

9TH ANNUAL SYMPOSIUM ON CELL AND GENE THERAPY

1st to 3rd August, 2024

PROGRAMME SCHEDULE

DAY-1: Thursday, 1st August, 2024

1:00 to 1:05 PM	• Prayer by Chaplain	
1:05 to 1:20 PM	• Welcome remarks: Director, CMC / Director, InStem / Principal, CMC	
1:20 to 1:25 PM	• Remarks by Secretary, Department of Biotechnology, Ministry of Science and Technology, Govt. of India	
1:25 to 1:30 PM	• Closing remarks: Head, CSCR	
Session-1: Orthobiologics In Cartilage Repair Chair: Samuel Chittaranjan		
India Time	Title	Speaker Name
1.30 to 2:00 PM	Cell-Based Therapeutics for Arthritic Disease	Frank Barry University of Galway, Ireland
2:00 to 2:30 PM	PRP for OA Knee: Bench to bedside	Sandeep Patel The Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India
2:30 to 3:00 PM	The Role of Extracellular Vesicles and Orthobiologics Secretome in Joint Preservation	Elizabeth Vinod Centre for Stem Cell Research, a unit of inStem, Bengaluru and Christian Medical College, Vellore, India
3:00 to 3:30 PM	Poster presentation and Industry Exhibition	
Session-2: MANUFACTURING AND REGULATORY ASPECTS IN CELL AND GENE THERAPY Chair: Cartikeya Reddy		
India Time	Title	Speaker Name
3:30 to 4:00 PM	Regulatory Paradigm of CAR-T therapies in India	Akhil Kumar Aurigene Oncology Limited, Bangalore, India
	And	and
	Challenges and Promise of CAR-based therapies in India	Priyadarshini Chatterjee Aurigene Oncology Limited, Bangalore, India
4:00 to 4:30 PM	From Innovation to Translation to Patients: The Future of Genetically Engineered T-Cells for Human Therapeutics	Bruce L. Levine The University of Pennsylvania, Philadelphia, US
4:30 to 5:00 PM	Mesenchymal stromal cells for clinical applications: CMC Challenges and Paths Forward	Sowmya Viswanathan Schroeder Arthritis Institute, University Health Network and the University of Toronto, Ontario, Canada
5:00 to 5:15 PM	Break	
Session-3: TECHNOLOGY ADVANCES Chair: Soniya Nityanand		
India Time	Title	Speaker Name
5:15 to 5:45 PM	Development of targeted viral platform for selective gene transfer to human HSCs in vivo	Dmitry M. Shayakhmetov Emory University School of Medicine Atlanta, USA
5:45 to 6:15 PM	Genetic and Transcriptional Engineering of Primary Human Blood Cells	Rasmus O. Bak Aarhus University, Department of Biomedicine, Aarhus, Denmark
6:15 to 6:45 PM	Innovative Non-Genotoxic Cell and Gene Therapies for Fanconi Anemia	Agnieszka Czechowicz Stanford University School of Medicine, Dept of Pediatrics Div. of Stem Cell Transplantation and Regenerative Medicine, Stanford, US
KEYNOTE ADDRESS Chair: Alok Srivastava		
India Time	Title	Speaker Name
6:45 to 7:45 PM	The Concept of Innovation and Orchestration: Translating Engineered Cellular Therapies from Bench to Bedside	Khalid Shah Center for Stem Cell and Translational Immunotherapy, Brigham and Women's Hospital and Harvard Stem Cell Institute, Cambridge, USA
End of Day-1		

DAY-2: Friday, 2nd August, 2024

Session-4: INDUSTRY UPDATES

Chair: Praveen Kumar Vemula

India Time	Title	Speaker Name
12:00 to 12:20 PM	Non-Viral Chimeric Antigen Receptor (CAR) T Cells going Viral: Process Studies from Stanford Center for Cancer Cell	Vimal Keerthi Stanford University School of Medicine, California, US
12: 20 to 12:40 PM	Writing the Future of Biologics with an Integrated Offering of Immunization, Libraries, and Machine Learning	Jay Yang Twist Bioscience, San Francisco, California, US
12:40 to 1:00 PM	Transforming Viral Vector Production: Enhancing Efficiency and Scale-Up with OmniBRx's Dynamic Bed Reactor Technology	Ravindra Patel OmniBRx Biotechnologies Pvt Ltd. Ahmedabad, Gujarat, India
1:00 to 2:00 PM	Lunch Break	

Session-5: APPLICATION OF IPSC TECHHNOLOGY

Chair: Maneesha S. Inamdar

India Time	Title	Speaker Name
2:00 to 2:30 PM	Challenges for the development of pluripotent stem cell based therapies and the role of international standards.	Glyn Stacey International Stem Cell Banking Initiative, Barley, UK
2:30 to 3:00 PM	Developing iPSC-derived RPE cell replacement therapy for the treatment of AMD	Rajarshi Pal Eyestem Research, Centre for Cellular and Molecular Platforms (C-CAMP), Bangalore, India
3:00 to 3:30 PM	Developing iPSC technologies to impact current challenges in the production of cell therapies	Julia Neubauer Fraunhofer Institute for Biomedical Engineering IBMT, Germany
3:30 to 3:45 PM	Break	

