11th International Cell and Gene Therapy Conference (CGTCON 2026)

Friday, 09 & Saturday, 10 October 2026

Venue: New Examination Building, Christian Medical College Vellore,
Bagayam Campus, Vellore 632002, Tamil Nadu, India

Organised by: Centre for Stem Cell Research (a Unit of BRIC-inStem, Bengaluru),
Christian Medical College Vellore, Bagayam Campus, Vellore 632002, Tamil Nadu, India.

Scientific Programme

Day 1 — Friday, October 9, 2026

07:00 to 08:00 AM **REGISTRATION & BREAKFAST**

08:00 to 08:15 AM **WELCOME ADDRESS**
HALL A

• PARALLEL SESSIONS

Hall A

SESSION 1A: HEMATOLOGICAL DISORDERS 1
Chairs: Aby Abraham & Poonkuzhali Balasubramanian

08:30 to 08:55 AM
Trends and outcomes of stem cell transplantation
Biju George
Christian Medical College Vellore, Vellore, India

08:55 to 09:20 AM
Navigating the equitability barrier of gene editing therapies in India
Debojyoti Chakraborty
CSIR-Institute of Genomics & Integrative Biology (IGIB), New Delhi, India

09:20 to 09:45 AM
Development of curative therapies for inherited anemias
Senthil Bhoopalan
St. Jude Children's Research Hospital, Memphis, TN, USA

09:45 to 10:10 AM
Recent Advances in CAR T-Cell Therapy for Hematologic Malignancies
Vikram Mathews
Christian Medical College Vellore, Vellore, India

Hall B

SESSION 1B: OCULAR DISORDERS
Chairs: Sanita Mary George Korah & Anupriya Arthur

08:30 to 08:55 AM
Understanding Inherited Eye Diseases (IEDs) and Developing Newer Therapeutics
Indumathi Mariappan
BRIC-Institute for Stem Cell Science and Regenerative Medicine (inStem), Bengaluru, India

08:55 to 09:20 AM
Future Directions in Corneal Regeneration: Convergence of Stem Cell Biology and Biomaterials
Vivek Singh
L V Prasad Eye Institute, Hyderabad, India.

09:20 to 09:45 AM
Gene Therapy in Retinal Dystrophies: Real-World Effectiveness and Challenges
Deepika Parameswarappa
Narayana Nethralaya, Bengaluru, India

09:45 to 10:10 AM
A synthetic splice-enhancer intron platform for efficient hybrid dual-AAV gene therapy: application in Stargardt disease
Arkasubhra Ghosh
Narayana Nethralaya Foundation, Bengaluru, India

10:10 to 10:30 AM **TEA BREAK**

• PARALLEL SESSIONS

Hall A

SESSION 2A: CELL THERAPY FOR DIABETES
Chairs: Felix Jebasingh & Supraja Srivatsava

10:35 to 11:00 AM
Beyond Insulin: Regenerating Beta Cells via Stem Cell Therapy versus Growth Factors
Rohit Kulkarni
Harvard Medical School, Boston, MA, USA

11:00 to 11:25 AM

Hall B

SESSION 2B: VIRAL & NON-VIRAL NUCLEIC ACID DELIVERY TECHNOLOGIES
Chairs: Suresh Rayala & Immanuel Dhanasingh

10:35 to 11:00 AM
Metadherin-mRNA-LNPs for Triple-Negative Breast Cancer Therapy
Srinivasa Reddy Bonam
CSIR-Indian Institute of Chemical Technology (IICT),

Genetic Forms of Lipodystrophy and Emerging Gene Therapy Strategies
Aaron Chapla
Christian Medical College Vellore, Vellore, India

11:25 to 11:50 AM
Total Pancreatectomy with Islet Autotransplantation for Chronic Pancreatitis: An International Experience
Gopalakrishnan Loganathan
Otsuka American Pharmaceuticals, Minnesota, USA

11:50 to 12:15 PM
Understanding targets at single-islet-cells for anti-diabetic treatment
Nikhil Gandasi
Indian Institute of Science (IISc), Bengaluru, India

Hyderabad, India

11:00 to 11:25 AM
Engineering Controlled Destabilization: The "Magic Methyl" Effect in RNAi Enhancement
Kiran R. Gore
Indian Institute of Technology (IIT) Kharagpur, Kharagpur, India

