



1st Subhash Mukhopadhyay (e)Symposium

13th January to 15th January 2022

Jointly hosted by: Subhash Mukhopadhyay Centre for Stem Cell Biology and Regenerative Medicine, Adamas University; Kolkata
Indian Institute of Science; Bengaluru

Collaborating organization: Indian Society of Developmental Biologists (InSDB)

Organizers:

Maharshi Krishna Deb, *Subhash Mukhopadhyay Centre for Stem Cell Biology and Regenerative Medicine, Adamas University; India*
Srimonta Gayen, *Indian Institute of Science; India*

TOPICS

Germline cycle and in vitro gametogenesis, epigenetic reprogramming and inheritance, genomic imprinting, X-chromosome reactivation, embryogenesis and regeneration

Contact: maharshi.deb@adamasuniversity.ac.in ; srimonta@iisc.ac.in

Venue:  <https://zoom.us/j/7697374157>

LIST OF SPEAKERS



Azim Surani
University of Cambridge; UK
(Keynote)



Shiv Grewal
National Institutes of Health; USA
(Keynote)

Antonio Scialdone
Helmholtz Centre; Germany

Danesh Moazed
Harvard University; USA

Deepak Modi
*National Institute for Research in
Reproductive Health; India*

Deepa Subramanyam
National Centre for Cell Sciences; India

Eran Meshorer
Hebrew University; Israel

Jean-Léon Maître
Curie Institute; France

Karuna Sampath
University of Warwick; UK

Malancha Ta
*Indian Institute of Science Education and
Research-Kolkata; India*

Michal Gdula
*Institute of Molecular Biology and
Biotechnology; Poland*

Montserrat Anguera
University of Pennsylvania; USA

Nicolas Rivron
*Institute of Molecular Biotechnology;
Austria*

Oded Rechavi
Tel Aviv University; Israel

Petra Hajkova
Medical Research Council; UK

Ramkumar Sambasivan
*Indian Institute of Science Education and
Research-Tirupati; India*

Sanjeev Galande
Shiv Nadar University; India

Sihem Cheloufi
University of California-Riverside; USA

Sundeep Kalantry
University of Michigan; USA

Tina Mukherjee
*Institute for Stem Cell Science and
Regenerative Medicine; India*



Scientific Programme

Time mentioned here is as per Indian Standard Time (IST)

13th January 2022 (Thursday)

2:00 pm – 2:15 pm: Welcome address by Polani Seshagiri, *Indian Institute of Science; India*

2:15 pm – 2:30 pm: Tribute to Dr. Subhash Mukhopadhyay by Durga - world's 2nd test tube baby

Session Chair: Maharshi Krishna Deb, *Subhash Mukhopadhyay Centre for Stem Cell Biology and Regenerative Medicine, Adamas University; India*

2:30 pm – 3:30 pm: Azim Surani (Keynote), *University of Cambridge; UK*
Totipotency, genomic imprinting and the mammalian germline

3:30 pm – 4:15 pm: Oded Rechavi, *Tel Aviv University; Israel*
Temperatures dependent long term memory in C.elegans

4:15 pm – 5:00 pm: Sanjeev Galande, *Shiv Nadar University; India*
Chromatin organizer Satb2 acts as a gatekeeper for major developmental transitions during early vertebrate embryogenesis

5:00 pm – 5:15 pm: Recess

Session Chair: Srimonta Gayen, *Indian Institute of Science; India*

5:15 pm – 6:00 pm: Eran Meshorer, *Hebrew University; Israel*
Epigenetics: from pluripotent stem cells to ancient DNA

6:00 pm – 6:45 pm: Petra Hajkova, *Medical Research Council; UK*
Germline reprogramming: reaching the ground state of the mammalian epigenome

6:45 pm – 7:30 pm: Sundeep Kalantry, *University of Michigan; USA*
Tracing the evolutionary origins of X-chromosome inactivation

14th January 2022 (Friday)

Session Chair: Jyotsna Dhawan, *DBT-Wellcome Trust India Alliance; India*

6:00 pm – 6:45 pm: Antonio Scialdone, *Helmholtz Centre; Germany*
Single-cell transcriptomic characterization of a gastrulating human embryo

6:45 pm – 7:30 pm: Nicolas Rivron, *Institute of Molecular Biotechnology; Austria*
Blastoids: modeling blastocyst development and uterus implantation with stem cells

7:30 pm – 8:30 pm: Shiv Grewal (Keynote), *National Institutes of Health; USA*
Epigenetic genome control by RNA-based mechanisms

8:30 pm – 8:45 pm: Recess

Session Chair: Lolitika Mandal, *Indian Institute of Science Education and Research-Mohali; India*

8:45 pm – 9:30 pm: Danesh Moazed, *Harvard University; USA*
How epigenetic memory is propagated?

9:30 pm – 10:15 pm: Montserrat Anguera, *University of Pennsylvania; USA*
X-Chromosome Inactivation in the Immune System: Implications for female-biased autoimmune disease

10:15 pm - 11:00 pm: Jean-Léon Maître, *Curie Institute; France*
Mechanics of blastocyst morphogenesis

Scientific Programme

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15th January 2022 (Saturday)

Session Chair: Vidita Vaidya, Tata Institute of Fundamental Research; India

9:30 am – 10:15 am: Sihem Cheloufi, University of California-Riverside; USA

Epigenetic mechanisms of cell fate decisions

10:15 am – 11:00 am: Deepak Modi, National Institute for Research in Reproductive Health; India

Lhx2 drives meiosis in mammalian germ cells

11:00 am – 11:45 am: Ramkumar Sambasivan, Indian Institute of Science Education and Research-Tirupati; India

Mechanism triggering bilateral symmetry breaking and left-right patterning in mammals

11:45 am – 12:30 pm: Deepa Subramanyam, National Centre for Cell Sciences; India

Move it around - trafficking and cell fate decisions in stem cells

12:30 pm – 12:45 pm: Recess

Session Chair: Sujata Mohanty, All India Institute of Medical Sciences; India

12:45 pm – 1:30 pm: Tina Mukherjee, Institute for Stem Cell Science and Regenerative Medicine; India

Myeloid cells: Understanding their development and functional roles through an organismal level approach using Drosophila

1:30 pm – 2:15 pm: Karuna Sampath, University of Warwick; UK

Understanding the mechanisms that control embryonic and germline progenitors

2:15 pm – 3:00 pm: Malancha Ta, Indian Institute of Science Education and Research-Kolkata; India

Defining vitronectin's pro-survival role in mesenchymal stem cells under nutritional stress condition

3:00 pm – 3:45 pm: Michal Gdula, Institute of Molecular Biology and Biotechnology; Poland

How to shut down a whole chromosome? SmcHD1, epigenetics and 4D genome in X inactivation

Closing note by the organizers