

Department of Biological Sciences

Seminar Announcement

Date: 24 Sept 2004, Fri
Time: 4 - 5 pm
Venue: LT20
Host: A/P Loh Chiang Shiong

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Cytokinesis is the final step of the cell cycle and is critical for the proper separation of chromosomes and organelles into two daughter cells. A clear understanding of the spatial and temporal regulatory mechanisms of cytokinesis is important not only for gaining further knowledge of this cellular process, but also for developing effective counter measures against various diseases such as cancer and birth defects.

Regardless of the numerous experiments in the cytokinesis filed, two major questions still remain: How is the cytokinesis signaled? How is cell cleavage regulated? Recently, we have contributed to the understanding of the mechanism of cytokinesis by focusing on the functions of aurora B kinase, one of the chromosomal passenger proteins and a key kinase in the coordination of mitosis and cytokinesis, in mammalian cells. We demonstrated that aurora B delivered to the equator through two discrete pathways in mammalian cells and is sufficient for signaling cell ingression. This finding could lead to significant progress in understanding the signaling, initiation and regulation of cytokinesis.

Molecular Mechanism for Signaling Cytokinesis in Mammalian Cells

All are welcome