11:25 to 11:50 AM
Biomaterial-based acellular cancer immunotherapy
Prakriti Tayalia
Indian Institute of Technology (IIT) Bombay, Mumbai, India

11:50 to 12:15 PM
Extracellular vesicles in cancer therapy
Suresh Mathivanan
La Trobe Institute for Molecular Science, Victoria, Australia

12:15 to 01:15 PM LUNCH & INDUSTRY EXHIBITION

• PARALLEL SESSIONS

Hall A

SESSION 3A: CARDIOVASCULAR DISORDERS
Chairs: **Sirish Chandra Srinath & Gayathri Bhuvaneswaran Kartha**

01:30 to 01:55 PM
Leveraging Human iPSC's to Advance Hypertrophic Cardiomyopathy Treatment
John Carter Ralphe
University of Wisconsin, Madison, WI, USA

01:55 to 02:20 PM
Organization principles governing the assembly and function of contractile units across scales
Minhaj Sirajuddin
BRIC-Institute for Stem Cell Science and Regenerative Medicine (inStem), Bengaluru, India

02:20 to 02:45 PM
PRKCA variants cause hypertrophic cardiomyopathy in multi-ancestry patients, stem cell-derived cardiomyocytes, and pre-clinical models through ERK1/2
Dhandapani Perundurai
BRIC-Institute for Stem Cell Science and Regenerative Medicine (inStem), Bengaluru, India

02:45 to 03:10 PM
From Prenatal Biomarker to Therapeutic Target: Circular RNA-X in Hypoplastic Left Heart Syndrome
Anupam Mittal
Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India

Hall B

SESSION 3B: METABOLIC DISORDERS
Chairs: **Asha H.S. & Praveen Paul**

01:30 to 01:55 PM
Molecular and Functional characterization of patients with Mucopolysaccharidosis
Ashwin Dalal
BRIC-Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad, India

01:55 to 02:20 PM
Delving for precision care in Gaucher disease
Sumita Danda
Christian Medical College Vellore, Vellore, India

02:20 to 02:45 PM
Molecular timing and scaling of hepatic gluconeogenic output during fed-fast transitions
Ullas Kolthur Seetharaman
BRIC-Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad, India

02:45 to 03:10 PM
Gene therapy for liver inherited metabolic diseases
Julien Baruteau
University College London (UCL), Great Ormond Street Institute of Child Health, London, UK

• PARALLEL SESSIONS

Hall A

SESSION 4A: NEUROLOGICAL DISORDERS
Chairs: **Maya Thomas & George Mani**

03:10 to 03:35 PM
Beyond Conventional Antiseizure Medications: Small Molecules and Gene Therapies in Childhood Epilepsies
Sangeetha Yoganathan
Christian Medical College Vellore, Vellore, India

03:35 to 04:00 PM

Hall B

SESSION 4B: TECHNOLOGY ADVANCES
Chairs: **Aruna Rakha Arora & Jyothi Prasanna**

03:10 to 03:35 PM
Decoding Cell-State Transitions Through Enhancer and Chromatin Dynamics
Srinivas Animireddy
BRIC-Institute for Stem Cell Science and Regenerative Medicine (inStem), Bengaluru, India

03:35 to 04:00 PM

Next-generation gene therapy for neuromuscular disorders - Opportunities for global impact with indigenous solution.
Jayandharan G. Rao
Indian Institute of Technology (IIT) Kanpur, Kanpur, India

04:00 to 04:25 PM

Gene therapy for Developmental Epileptic Encephalopathy - from Bench to Bedside
Srinivasarao Repudi
BRIC-Institute for Stem Cell Science and Regenerative Medicine (inStem), Bengaluru, India

04:25 to 04:50 PM

Niemann–Pick Disease: From Molecular Diagnosis to Therapeutic Frontiers
Neerja Gupta
All India Institute of Medical Sciences (AIIMS), New Delhi, India

RBM3 mRNA delivery with functionalized lipid nanoparticles for improving muscle function
Marepally Srujan Kumar
Centre for Stem Cell Research, Christian Medical College Vellore, Vellore, India

04:00 to 04:25 PM

Stem Cell Transplantation in Ischemic Heart: A Cure in Waiting - or a Battle for Survival
Sanjay Kumar
All India Institute of Medical Sciences (AIIMS), Bathinda, India

