

CONFERENCE ON CHROMOSOME STABILITY

Dec 17 – Dec 19, 2012

Mechanisms that maintain chromosome stability are important for understanding genome evolution, organization and variability. Chromosomal instability during mitotic and meiotic divisions are also associated with a large number of diseases. The meeting on chromosome stability is the first of its kind in India. This meeting will bring together established and new investigators working in the area of DNA replication, recombination and repair processes as well as chromosome cohesion, centromere and kinetochore structure-function. The meeting is spread over four sessions consisting of invited talks from internationally recognized scientists using distinct biochemical, cell biological, genetic and genomic approaches for studying chromosome stability. A number of model systems from *invitro* purified components to bacteria, yeast, plants and mammalian systems are used by groups participating in this meeting.

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Jawaharlal Nehru Centre for Advanced
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Indo-US Science and
Technology Forum

Conveners

Nishant K.T (IISER-TVM)
Kaustuv Sanyal (JNCASR, Bangalore)

Venue

Golden Peak resort, Ponmudi Hills, Thiruvananthapuram

PROGRAMME

Monday, Dec 17th

2:00pm-2:15pm	Welcome: Nishant K.T
	Opening Remarks: E.D. Jemmis, Director, IISER-TVM
2:15pm- 2:30pm	Introductory Address: M.R.S. Rao, President, JNCASR
	Session I, DNA repair (Chair- M.R.S. Rao)
2:30pm-3:00pm	Eric Alani (Cornell University, USA) “Understanding early steps in DNA Mismatch Repair”
3:15pm – 3:45pm	D.N. Rao (IISc, India) “Effects of DNA modification on cellular physiology in H. Pylori”
4:00pm – 4:30pm	Tea
4:45pm – 5:15pm	B.J. Rao (TIFR, India) “Chromosome territories relocate during DNA damage response”
5:30pm- 6:00pm	Sathees Raghavan (IISc, India) “Mechanism of DNA breakage and repair during chromosomal Translocation in Leukemia”
6:15pm-6:45pm	Kundan Sengupta (IISER, Pune) “Nuclear structure function relationships and genome instability in colon cancer cells”
7:00pm	Dinner

Tuesday, Dec 18th

	Session II, Centromere and segregation (Chair- Imran Siddiqi)
9:00am – 9:30am	Kaustuv Sanyal (JNCASR, India) “Rapidly evolving fungal centromeres”
9:45am-10:15am	Raja Paul (IACS, India) “Mutual interaction between kinetochore and microtubule filaments is responsible for positioning the chromosomal cluster in budding yeast”
10:30am-10:45am	Tea
10:45am – 11:15 am	German Larriba (University of Extremadura, Spain) “Role of homologous recombination genes on the prevention of chromosomal instability in Candida albicans”
11:30am – 12:00 pm	Maruthachalam Ravi (UC Davis, USA) “Centromere incompatibility induces genomic catastrophe during zygotic mitosis in A. thaliana”
12:15pm – 1:30pm	Lunch
	Session III, Meiosis (Chair- B.J. Rao)
1:30pm – 2:00pm	Nishant K.T. (IISER-TVM, India) “Analysis of crossover assurance mechanisms in S. cerevisiae using high through-put genomics”
2:15pm – 2:45pm	Imran Siddiqi (CCMB, India) “TBD”
3:00pm – 3:30pm	Santanu Ghosh (IIT-Bombay, India) “Functional characterization of nonessential central kinetochore proteins in meiosis”
3:45pm-	Sight-seeing/visit to new IISER-TVM campus

Wednesday, Dec 19th

	Session IV, Genome Stability (Chair- Eric Alani)
9:00am – 9:30am	Usha Vijayraghavan (IISc, India) “TBD”
9:45am – 10:15am	Lucas Argueso (Colorado State University, USA) “A new yeast model system for the study of Copy Number Variation (CNV) and general genome stability”
10:30am-10:45am	Tea
10:45am- 11:15am	Shikha Laloraya (IISc, India) “A role for Smc5/6 complex mediated sumoylation in maintenance of genomic integrity in S. cerevisiae”
11:30am – 12:00pm	Jagmohan Singh (IMTECH, India) “A non-canonical primase is involved in generating the fragile site/imprint at mat1 locus in S. pombe”
12:15pm- 12:45 pm	Tapas Manna (IISER-TVM, India) “Role of microtubule end binding proteins in mitosis”
1:00 pm	Vote of Thanks: Kaustuv Sanyal; followed by lunch and departure