Singapore Developmental Biology Club

SEMINAR ANNOUNCEMENT

12 January 2012, Thursday
Temasek Life Sciences Laboratory, Auditorium, 1 Research Link,
National University of Singapore
5.30pm – 6.30pm



Prof. Roger Patient

PROFESSOR OF DEVELOPMENTAL GENETICS
UNIVERSITY OF OXFORD, UK

Seminar Title: *On the origins and development of blood and cardiac stem cells*

Adult stem cells are made during embryonic development. Whether they retain stem cell properties from pluripotent embryonic precursors or develop the programme de novo, they somehow find a way to resist differentiation while all about them are differentiating. This is obviously a key property of stem cells. By studying how these cells develop we are hoping to gain some insight into how this control is effected. With a particular focus on the haematopoietic stem cell, our approach is to determine the lineage of these cells and then to identify the instructions they receive as they move through the embryo leading to the establishment of stable transcriptional regulatory networks in the nucleus. Very recently we have uncovered an evolutionary relationship between the precursors of the blood and vasculature, and the precursors of the heart. Specifically we have identified a field of cells giving rise to blood and endothelium in earlier vertebrates that has been recruited into the heart field in higher vertebrates. These cells appear to have greater potential than those in the primary heart field, and may have implications for the identification and activities of stem cells in the adult heart.

All are welcome. For more details on Singapore Developmental Biology Club,
please visit www.singaporedbc.blogspot.com

Social mixer supported by

SIGMA-ALDRICH®

ZEISS
We make it visible.