04:25 to 04:50 PM

Translational potential of Human Liver organoids for chronic liver diseases: Deliberations From bench to bedside approaches
Ruchi Tandon
Translational Health Science and Technology Institute, Faridabad, Haryana, India

04:50 to 05:50 PM **POSTER PRESENTATIONS/TEA**

• KEYNOTE ADDRESS - SCUDDER AUDITORIUM

Chairs: Sangeetha Yoganathan & Senthil Bhoopalan

06:00 to 06:45 PM **Gene Therapy for Leukodystrophies**
Christine Noel Duncan
Harvard Medical School, Boston, MA, USA

06:45 to 07:30 PM **INAUGURATION AT SCUDDER AUDITORIUM**
Chief Guest: P Balaram
Padma Bhushan, Distinguished Scientist, Former Director of Indian Institute of Science (IISc), Bangalore

07:30 PM Onwards **DINNER & CULTURAL PROGRAMME AT EDEN GARDEN**

Day 2 — Saturday, October 10, 2026

07:00 to 08:15 AM **REGISTRATION & BREAKFAST**

• PARALLEL SESSIONS

Hall A

SESSION 5A: HEMATOLOGICAL DISORDERS 2

Chairs: Eunice Sindhuvi & Sharon Anbumalar Lionel Ninan

08:30 to 08:55 AM

Gene therapy for Hemophilia A

Aby Abraham

Christian Medical College Vellore, Vellore, India

08:55 to 09:20 AM

Targeted base editing enables safe and efficient knockout of ELANE for the treatment of ELANE-associated severe congenital neutropenia

Mohankumar Murugesan

Centre for Stem Cell Research, Christian Medical College Vellore, Vellore, India

09:20 to 09:45 AM

Precision conditioning for precision medicine: Targeted, Non-Genotoxic hematopoietic stem cell Conditioning to Enable Gene Therapy with Gene-Edited Stem Cells

Saravanabhavan Thangavel

Centre for Stem Cell Research, Christian Medical College Vellore, Vellore, India

09:45 to 10:10 AM

A pharmacological modulator of Glucocerebrosidase reverses pathogenic phenotypes in Gaucher's disease and GBA1-Parkinson's disease Models

Sivaprakash K Ramalingam

Indian Institute of Technology (IIT) Kanpur, Kanpur, India

Hall B

SESSION 5B: ORGANOIDS & DISEASE MODELLING

Chairs: Sitara Swarna Rao & Ruchi Tandon

08:30 to 08:55 AM

Human Intestinal Organoids as Models of Enteric Infections and Vaccines

Sasirekha Ramani

Baylor College of Medicine, Houston, TX, USA

08:55 to 09:20 AM

Chromatinopathies, Ciliopathies, and Brain Malformations: From Genetic Mechanisms to Disease Models

Bhavana Muralidharan

BRIC-Institute for Stem Cell Science and Regenerative Medicine (inStem), Bengaluru, India

09:20 to 09:45 AM

Disease modelling using iPSC

Shaji RV

Centre for Stem Cell Research, Christian Medical College Vellore, Vellore, India

09:45 to 10:10 AM

Organs in a Dish: Intestinal and Liver Organoids for Human Disease Modelling

Vijayalakshmi B

Centre for Stem Cell Research, Christian Medical College Vellore, Vellore, India

10:10 to 10:30 AM **TEA BREAK**

• PARALLEL SESSIONS

Hall A

SESSION 6A: MANUFACTURING AND REGULATORY ASPECTS IN CELL & GENE THERAPY

Chairs: Arkasubhra Ghosh & Gaurav Narula

10:35 to 11:00 AM

In vitro prediction of CAR-T Cell Function, Persistence, and Therapeutic Success

Priyadarshini Chatterjee

MicroCRISPR Pvt. Ltd, New Delhi, India

11:00 to 11:25 AM

Towards Accessible, Equitable, and Affordable Cell Therapy: The Promise of Allogeneic ?? CAR-T Cells

Lakshmikanth S Gandikota

Immuneel Therapeutics Private Limited, Bengaluru, India

11:25 to 11:50 AM

Regulatory Aspects of Cell and Gene Therapy: Navigating the Indian Regulatory Pathway