Session-6: GENE THERAPY

Chair: Ullas Kolthur-Seetharam

India Time	Title	Speaker Name
3:45 to 4.15 PM	New insights into the use of gamma delta T cells to treat childhood cancers	H. Trent Spencer Emory University School of Medicine, Atlanta, USA
4:15 to 4:45 PM	Development of genome-modified generation ZZ (GenZZ) single-stranded AAV vectors with improved transgene expression	Arun Srivastava University of Florida, Florida, USA
4:45 to 5:15 PM	Preclinical development of gene therapy for Diamond-Blackfan anemia	Senthil Bhoopalan St. Jude Children's Research Hospital, Memphis, USA
5:15 to 6:00 PM	Poster presentation and Industry Exhibition	

Session-7: Challenges And Opportunities In Gene Therapy

Chair: RV Shaji

India Time	Title	Speaker Name
6:00 to 6:30 PM	Development of pathophysiologically relevant models of β -hemoglobinopathies for therapeutic studies	Sivaprakash Ramalingam CSIR–Institute Of Genomics And Integrative Biology (CSIR–IGIB), New Delhi, India
6:30 to 7:00 PM	CAR T-cell induced T-cell malignancies	Nirali Shah Center for Cancer Research, National Cancer Institute, Maryland, US
7:00 to 7:30 PM	Genome Editing of HSCs to Develop Stem Cell Based Therapies	Matthew Porteus Stanford School of Medicine, California, USA

KEY NOTE ADDRESS

Chair: Sanjay Singh

India Time	Title	Speaker Name
7:30 to 8:30 PM	Gene therapy for haemophilia in India – The beginning of a New Era	Alok Srivastava Centre for Stem Cell Research, a unit of inStem, Bengaluru and Department of Haematology, Christian Medical College, Vellore, India

End of Day-2

DAY-3: Saturday, 3rd August, 2024

Session-8: INDUSTRY UPDATES

India Time	Title	Speaker Name
12:20 to 12:40 PM	Autologous CAR-T Cell Therapy Manufacturing Solution	Pankaj Salvi Cytiva, Marlborough, US
12:40 to 01:00 PM	Thermo Fisher Scientific: Cell & Gene Therapy capabilities overview	Uchenna Waturuocha Thermo Fisher Scientific, Mumbai, India
01:00 to 02:00 PM	Lunch Break	

Session-9: NON-VIRAL VECTOR BASED GENE THERAPY

Chair: N. Madhusudhana Rao

India Time	Title	Speaker Name
2:00 to 2:30 PM	Enhancing Natural killer cells proliferation and cytotoxicity using Imidazole-based lipid nanoparticles encapsulating interleukin-2 mRNA	Chantal Pichon INSERM and University of Orléans, Orléans, France: Institut Universitaire de France, Paris
2:30 to 3:00 PM	MSC Extracellular Vesicles: Navigating Regenerative Medicine's Therapeutic Landscape	Sujata Mohanty All India Institute of Medical Sciences New Delhi, India
3:00 to 3:30 PM	Sugar-alcohol modified poly(beta-amino) ester nanoparticles for gene delivery to the brain	Munia Ganguli Institute of Genomics and Integrative Biology (CSIR-IGIB), New Delhi, India
3:30 to 3:45 PM	Break	
3:45 to 4:30 PM	Poster presentation and Industry Exhibition	

Session-10: GENE EDITING

Chair: Sanjeev Galande

India Time	Title	Speaker Name
4:30 to 5:00 PM	Genome editing strategies for treating sickle cell disease	Thiyagaraj Mayuranathan Centre for Stem Cell Research (a unit of iStem, Bengaluru), Vellore, India
5:00 to 5:30 PM	Epitope Editing for an Immunotherapy "Stealth" Hematopoiesis	Pietro Genovese Harvard Medical School, Boston, USA
5:30 to 6:00 PM	Next-generation gene editing of human hematopoietic stem cells: from research to clinical translation	Samuele Ferrari San Raffaele Telethon Institute for Gene Therapy (SR-Tiget), Milan, Italy

Session-11: IMMUNE CELL THERAPY

Chair: Amit Awasthi

India Time	Title	Speaker Name
6:00 to 6:30 PM	CART Therapy in Pediatric Acute Lymphoblastic Leukemia	Sunil Bhat Mazumdar Shaw Medical Centre, Narayana Health City, Bangalore, India
6:30 to 7:00 PM	Development of CAR-T cell products with non-viral vector system	Yoshiyuki Takahashi Nagoya University Graduate School of Medicine, Nagoya, Japan
7:00 to 7:30 PM	Genetic manipulation of NK cells for enhanced immunotherapy	Rizwan Romee Harvard Medical School, Dana Farber Cancer Institute, Boston, USA

CONCLUDING REMARK

End of Day-3