

# SCIENTIFIC PROGRAM



**3rd Dec 2018**

08:00AM-09:30AM	Registration
09:30AM-09:40AM	Welcome address; Jagan Pongubala, K V Ramaiah
09:40AM-09:50AM	Inaugural address; Appa Rao Podile
09:50AM-10:30AM	Keynote address; G V Shivashankar, NUS – Singapore Mechanical regulation of genome architecture and cell fate decisions
10:30AM-10:50AM	High Tea
	<b>Session I: Chromatin Structure and Dynamics (Chair: Harinder Singh)</b>
10:50AM-11:25AM	Keynote lecture; Tom Misteli, National Cancer Institute (NIH) High-throughput imaging to probe human genome architecture
11:25AM-11:45AM	Aprotim Mazumder, TIFR-Hyderabad Measuring DNA damage responses and associated chromatin and transcriptional changes from image analysis
11:45AM-12:10PM	Kundan Sengupta, IISER-Pune Chromosome territory positions are altered in cells on softer matrices
12:10PM-12:25PM	Mahipal Ganji, Max-Planck Institute of Biochemistry Unravelling spatial organization of chromosomes by single molecular imaging
12:25PM-01:00PM	Keynote lecture; Kees Murre, UCSD Tracking long-range genomic interactions in live cells

01:05PM-02:00PM	Lunch
	<b>Session II: Transcriptional Regulatory Networks (Chair: K V Ramaiah)</b>
02:00PM-02:30PM	Sanjeev Khosla, CDFD The Imprint Control Region (ICR) of the mouse Neuronatin gene is an enhancer that also regulates the Blcap gene
02:30PM-03:00PM	Hernan Garcia, UC Berkely Binary transcriptional control of pattern formation in <i>Drosophila</i>
03:00PM-03:30PM	Sanjeev Galande, IISER-Pune Regulation of chromatin organizer SATB1 during T cell development
03:30PM-03:50PM	Rahul Siddharthan, IMSC Gene regulation, sequence features, chromatin and their interplay
03:50PM-04:10PM	B Jayaram, IIT-Delhi Genomes to hit molecules <i>in silico</i> - An update: Bioinformatics for a better tomorrow
04:10PM-04:20PM	High Tea
	<b>Session III: Epigenetics in Development and Disease (Chair: Sanjeev Galande)</b>
04:20PM-04:50PM	K. Thangaraj, CCMB Identification and functional characterization of novel genes responsible for male infertility
04:50PM-05:10PM	M. Subba Reddy, CDFD New players on histone field

05:10PM-05:30PM	Sreelaja Nair, TIFR-Mumbai The influence of early parental epigenetics and zygotic cell biology on vertebrate embryonic development
05:30PM-05:50PM	HBD Prasad, NIAB Coordinate regulation of chromosome length and recombination by SUMO1
05:50PM-06:10PM	Sravanthi Rampalli, InStem Regulation of peripheral heterochromatin domain organization via histone and non-histone protein methylation
06:10PM-06:30PM	Manish Jaiswal, TIFR-Hyderabad Role of mito-nuclear crosstalk in neuronal survival and degeneration
06:30PM-06:45PM	Prem P Tripathi, IICB Functional Dissection of Histone H3 Lysine 27 demethylation in neural cell fate and cortical development.
06:45PM-07:00PM	Vaishna V, CDFD WWP2 regulates Wnt signalling by ubiquitinating DVL2
07:00PM-7:15PM	Akshay Kumar Avvaru, CCMB Patterns of microsatellite distribution across eukaryotic genomes
07:15PM-7:45PM	Keynote lecture; Ali Shilatifard, Northwestern University Principles of epigenetics and chromatin in development and human disease
07:45PM-09:00PM	Dinner

4th Dec 2018	<b>Session IV: Genome Organization and Regulation (Chair: Mike Atchison)</b>
10:00AM-10:20AM	Dimple Notani, NCBS Role of transcriptional enhancers in gene regulation
10:20AM-10:50AM	Ranjan Sen, National Institute of Aging (NIH) Genetic and epigenetic control of antigen receptor gene assembly
10:50AM-11:00AM	High Tea
11:00AM-11:20PM	Cornelis Murre, UCSD The role of non-coding transcription in compartmentalization
11:20PM-11:40PM	Sreenivasulu Kurukuti, University of Hyderabad Dynamic hierarchical reorganization of lamina and inter lamina associated domains accompanies lactogenic differentiation of murine mammary epithelial stem-like cells
11:40PM-12:10PM	Harinder Singh, CCHMC Delineating functional cis-regulomes of mammalian cellular states
12:10PM-12:40PM	David Schatz, Yale University Mapping vulnerability to somatic hypermutation across topologically associated domains in the B cell genome
12:40PM-12:50PM	Ken R Chandradoss, IISER-Mohali Does genome architecture guide the mitotically-stable mono-allelic expression of genes?
12:50PM-01.00PM	Gaurav Bajpai, IIT-Bombay Irregular chromatin: packing density, fiber width and occurrence of heterogeneous clusters
01.00PM-02.00PM	Lunch