Akhil Kumar

Journey to West, Singapore

11:50 to 12:15 PM

Allogeneic Off-the-Shelf Natural Killer (NK) Cells for Autoimmune Disorders and Cancers

Hall B

SESSION 6B: STEM CELL & GENE THERAPY - INDUSTRY UPDATES

Chairs: Sharat Damodar & Ruchika Goel

10:35 to 11:00 AM

Navigating Our Way to Developing Next Generation CAR T Cell Therapy – The XenCART Model

Gaurav Kharya

Cellogen Therapeutics Pvt. Ltd., Noida, India

11:00 to 11:25 AM

The Evolving Landscape of Mesenchymal Stromal Cell Therapy and Regulatory Considerations

Pawan Kumar Gupta

Stempeutics, Research Private Ltd., Bengaluru, India

11:25 to 11:50 AM

Real world evidence (RWE) of efficacy and safety of Talicel

Rahul Purwar

Immunoadoptive Cell Therapy Private Limited (ImmunoACT) & IIT Bombay, Mumbai, India

11:50 to 12:15 PM

A Phase 1/2a Clinical Trial of Allogeneic Retinal Pigmented Epithelium (RPE) cells in Geographic

Renjitha Gopurappilly
NKure Therapeutics Pvt Ltd, (CCAMP), Bengaluru, India

Atrophy (GA): Interim Results of Safety & Efficacy
Jogin Desai
Eyestem Research Private Ltd., (CCAMP), Bengaluru, India

12:15 to 01:15 PM **LUNCH & INDUSTRY EXHIBITION**

• **PARALLEL SESSIONS**

Hall A

SESSION 7A: CAR T & CAR NK CELL THERAPY
Chairs: Mammen Chandy & Gaurav Kharya

01:30 to 01:55 PM
The Cell-Gene Therapy Road Beyond B-Cell Malignancies Needs Smarter Strategies and not just Better CARs
Gaurav Narula
Tata Memorial Centre, Mumbai, India

01:55 to 02:20 PM
Post CART cell therapy - complications
Sharat Damodar
Mazumdar Shaw Medical Center, Bengaluru, India

02:20 to 02:45 PM
From Donor to Dose: Translating Allogeneic CAR-NK Cell Therapy Towards Clinical Reality
Dinesh Kundu
East Ocyon Bio, Gurugram, India

02:45 to 03:10 PM
Generation and Preclinical Evaluation of TRAC/B2M Cytosine Base-Edited Allogeneic CD19 CAR-T Cells for B-ALL
Thiyagaraj Mayuranathan
Centre for Stem Cell Research, Christian Medical College Vellore, Vellore, India

Hall B

SESSION 7B: DERMATOLOGICAL DISORDERS
Chairs: Dharshini Sathishkumar & Diya Binoy Joseph

01:30 to 01:55 PM
MicroRNA in Epidermolysis Bullosa—Pathophysiologic and translational Significance
Vinod Kumar
Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, India

01:55 to 02:20 PM
Cell-based therapies from genetic to inflammatory skin disease
Su Lwin
King's College London (KCL), London, UK

02:20 to 02:45 PM
Engineering Human Skin: Applications of 3D Skin Models in Dermatology Research
Archana Singh
CSIR-Institute of Genomics & Integrative Biology (IGIB), New Delhi, India

02:45 to 03:10 PM
Accessible Diagnostics & Affordable Therapies for Incurable Genetic Skin Diseases
Vamsi K. Yenamandra
Sri Madhusudhan Sai Institute of Medical Sciences & Research (SMSIMSR), Chikkaballapur, India

• **PARALLEL SESSIONS**

Hall A

SESSION 8A: INDUSTRY TALKS
Chairs: Barun Mahata & Alan Punnoose

03:10 to 03:30 PM
Addressing ATMP manufacturing Risks through Closed Vial Technologies
Shrikant Rao
Pharmalab India Pvt. Ltd. (Representing Aseptic Technologies, Belgium)

03:30 to 03:50 PM
Empowering Cell and Gene Therapy: Overcoming Bottlenecks with Innovative Agilent Cell Analysis Solutions
Saket Siddharth
Agilent Technologies, Hyderabad, India

03:50 to 04:10 PM
Transforming Translational Research with Cell & Gene Therapy and Spatial Biology Solutions
Asim Iqbal Shaikh
Miltenyi Biotec, India.

