

CMM/ IMCB VISITING SCIENTIST



Prof Christopher POTTEN

About the Speaker :



Prof Potten is an international authority on the organization and regulation of epithelial tissues and their responses to ionizing radiation and a pioneer of stem cell biology. In 1971 Chris was appointed Head of the Department of Epithelial Biology at the Paterson Institute for Cancer Research in Manchester, a position he held until 2000 when he assumed his present roles of Chairman and Director of Epistem, a pre-clinical contract research company focused on epithelial tissues and their stem cells with specific expertise in cancers and cancer therapy side effects. In the late 1960s and early 1970s Chris Potten's studies of epidermal cell kinetics led to his description, in 1974, of the murine epidermal proliferative unit (EPU), a concept that has general applicability in many species including humans. Over his career, Chris has undertaken numerous investigations with the major theme of the in vivo responses of epithelial tissue to ionizing radiation. His studies have led to the identification and characterization of stem cells and their dependent lineages in the small intestine, the description of the proliferative and structural organization of the filiform papilla of the tongue and the tongue proliferative unit and an understanding of the biological significance of apoptosis in the gastro-intestinal tract. His work on apoptosis has led to a new hypothesis to explain the differential cancer incidence in the small and large intestine and provided a major contribution to understanding the role of apoptosis in stem cell homeostasis and stem cell protection mechanisms. In recent years he has been involved in studies determining the genes controlling apoptosis in the gastro-intestinal tract and demonstrated that exogenous growth factors can be used to provide significant levels of stem cell protection against radiation-induced apoptosis. Alongside these investigations, Chris has developed radiobiological assays for the hair follicle with the aims of developing a potential biological dosimeter and for assessing the differing radiosensitivities of radiotherapy patients. In recent years he has also been actively engaged in an ongoing multidisciplinary study investigating the role of cellular hierarchies, hormones, dietary factors, and extracellular matrix proteins on cell proliferation, apoptosis and carcinogenesis in the breast.

Talk 1: ***“Epistem Ltd and its scientific research services”***

- All welcome -
Date : Tue, 25 Apr 06
Time : 3.00 – 4.00 pm
Venue : Breakthrough,
Level 4 @ Matrix
30 Biopolis St, S(138671)

Talk 2: ***“Intestinal Stem Cells: numbers, location and characteristics”***

- All welcome -
Date : Wed, 26 Apr 06
Time : 3.00 – 4.00 pm
Venue : Breakthrough,
Level 4 @ Matrix
30 Biopolis St, S(138671)

Talk 3: ***Special meeting of the Singapore Skin Club:*** ***“Stem cells in skin”***

- All welcome -
Date : Thur, 27 Apr 06
Time : 5.00 – 8.00 pm
Venue : Multifunction Room 2a,
Level 5 @ Matrix
30 Biopolis St, S(138671)