**Session V: Genome Organization and Regulation  
(Chair: Subeer S. Majumdar)**

- 02:00PM-02:30PM      Eric C. Schirmer, University of Edinburgh  
Tissue-specific nuclear proteins direct 3D genome organization changes important for cell state switching, tissue differentiation and disease
- 02:30PM-03:00PM      Michael Atchison, University of Pennsylvania  
Mechanisms of inducible long-distance DNA loops
- 03:00PM-03:30PM      Rudolf Grosschedl, Max Planck Institute of Immunobiology and Epigenetics  
Functional repurposing of SATB2 by SUMOylation drives ES cell differentiation
- 03:30PM-03:50PM      Quasar Padiath, University of Pittsburgh  
The organization of the nuclear lamina and its role in disease and development
- 03:50PM-04:10PM      Krishnaveni Mishra, University of Hyderabad  
Regulation of nuclear shape and size in *Saccharomyces cerevisiae*
- 04:10PM-04:30PM      Senthilkumar Ramamoorthy, Max Planck Institute of Immunobiology and Epigenetics  
Molecular signatures of the Ebf1/Pax5 haploinsufficiency mouse model of B-ALL
- 04:30PM-5:00PM      High Tea
- 05:00PM-07:30PM      Cultural Program
- 07:30PM-09:00PM      Dinner

5th Dec 2018	<b>Session VI: Non-coding RNAs</b> <b>(Chair: SC Lakhotia)</b>
10:00AM-10:20AM	Geetanjali Chawla, RCB MicroRNA pathways in aging and dietary restriction
10:20AM-11:00AM	Keynote Lecture; Chandrasekhar Kanduri, University of Gothenburg Functional and mechanistic roles of long noncoding RNAs in genomic integrity and spatial localization of oncogenic and tumor suppressor proteins
11:00AM-11:15AM	Sameena Nikhat, University of Hyderabad MicroRNAs enforce commitment during early developmental trajectories of B and T lymphocytes
11:15AM-11:30AM	High Tea
11:30 AM-12:00PM	Subhash C Lakhotia, Banaras Hindu University The hsr $\omega$ nuclear lncRNAs impact multiple regulatory pathways through interaction with diverse hnRNPs and other proteins in <i>Drosophila</i>
12:00PM-12:20PM	Suvendra N. Bhattacharyya, IICB miRNA-mediated gene expression control in mammalian cells and tissue
12:20PM-12:40PM	Dasaradh Palakodeti, InStem Dynamic expression of tRNA derived small RNAs define cell states
12:40PM-01.00PM	Awadesh, C-CAMP Scientific presentation
01:00PM-02:00PM	Lunch



**Session VII: Gene activity and Cell Response  
(Chair: Debashis Mitra)**

02:00PM-02:20PM	Tina Mukherjee, InStem Metabolic control of immune-competence by odors in <i>Drosophila</i>
02:20PM-02:50PM	Rakesh K. Mishra, CCMB Going GAGA over Hox and beyond
02:50PM-03:10PM	Aneesh Kumar, NII Regulation of protein synthesis during immune cell activation and differentiation
03:10PM-03:30 PM	Amitav Sengupta, IICB Nucleosome remodeler plasticity in human Acute Myeloid Leukemia pathobiology
03:30PM-04:00PM	Ullas Kolthur, TIFR-Mumbai Metabolism connects to chromatin and gene expression
04:00PM-04:15PM	High Tea
04:15PM-06:30PM	Poster Session
06:30PM-07:30PM	Meet the Expert Session (Tom Misteli, Kees Murre, Rudolf Grosschedl, Rakesh Mishra, Sanjeev Galande, Harinder Singh) Moderator : Subeer Majumdar
07:30PM-09:00PM	Dinner

<b>6th Dec 2018</b>	<b>Session VIII : DNA damage and Transcription (Chair: Pallu Reddanna)</b>
10:00AM-10:20AM	S. Radhakrishnan, NCBS Chromatin structure shapes the local mutational density in cancer genomes
10:20AM-10:50AM	Ritwick Sawarkar, Max Planck Institute of Immunobiology and Epigenetics Genome regulation by stress and chaperones
10:50AM-11:10AM	Ganesh Nagaraju, IISc XRCC2 regulates replication fork progression during dNTP alterations
11:10AM-11:20AM	High Tea
11:20AM-11:40AM	Rashna Bhandari, CDFD Inositol pyrophosphates are essential for the completion of DNA recombination
11:40AM-12:10PM	Sathees Raghavan, IISc Quadruplex structures confer differential radiosensitivity to human genome and is modulated in a cell-cycle manner
12:10PM-12:30PM	Ellora Sen, NBRC TLR4 affects p53-JMJD2A-BRG1 transcriptional network to drive SOCS1 expression
12:30pm-12:50PM	Sanjeev Das, NII Understanding the role of Cyclin F in tumor suppression
01:00PM-02:00PM	Lunch
02:00PM-02:30PM	Harinder Singh, CCHMC Summary of the scientific highlights
02:30PM-04:00PM	Concluding Session Awards for Best Posters