04:10 to 04:30 PM
From Process Development to GMP Execution - India's First Versatile Plasmid DNA Manufacturing

Hall B

SESSION 8B: STUDENT PRESENTATIONS
Chairs: Joe Varghese & Sathish Kumar L

03:10 to 03:22 PM
Generation of Human Corneal Epithelial Cells from induced Pluripotent Stem Cells in Serum-Free and Feeder-Free Conditions using a Chemically Defined Medium
Vikram Krishna
L V Prasad Eye Institute, India, India

03:22 to 03:34 PM
Targeting IFITM2/3 to Enhance Lentiviral Transduction Efficiency in CD34+ Hematopoietic Stem and Progenitor Cells
Shreejha Chandrasekar
Shankara Cancer Hospital and Research Institute, India

03:34 to 03:46 PM
Characterization and In Vitro Evaluation of the Regenerative Potential of Pooled Human Bone Marrow-Derived Mesenchymal Stromal Cell-Conditioned Medium for Diabetic Foot Ulcers
Neema V Shetty
Manipal Academy of Higher Education (MAHE), India

Platform
Bhushan Kantode & Kavya Kannan
Kodo Lifescience Pvt. Ltd, Vapi, India

04:30 to 04:50 PM
A Scalable Framework for CRISPR Off-Target Assessment Using Orthogonal Nomination and Targeted Deep Sequencing
Edward Wong Serng Yuen
Integrated DNA Technologies (IDT), Singapore

04:50 to 05:10 PM
The Cell Therapy Reset: Redefining the Path Forward Through Modular Manufacturing and In Vivo Immune Engineering
Vaibhav Daund
Cytiva Ltd., India

03:46 to 03:58 PM
Developing Novel Immunotherapy Strategies for Treating Relapsed, CD20/CD19-Negative Diffuse Large B-Cell Lymphoma (DLBCL)
Nandini Sharma
Advanced Center for Treatment, Research, and Education in Cancer (ACTREC), India

03:58 to 04:10 PM
Characterization of Paracrine and Neuroprotective Response of RPE Cells Under Oxidative and Cellular Stress Recapitulating AMD-Like Disease Conditions
Nikshitha Ramanath
Manipal Academy of Higher Education (MAHE), India

04:10 to 04:22 PM
Cell-Penetrating Peptide-Based Gene Delivery for Potential Therapy of Autosomal Recessive Congenital Ichthyosis.
Idrees Qadir Gojree
CSIR Institute of Genomics and Integrative Biology, India

04:22 to 04:34 PM
One-Time CRISPR Adenine Base Editing Intervention in SMA: From SMN2 Splice Correction to Motor Neuron Rescue
Sheena P Kochumon
Amrita Institute of Medical Sciences and Research Centre, India

04:34 to 04:46 PM
Metabolically Optimized, CD19-Targeted Allogeneic CAR-T Cells Overcome Antigen Escape and Show Persistent Killing in B-Cell Malignancies
Riya Agarwal
MicroCrispr Pvt. Ltd., India

04:46 to 04:58 PM
In Vitro Proof-of-Concept Evaluation of GD2-Specific CAR-Engineered Allogeneic ?? T Cells Against Solid Tumors
Hascitha J
Immuneel therapeutics Pvt. Ltd., India

04:58 to 05:10 PM
Investigating ABI1 as a new cardiomyopathy gene using multi-ancestry patient-exomes, base-edited iPSCs and Knock-in mice models
Saptashwa Chakrabarti
BRIC-Institute for Stem Cell Science and Regenerative Medicine (inStem), India.

05:10 to 05:50 PM	**POSTER PRESENTATION/TEA**
• KEYNOTE ADDRESS - SCUDDER AUDITORIUM	
Chairs: Mammen Chandy & John Carter Ralphe	
06:00 to 06:45 PM	**From Innovation to Translation to Patients: The Future of Genetically Engineered T Cell Therapies** **Bruce Levine** University of Pennsylvania, Philadelphia, PA, USA
06:45 to 07:30 PM	**VALEDICTION, PRIZE DISTRIBUTION AND CONCLUSION AT SCUDDER AUDITORIUM**
07:30 PM Onwards	**DINNER AT CENTRE FOR STEM CELL RESEARCH**