



LV Prasad Eye Institute



DEPARTMENT OF BIOTECHNOLOGY
Ministry of Science & Technology
Government of India



THE FUTURE IS HERE

GENE THERAPY, CELL THERAPY, & BIOMATERIALS IN OPHTHALMOLOGY

The future of ophthalmology is ushering in an era of ground-breaking advancements through the integration of gene therapy, stem cells, and biomaterials. This convergence of cutting-edge technologies holds immense promise for revolutionizing the field of vision care.

- **Scientific Voyage**
- **Regulatory Road Map**
- **In Vitro & Animal Models**
- **Clinical Experience**



18-20
January 2024



L V Prasad Eye Institute,
Hyderabad, India

Register now

Program Schedule

Registration Extended upto: **10-01-2024**

Poster Submission Deadline: **10-01-2024**

L V Prasad Eye Institute
Brien Holden Eye Research Centre



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Organizer



Dr Sayan Basu
LVPEI, Hyderabad



Dr Vivek Singh
LVPEI, Hyderabad



Dr Arkasubhra Ghosh
Narayana Nethralaya, Bangalore

International Speakers / Experts / Chairs



Dr Kapil Bharti
NEI, NIH, USA



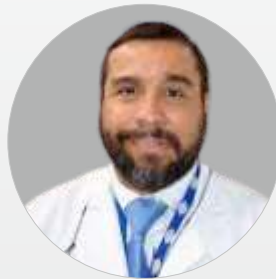
Dr Matthew Campbell
Smurfit Institute of Genetics, Dublin, Ireland



Dr Heli Skottman
Tampere University, Finland



Dr Rajiv R Mohan
University of Missouri, USA



Dr Yonathan Garfias
Instituto de Oftalmologia Conde de Valenciana
Mexico



Dr Che Connon
Newcastle University, UK



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National Speakers / Experts / Panellist



Dr Geeta Jotwani
ICMR, Delhi



Dr Debojyoti Chakraborty
IGIB, Delhi



Dr Falguni Pati
IIT, Hyderabad



Dr Kiran Kumar
CCMB, Hyderabad



Dr Nirmal Jayabalan
BITS-Pilani, Hyderabad



Dr Jogin Desai
Eyestem, Bangalore



Dr Pooja Khamar
Narayana Nethralaya, Bangalore



Dr Sharath Babu
Narayana Nethralaya, Bangalore



Dr Priya Panikker
Narayana Nethralaya, Bangalore



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National Speakers / Experts / Panellist



Dr Chitra Gopinath
Narayana Nethralaya, Bangalore



Dr Pravin Krishna
LVPEI, Hyderabad



Dr Anshuman Verma
LVPEI, Hyderabad



Dr Sachin Shukla
LVPEI, Hyderabad



Dr Charanya Ramachandran
LVPEI, Hyderabad



Dr K Arunasri
LVPEI, Hyderabad



Dr Swati Singh
LVPEI, Hyderabad



Dr Swapna Shanbhag
LVPEI, Hyderabad



Dr Vineet Joshi
LVPEI, Hyderabad



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National Speakers / Experts / Panellist



Dr Pragnya Rao
LVPEI, Hyderabad



Dr Sanhita Roy
LVPEI, Hyderabad



Smt Mala Srivastava
Nextvell Consultation, Bangalore



Dr PV Mohanan
Sree Chitra Tirunal Institute of
Medical Sciences and technology,
Thiruvananthapuram



