



CHROMOSOME  
STABILITY 2022

14-18 Dec 2022, Thiruvananthapuram, India

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**PROGRAM**



**14 DECEMBER 2022**

**Lecture Hall Complex, IISER TVM**

12:00-14:00	Registration and Lunch	
14:00-14:15	Inauguration / Introduction	
<b>Session I: DNA Replication - Repair – Recombination</b> <b>Chairs: Viji Subramanian and Devyani Haldar</b>		
Time	Speaker/Affiliation	Title
14:20-14:40	<b>Marco Foiani</b> FIRC Institute of Molecular Oncology (IFOM), Italy	Genome elements and pathways mediating chromosome catenation
14:45-15:05	<b>Viji Subramanian</b> Indian Institute of Science Education and Research, Tirupati	Ends: a means to promote chromosome size bias
15:10-15:30	<b>Benu Brata Das</b> Indian Association for Cultivation of Science, Kolkata	Protein Arginine Methyltransferase 5 (PRMT 5): A key regulator of DNA Topoisomerase 1-induced Chromosomal Break Repair
15:35-15:55	<b>Ganesh Nagaraju</b> Indian Institute of Science, Bangalore	RTEL1 helicase regulates homologous recombination during DNA replication
16:00-16:20	<b>Miki Shinohara</b> Kindai University, Japan	Rad50 regulates Mre11 nuclease activity to facilitate bidirectional resection of DSB ends
16:30-17:00	<b>TEA</b>	

Time	Speaker/Affiliation	Title
17:00-17:20	<b>Lucas Argueso</b> Colorado State University, USA	Bursts of aneuploidization are associated with phenotypic diversification in <i>Saccharomyces cerevisiae</i>
17:25-17:45	<b>Devyani Haldar</b> Center for DNA Fingerprinting and Diagnostics, Hyderabad	Chromatin modifications and the mechanisms for maintenance of DNA replication fork stability
17:50-18:10	<b>Sathees Raghavan</b> Indian Institute of Science, Bangalore	Unleashing a novel function of endonuclease G in mitochondrial genome instability
18:15-18:35	<b>Umesh Varshney</b> Indian Institute of Science, Bangalore	Mechanism of uracil excision by UdgX and its possible roles in bacteria
18:40-19:00	<b>K. Muniyappa</b> Indian Institute of Science, Bangalore	New insights on DNA interstrand crosslink repair in <i>Saccharomyces cerevisiae</i>
19:10	<b>SOCIAL MIXER &amp; DINNER</b>	



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**15 DECEMBER 2022**

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**Session II: DNA Replication - Repair – Recombination  
Chairs: Valerie Borde and Mridula Nambiar**

Time	Speaker/Affiliation	Title
9:00-9:20	<b>Bernard de Massy</b> Institute of Human Genetics, France	Regulation of DNA double-strand formation for meiotic recombination
9:25-9:45	<b>Nishant K. T.</b> Indian Institute of Science Education and Research, Thiruvananthapuram	Heterozygosity alters binding of the Msh4-Msh5 complex to meiotic chromosomes in yeast
9:50-10:10	<b>Akira Shinohara</b> Osaka University, Japan	FIGNL1 AAA+ ATPase remodels RAD51 and DMC1 filaments in meiotic DNA replication and recombination
10:15 – 10:35	<b>Francesca Cole</b> MD Anderson Cancer Centre, USA	Genetic dissection of crossover maturation mutants defines discrete crossover intermediates in mouse spermatocytes
10:40-11:10	<b>T E A</b>	
11:10-11:30	<b>Valerie Borde</b> Institut Curie, France	Molecular Determinants of Recombination-Associated DNA-synthesis during DSB repair
11:35-11:55	<b>Sagar Sengupta</b> National Institute of Immunology, New Delhi	Linking disruption of chromatin remodelling to chemosensitivity and adjunct therapy in colon cancer

Time	Speaker/Affiliation	Title
12:00-12:20	<b>Mridula Nambiar</b> Indian Institute of Science Education and Research, Pune	Diversity among cohesin complexes: roles in recombination and chromosomal segregation
12:25-12:45	<b>Michael Lichten</b> National Institutes of Health, USA	On the molecular mechanism of meiotic recombination
13:00-14:30	<b>LUNCH</b>	
<b>Session III: Centromere and Kinetochores</b> <b>Chairs: Munira Basrai and Ines Drinnenberg</b>		
14:30-14:50	<b>Harmit Malik</b> Fred Hutchinson Cancer Research Center, USA	Causes and consequences of centromeric histone rapid evolution in Drosophila
14:55-15:15	<b>Munira Basrai</b> National Institutes of Health, USA	Mechanisms that prevent mislocalization of CENP-A and chromosomal instability (CIN)
15:20-15:40	<b>Tapas Manna</b> Indian Institute of Science Education and Research, Thiruvananthapuram	Molecular control of mitotic chromosome segregation errors
15:45-16:05	EMBO Young Investigator Lecture <b>Ines Drinnenberg</b> Institut Curie, France	Identification of a new genome-wide compartment in Lepidoptera
16:10-16:30	<b>Kevin Hardwick</b> University of Edinburgh, UK	Mitotic regulation and aneuploidy in Cryptococcus: spindle assembly checkpoint mutants and Titan cells
16:35-17:20	<b>TEA &amp; GROUP PHOTO</b>	

