Institute of Medical Biology
A*STAR

Seminar Announcement

- All Are Welcome -

Speaker: **Prof Viki Allan**

Professor of Cell Biology
Faculty of Life Sciences
University of Manchester

Title : "A novel role for the microtubule motor cytoplasmic dynein in the mitotic spindle"

Date : 9 Feb 2014 (Monday)
Time : 4.00pm – 5.00pm
Venue : Creation Theatrette, Matrix Level 4, Biopolis
Hosts : Dr Leah Vardy
(Tel: 64070174, email: leah.vardy@imb.a-star.edu.sg)

Abstract of the Seminar:

Cytoplasmic dynein has many different roles in the cell, from moving membranous organelles during interphase, to assembly and function of the mitotic spindle. We have been focussing on the role of one dynein subunit, the light intermediate chain (LIC), on dynein function. Loss of LICs leads to the formation of multipolar spindles in both human cultured cells and in Xenopus laevis early embryos. Unexpectedly, this occurs because the mother and daughter centrioles at each pole separate prematurely, driven by the activity of the kinesin family member Eg5. These data suggest that dynein and Eg5 normally work against each other to maintain spindle pole and centrosome integrity in the mitotic spindle. Since dynein lacking LICs is localised normally to the spindle poles, one possibility is that dynein without LICs generates reduced force, so allowing Eg5 to pull apart the centrosome.

About the Speaker:

Viki trained as a biochemist and cell biologist at the University of York, UK. She then went on to work with the late Thomas Kreis at EMBL, Heidelberg, and with Ron Vale at UCSF, where she started to work on microtubule motors. She spent several years at the MRC Laboratory of Molecular Biology in Cambridge as an independent scientist. She then established her own laboratory as a Lister Instititue Senior Research Fellow at the University of Manchester, where she is now Professor of Cell Biology in the Faculty of Life Sciences. She is currently on sabbatical here in the IMB, where she is working with Brian Burke.