by measuring tissue absorption and scattering over wide areas. Combined with multi-spectral imaging, SFDI can then be used to characterize tissue function by quantifying oxy-hemoglobin (HbO2), deoxy-hemoglobin (HbR), and tissue oxygen saturation (StO2) over a large area (up to 15cm x 20cm). Modulated Imaging is dedicated to bringing benchtop optical technologies to the bedside. To achieve this goal, our team has developed a commercial platform system based on SFDI called the Reflect RS. In this talk, I will present benchtop and clinical validation testing of hardware and software for a clinically-relevant SFDI system. Second, I will discuss the deployment of this technology to several clinical scenarios to establish the utility of SFDI. I will cover preliminary data using Reflect RS SFDI data for assessing circulation in diabetes, peripheral vascular disease and burn injuries.

About the Speaker

Dr Amaan graduated from Rice University with a degree in Bioengineering and Managerial Studies. He subsequently earned a PhD from UC Irvine, where SFDI was the subject of both his graduate and post-graduate research. Dr Amaan has co-authored over twenty journal publications and contributed to a number of journals as a reviewer and editor. Currently, Dr Amaan heads research and development at Modulated Imaging Inc.

--- Admission is free and all are welcome ---