Time	Speaker/Affiliation	Title
17:20-17:40	<b>Geert Kops</b> Utrecht University, Netherlands	On the relation between centromeric chromatin, kinetochores and microtubule interactions
17:45-18:05	<b>Dileep Varma</b> Northwestern University, USA	Molecular mechanisms controlling efficient kinetochore-microtubule coupling during mitotic chromosome segregation
18:10-18:30	<b>Tatsuo Fukagawa</b> Osaka University, Japan	Dynamic assembly of the kinetochore
18:35-18:55	<b>Jeyaprakash Arulanandam</b> University of Edinburgh, UK	Maintenance of Centromere Identity: Mechanistic Insights
19:00-19:30	Discussion on career opportunities <b>Devendra Singh</b> DBT/Wellcome Trust India Alliance	India Alliance: Innovative Funding Opportunities for Biomedical & Health Research
19:40-21:00	<b>D I N N E R</b>	



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**16 DECEMBER 2022**

**Kovalam (Uday Samudra)**

Time	Activity
7:00-8:30	Breakfast and depart for Kovalam (Uday Samudra)
11:00-13:00	Poster Session I
13:00-14:30	Lunch
14:30-16:30	Poster Session II
16:30-19:30	Free time & discussions on Career opportunities
19:30-21:00	Banquet Dinner



**17 DECEMBER 2022**

**Lecture Hall Complex, IISER TVM**

**Session IV: Genome Structure and Function**  
**Chairs: Dimple Notani and Yamini Dalal**

Time	Speaker/Affiliation	Title
9:00-9:20	<b>Joseph Heitman</b> Duke University, USA	Uncontrolled transposition following RNAi loss causes hypermutation and antifungal drug resistance in clinical isolates of <i>Cryptococcus neoformans</i>
9:25-9:45	<b>Kaustuv Sanyal</b> Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore	Discovery of a novel mitotic progression factor in <i>Candida albicans</i>

Time	Speaker/Affiliation	Title
9:50-10:10	<b>Christophe d'Enfert</b> Institut Pasteur, France	eQTL mapping reveals trans-acting genetic variants in the pathogenic yeast <i>Candida albicans</i>
10:15-10:35	<b>Santanu Ghosh</b> Indian Institute of Technology Bombay, Mumbai	Elucidating the composition and functions of the Remodeling the Structure of Chromatin (RSC) complex in <i>Candida albicans</i>
10:40-11:10	T E A	
11:15-11:35	<b>Karl Kuchler</b> Medical University Vienna, Austria	White-brown switching and fitness of <i>C.auris</i> in skin tissues
11:40-12:00	<b>Guilhem Janbon</b> Institut Pasteur, France	Alternative Transcription Start site usage regulation in <i>Cryptococcus</i>
12:05-12:25	<b>Dimple Notani</b> National Center for Biological Sciences, Bangalore	Functional dissection of enhancers in signaling context
12:30-12:50	<b>Yamini Dalal</b> National Institutes of Health, USA	Histone Variants reset the Epigenetic Clock in Cancer and Aging
13:00-14:30	L U N C H	



**Session V: Genome Structure and Function**  
**Chairs: Shweta Tyagi and Anjana Badrinarayanan**

Time	Speaker/Affiliation	Title
14:30-14:50	<b>Tapas Kundu</b> Jawaharlal Nehru Center for Advanced Scientific Research, Bangalore	Chromatin Meets Autophagy
14:55-15:15	<b>Shweta Tyagi</b> Center for DNA Fingerprinting and Diagnostics, Hyderabad	From histone modification to chromosome segregation: How MLL family regulates epigenetic specification of centromere.
15:20-15:40	<b>Shantanu Chowdhury</b> Institute of Genomics and Integrative Biology, New Delhi	Long Distance Control: Telomere-Dependent Chromatin changes Activate Interleukin-1 Signalling and Immunosuppression in Cancer
15:45-16:05	<b>Anjana Badrinarayanan</b> National Center for Biological Sciences, Bangalore	Searching for homology
16:10-16:30	<b>Srimonta Gayen</b> Indian Institute of Science, Bangalore	Allelic Coordination in Pre-gastrulation
16:35-17:05	<b>T E A</b>	
17:05-17:25	<b>Sabari Thirupathi</b> Indian Institute of Science Education and Research, Thiruvananthapuram	Selection preserves genome organization in bacteria
17:30-17:50	<b>Madhusoodanan U. K.</b> Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum	Neuronal DNA damage response and cell death pathway modulation by Ubiquitination

Time	Speaker/Affiliation	Title
17:55-18:15	<b>Amit Kumar</b> Institute of Microbial Technology, Chandigarh	Nuclear PIP4K2 $\alpha$ and PIP4K2 $\beta$ coordinate a non-canonical ATM response following UV irradiation
18:20-18:35	<b>Saravanan Palani</b> Indian Institute of Science, Bangalore	Molecular probes for imaging the dynamics of cell division proteins
18:35-18:50	<b>Gunjan Mehta</b> Indian Institute of Technology, Hyderabad	Single-Molecule tracking to understand the cross-talk between mitotic kinases and phosphatases to regulate cell division.
18:55-19:05	<b>Poster prizes</b>	
19:10-19:55	<b>Panel Discussion</b> (Discussion on publishing your work with journal editors)	
19:55-20:00	<b>Vote of thanks</b>	
20:00	<b>DINNER</b>	



**18 DECEMBER 2022**

Time	Activity
7:30-9:00	Box Breakfast and Departure