IMCB Invited Speaker

Speaker : **Dr. Rosella Visintin**
Junior Group Leader, European Institute of Oncology (IEO), Italy

Date : 28 October 2013, Monday

Time : 11:00AM - 12:00PM

Venue : IMCB Seminar Room 3-46, Level 3, Proteos, Biopolis

Host : Prof. Uttam Surana

Seminar :

Regulation of anaphase progression by the Cdc14 phosphatase and Cdc5 kinase

The correct transmission of the genome during cell division requires that replicated chromosomes (sister chromatids) are first separated and then segregated between the daughter cells. Sister chromatid segregation occurs in anaphase and it is triggered by the dissolution of cohesin ring complexes that hold the sister chromatids together. Here weshow that simultaneous removal of the Cdc5 kinase and Cdc14 phosphatase prevents anaphase despite efficient cohesin cleavage. This requirement is suppressed by supplying increased activity of the microtubule motor Cin8. Our data indicate that Cdc14 and Cdc5 are required in metaphase and/or at the onset of anaphase to mediate changes in motor activity and microtubule dynamics, which is a prerequisite for anaphase spindle elongation.

About the Speaker :

Dr. Rosella Visintin received her Ph.D. degree from the University of Milan, Italy, where she worked under the supervision of Prof. Lilia Alberghina. During her Ph.D. research Dr. Visintin became interested in understanding the process of chromosome segregation. She extended her knowledge on this topic during her post-doctoral training in the laboratory of Dr. Angelika Amon at MIT. Her post-doctoral work significantly contributed to our understanding of how mitotic exit is regulated. In 2005 she became a Group Leader at the European Institute of Oncology (IEO) in Milan, Italy. There she continued her work on mitotic exit but more recently became interested in understanding the role of spindle elongation during chromosome segregation. In 2012, she became an International Early Career Scientist of the HHMI.

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