THE UNIVERSITY



OF HONG KONG

DEPARTMENT OF MECHANICAL ENGINEERING AND MEDICAL ENGINEERING PROGRAMME



JOINT SEMINAR

Title: Functional Imaging & Monitoring of Brain & Breast with Diffuse Light

Speaker: Prof. Arjun G. Yodh Department of Physics & Astronomy University of Pennsylvania Philadelphia, USA

Date: 22 July, 2015 (Wednesday)

Time: 10:00 a.m.

Venue: Room 7-37, Haking Wong Building, HKU

Abstract

Functional diffuse optical imaging and spectroscopy of tissue is gaining momentum as a diagnostic in a variety of medical scenarios including breast cancer imaging, functional activation and clinical studies of brain, cancer therapy monitoring and the investigation of muscle disease [1, 2, 3]. After a short introduction to diffuse optics, I will review several recent clinical studies from my lab, particularly those oriented towards breast cancer and brain function. Central to the breast cancer effort is a pilot clinical trial [4] which has taken important steps towards quantitative assessment of diffuse optics for detection and characterization of tumors [5], and helps to spin-off problems such as cancer therapy monitoring. A second important application of diffuse optical methods is in the area of brain function and physiology wherein the interplay between tissue oxygen consumption, vascular supply, and

regulatory effects remains poorly understood. The utility of this approach in brain will be demonstrated in several contexts, including the care of acute ischemic stroke (AIS) patients in the clinic [6, 7].

References

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ALL INTERESTED ARE WELCOME

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