

# SCHEDULE

Tuesday, December 11, 2018

	<b>Session 1 - Symmetry in developing systems-I</b> 15:30-15:55 Cilia-dependent and cilia-independent mechanisms for left-right symmetry breaking in vertebrates Hiroshi Hamada, RIKEN CDB, Japan
	15:55-16:15 Evolution of Developmental Signaling Pathways: Role of BMP Inhibitors Noggin and Gremlin in Organizer Formation in Hydra Surendra Ghaskadbi, ARI, India
	16:15-16:35 Genetic network governing early mesoderm patterning in vertebrates Ramkumar Sambasivan, InStem, India

16:35-17:05 **Tea**

	<b>Session 2 - Stem cells and cell fate decisions-I</b> 17:05-17:30 From servant to master: The ribosomes instructive role in drosophila hematopoietic stem cell fate Leonie Quinn, ANU, Australia
	17:30-17:55 Cell Adhesion mediated Actomyosin assembly is essential for the hematopoietic progenitor maintenance in Drosophila Lolitika Mandal, IISER Mohali, India
	17:55-18:15 The development and differentiation of haematopoietic stem cells in mouse embryo: cell cycle arrest and erythrocyte enucleation are interlinked Sharmili Jagtap, PU, India
	18:15-18:30 The role of Fatty Acid $\beta$ Oxidation in regulating hemocyte progenitor homeostasis in Drosophila melanogaster Satish Kumar Tiwari, IISER Mohali, India
	18:30-18:50 Talk by Zeiss
	18:50-19:10 Vendor Talk

Wednesday, December 12, 2018

	<b>Session 3 - Developmental neurobiology</b> 9:00-9:25 Calcium dynamics and tissue mechanics of vertebrate neural tube closure Naoto Ueno, NIBB, Japan
	9:25-9:50 The long and the short of separating the two cerebral hemispheres Jonaki Sen, IIT Kanpur, India
	9:50-10:15 The importance of suppressing Wnt responsiveness and the telencephalic midline Shubha Tole, TIFR Mumbai, India
	10:15-10:35 Maintaining Acetylcholine Receptors at the NMJ: What have Claudins got to do with it? Kavita Babu, IISER Mohali, India
	10:35-10:50 MicroRNA-19b positions the hippocampus in the developing brain Suvimal Kumar Sindhu, IIT Kanpur, India

10:50- 11:20 **Tea**

	<b>Session 4 - Segmentation of body axis</b> 11:20-11:45 Deconstructing the segmentation clock oscillator in vitro Olivier Pourquie, HMS, USA
	11:45-12:10 Understanding the molecular mechanism of differentiation and stability of articular cartilage Amitabha Bandyopadhyay, IIT Kanpur, India
	12:10-12:35 Breaking constraint of mammalian axial formulae Edwina McGlenn, ARMI, Australia
	12:35-12:50 Remodelling of the Actin Cytoskeleton Regulates Embryonic Stem Cell Pluripotency Sarita Kumari, NCCS, India
	12:50-13:05 Role of formin-2 in actin- microtubule coordination during axonal pathfinding Tanushree Kundu, IISER Pune, India

13:05-14:00 **Lunch**

14:00-17:00 **POSTER SESSION - I**

17:00-17:30

*Tea*

**Session 5 - Building epithelial tissues and organs**

17:30-17:55

Building your kidneys and keeping them happy

Ian Smyth, Monash University, Australia

17:55-18:20

Hox protein Ultrabithorax mediated specification of organ shape and size in *Drosophila*

LS Shashidhara, IISER Pune, India

18:20-18:45

Hox-dependent regulation of autophagy at the nuclear periphery

Merabet Samir, IGFL, UK

18:45-20:00

**What it's like to be a woman in science- a session for men and women**

Coordinator: Shubha Tole (TIFR Mumbai, India)

**Thursday, December 13, 2018**

**Session 6 - Symmetry in developing systems-II**

9:00-9:25

Understanding the cues critical for establishing bilateral symmetry in planarians

Dasaradhi Palakodeti, InStem, India

9:25-9:45

Maternal Homeobox A10 (HOXA10) controls Embryo Implantation and Early Placentation

Deepak Modi, NIRRH, India

9:45-10:05

Isoform-specific translational control of furin RNA underlies regulation of Nodal signaling and left-right patterning

Karuna Sampath, University of Warwick, UK

10:05-10:20

NFY, a trimeric transcription factor complex, is required for oogenesis and preimplantation development in mice

Deepankar Pratap Singh, FMI, Switzerland

10:20-10:35

Evolution of embryo implantation in eutherian mammals was enabled by the origin of uterine decidual cells

Arun R. Chavan, Yale University, USA

10:35-10:50

Probing the relative role of cell proliferation, cell size and cell adhesion in tolerating mechanical stress in zebrafish epidermis

Geetika Chouhan, TIFR, India

10:50-11:20

*Tea*

**Session 7 - Stem cells and cell fate decisions-II**

11:20-11:45

Sexual fate decisions in mouse fetal germ cells

Josephine Bowles, UQ, Australia

11:45-12:10

Transcriptional control of neural stem cell biology

Michael Piper, UQ, Australia

12:10-12:30

Regulation of mitotic arrest in stem/progenitor cells

Arjun Guha, InStem, India

12:30-12:45

The mRNP granule proteins Fmrp and Dcp1a differentially regulate muscle cell quiescence