Dr Geeta Vemuganti
University of Hyderabad, Hyderabad



Dr Viswanath Chinthapenta
IIT, Hyderabad


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PROGRAM SCHEDULE

Day 1: Thursday, 18th January 2024

Timings	Event & Session details	Speakers/Experts/Panellists
02:00 PM – 02:30 PM Venue: Patodia Auditorium, LVPEI	Registration of Participants and Delegates	
02:30 PM – 03:00 PM Venue: Patodia Auditorium, LVPEI	Inauguration and Welcome address (Sayan Basu)	
03:00 PM - 06:15 PM	<p>NAVIGATING INDIA'S CLINICAL TRAIL REGULATIONS: IMPACT ON GLOBAL COMPLIANCE</p> <p>Session Moderators: Arkasubhra Ghosh & Vivek Singh</p> <p>Co-ordinator: Vijay Singh & Chetan</p>	<p>Sayan Basu (LVPEI) Mala Srivastava (Nextvel Consulting LLP) Che Connon (NCU, UK) Yonathan Garfias (CDV, Mexico) Geeta Jotwani (ICMR) CDSCO member (TBD) NNF team (Sharath, Poorna, Pooja)</p>
03:00 PM - 03:10 PM	Conference Kick off : Landscape of CGT research in India (Arkasubhra Ghosh)	
03:10 PM - 03:35 PM	<p>SPEAKER : Geeta Jotwani</p> <p>TITLE : Evolution of the regulatory and scientific pathway for gene therapy in India</p>	
03:35 PM - 04:00 PM	<p>SPEAKER : Priya Panikker/ Vivek Singh</p> <p>TITLE : Scaling up regenmed from lab scale to clinical scale – IND enabling studies</p>	
04:00 PM - 04:25 PM	<p>SPEAKER : Sharath Babu</p> <p>TITLE : CMC and product safety considerations for clinical grade GT products</p>	
04:25 PM - 04:50 PM	<p>SPEAKER : Sayan Basu</p> <p>TITLE : Designing CGT clinical trials in Ophthalmology, patient considerations and outcome monitoring.</p>	
04:50 PM – 05:05 PM	<p>SPEAKER : Yonathan Garfias</p> <p>TITLE : Regulatory status in stem cell therapy, a mexican perspective</p>	
05:05 PM - 05:20 PM	<p>SPEAKER : Mala Srivastava</p> <p>TITLE : Experience with clinical trial; Roadmap and Troubleshooting</p>	
05:20 PM – 06:00 PM	Update on LVPEI Clinical Trial and GMP Facility (Vivek, Sayan & Chetan)	
06:00 PM - 06:30 PM	<p>BRAINSTORMING SESSION</p> <ul style="list-style-type: none"> • Application process pitfalls • Hand-holding process for IND filing • Common challenges – technology, ATMP process, trial readouts • Awareness and common confusions 	
<p>NETWORKING/POSTER SESSIONS/DINNER : 07:00 PM onwards ; VENUE: PARK HYATT - Salon II & III</p>		

Day 2: Friday, 19th January 2024 (SESSION-1)

Timings & Venue	Event & Session details	Speakers/Experts/Panellists
09:00 AM - 12:30 PM	<p>ADVANCEMENTS AND PROSPECTS IN OCULAR GENE THERAPY FOR VISION DISORDERS</p> <p>Session Moderators: Arkasubhra Ghosh & Kapil Bharti</p> <p>Co-ordinators: Mohd Salman & Sonali Mohapatra</p>	<p>Kapil Bharati (NEI,USA) Arkasubhra Ghosh (NN) Rajiv Mohan (Missouri,USA) Mathew Campbell (Dublin University) NN team (Pooja, Poorna, Chitra, Priya) Debojyoti Chakroborty (IGIB) Anshuman Verma(LVPEI)</p>
09:00 AM - 09:10 AM	Session Beginnings	
09:10 AM - 09:30 AM	<p>SPEAKER : Rajiv Mohan TITLE : Tissue-targeted topical gene therapy for corneal fibrosis treatment</p>	
09:30 AM - 09:50 AM	<p>SPEAKER : Mathew Campbell TITLE : Retinal Gene Therapy for human applications</p>	
09:50 AM - 10:10 AM	<p>SPEAKER : Pooja Khamar TITLE : Lysyl Oxidase gene therapy for Keratoconus</p>	
10:10 AM - 10:30 AM	<p>SPEAKER :Debojyoti Chakroborty TITLE : Gene editing technologies for ocular conditions</p>	
TEA BREAK (10:30 AM – 10:50 AM)		
10:50 AM - 11:10 AM	<p>SPEAKER : TBD TITLE : TBD</p>	
11:10 AM – 11:30 AM	<p>SPEAKER : Anshuman Verma TITLE : Translating genetic information into clinical and therapeutic perspective</p>	
11:30 AM – 11:50 AM	<p>SPEAKER : Chitra Gopinath TITLE : Gene Therapy for Stargardt disease</p>	
11:50 AM - 12:30 PM	<p>BRAINSTORMING SESSION</p> <ul style="list-style-type: none"> Key questions Leveraging technologies for rapid developments, reducing R&D cycles Developing adaptable technologies for disease modelling for rare conditions Technologies towards reducing dosage, immune response 	
BON APPÉTIT (12:30 PM - 01:30 PM)/ POSTER SESSIONS ; VENUE: ART GALLERY,LVPEI		