Swetha Sundar, CCMB, India

12:45-13:00

Mechanisms of Muscle Repair: Learning from *Drosophila*

Dhananjay Chaturvedi, NCBS, India

13:00-14:00

*Lunch*

14:00-17:00

**POSTER SESSION - II**

**Session-8: Development and disease mechanisms**

17:00-18:00

**Panel Discussion: Developmental biology, Disease mechanism and entrepreneurship**

Coordinator: Jyotsna Dhawan

Hari Reddi (UC Davis Health, USA), Chetna Sachinanandan (IGIB, India), Xin Zhang (BU, USA), Philippa Francis-West (Kings College, UK)

18:00-18:25

Developmental paradigms of inter-organ communication in development and disease

Pradip Sinha, IIT Kanpur, India

18:25-18:45

Oncogeny recapitulates ontogeny in the context of ovarian cancer metastasis

Ramray Bhat, IISc, India

18:45-19:05

Developing in vitro and *Drosophila* models for novel ciliopathies to investigate the role of IFT52 and EXOC6B in modulating primary cilia and allied regulation of skeletal differentiation

Priyanka Upadhai, KMC, India

- 19:05-19:30 SOD1 activity threshold and TOR signalling modulate VAP(P58S) aggregation via ROS-induced proteasomal degradation in a Drosophila model of Amyotrophic Lateral Sclerosis  
Girish Ratanaparkhi, IISER Pune, India
- 19:30-19:45 BMP signaling is sufficient and necessary for the pathogenesis of Osteoarthritis in mice  
Akrit Pran Jaswal, IIT Kanpur, India

### Friday, December 14, 2018

#### Session 9 - Cell biology of developmental processes- I

- 9:00-9:25 Novel lipid regulators of synaptic vesicle cycle  
Raghu Padinjat, NCBS, India
- 9:25-9:45 Centrosome Aurora A gradient ensures a single PAR-2 polarity axis by regulating RhoGEF localization in *C. elegans* embryos  
Sachin Kotak, IISc, India
- 9:45-10:05 Measuring EGFR-mediated gene expression at a single molecule resolution in *Drosophila* tissues  
Aprotim Mazumder, TIFR, Hyderabad, India
- 10:05-10:25 High-content RNAi screens to identify the host cell requirements at the sequential steps of Influenza A virus entry  
Indranil Banerjee, IISER Mohali, India
- 10:25-10:40 Epithelial viscoelasticity is regulated by mechanosensitive E-Cadherin turnover  
K.Venkatesan Iyer, MPI-CBG, Germany
- 10:40-10:55 Neuropeptides required for *Drosophila* development under nutritional stress are regulated by the ER-Ca<sup>2+</sup> sensor STIM  
Megha, NCBS-TIFR, India

10:55-11:25

#### Tea

#### Session 10 - Building vasculature

- 11:25-11:50 The alternative splicing regulator Nova2 constrains vascular Erk signaling to limit specification of the lymphatic lineage  
Ben Hogan, UQ, Australia
- 11:50-12:10 Building the lymphatic vasculature: From progenitor cells to functional vessels  
Natasha Harvey, UniSA, Australia
- 12:10-12:30 *ecm1* promotes heart regeneration via regulating Pro-regenerative ECM molecules necessary for cardiomyocyte proliferation and migration  
Chinmoy Patra, ARI, India
- 12:30-12:45 LncRNA *veal2* negatively regulate Protein kinase C-beta to modulate endothelial permeability in Zebrafish  
Paras Sehgal, IGIB, India
- 12:45-13:00 Cuticle collagen regulate skin function and oxidative stress response in *Caenorhabditis elegans*  
Anjali Sandhu, IISc, India

13:00-14:00

#### Lunch

14:00-17:00

#### POSTER SESSION - III

#### Session 11 - Plant development

- 17:00-17:25 Leaf differentiation by TCP transportation factors  
Utpal Nath, IISc, India
- 17:25-17:50 Control of male gametogenesis in *Arabidopsis*  
Imran Siddiqi, CCMB, India

17:50-19:30

#### Mentoring session for young scientists

Gary Schoenwolf (U of U School of Medicine, USA), Shin-ichi Nishikawa

19:30-20:00

Award Ceremony

#### Gala Dinner

### Saturday, December 15, 2018

#### Session 12 - Cell biology of developmental processes- II

- 9:00-9:25 Sleeping stem cells switch signals  
Jyotsna Dhawan, CCMB, India
- 9:25-9:45 Unraveling the influence of Intrinsic and Extrinsic noise in Nanog dynamics  
Sandip Kar, IIT Bombay, India
- 9:45-10:10 Modes and mechanisms of cell death in *Drosophila*

10:10-10:35	The <i>C. elegans</i> protein PUF-8 promotes proteasome activity to initiate pairing of homologous chromosomes	Sharad Kumar, UniSA, Australia
10:35-10:55	Dendritic abnormalities might underlie intellectual disability in Lafora disease	K Subramaniam, IIT Madras, India S. Ganesh, IIT Kanpur, India

10:55-11:20 *Tea*

General Body Meeting

13:00-14:00 *Lunch*