Day 2: Friday, 19th January 2024 (SESSION-2)

Timings & Venue	Event & Session details	Speakers/Experts/Panellists
01:30 PM - 05:30 PM	<p>CELL BASED THERAPY: REPAIR, REGAIN AND REGENERATION</p> <p>Session moderators: Sayan Basu & Heli Skottman</p> <p>Co-ordinators: Tejaswini Pingali & Suraj Kumar Rajak</p>	<p>Heli Skottman (TAU, Finland) Che Connon (NCU, UK) Kapil Bharti (NEI, USA) Kiran Kumar Bokara (CCMB) Arkasubhra Ghosh (NN) Vivek Singh (LVPEI) Sayan Basu (LVPEI) Swati Singh (LVPEI) Sachin Shukla (LVPEI) Yonathan Garfias (CDV, Mexico) Jogin Desai (Eystem)</p>
01:30 PM - 01:40 PM	Session Beginnings	
01:40 PM - 02:05 PM	SPEAKER : Heli Skottman TITLE : Development of pluripotent stem cell based therapies for limbal stem cell deficiency	
02:05 PM - 02:30 PM	SPEAKER : Che Connon TITLE : Role of mechano-transduction in corneal epithelial homeostasis	
02:30 PM - 02:55 PM	SPEAKER : Kapil Bharti TITLE : Development of a cell therapy for AMD	
TEA BREAK (02:55 PM - 03:15 PM) / POSTER SESSIONS		
03:15 PM - 03:40 PM	SPEAKER : Yonathan Garfias TITLE : Limbal Stem cells, from basics to clinics	
03:40 PM - 04:05 PM	SPEAKER : Sayan Basu TITLE : MSCs in Corneal Repair and Regeneration	
04:05 PM - 04:30 PM	SPEAKER : Jogin Desai TITLE : Update on RPE cell therapy in India	
04:30 PM - 04:55 PM	SPEAKER : Sachin Shukla TITLE : MSC derived extracellular vesicles in corneal repair & immunomodulation.	
04:55 PM - 05:20 PM	SPEAKER : Kiran Kumar Bokara TITLE : Animal models for ocular research	
05:20 PM - 05:30 PM	SPEAKER : Swati Singh TITLE : Lacrimal Gland Repair & Regeneration	
05:30 PM - 05:40 PM	SPEAKER : Geeta Vemuganti TITLE : Scope of Lacrimal Gland Regeneration	
05:40 PM - 06:00 PM	Selected e-posters of participants/PhD/PostDocs/Clinical Fellows	
06:00 PM - 06:30 PM	GROUP EXERCISE / FUTURE GRANT DISCUSSIONS <ul style="list-style-type: none"> Current status, Are we still there ? Limbal Stem cells vs Mesenchymal Stem Cells; from other sources. Best Dose/ Single or Multiple. Immunosuppressant, Is it needed? For how long? 	
GALA DINNER & CULTURAL PROGRAM : 07:15 PM onwards; VENUE: PARK HYATT - BALLROOM		

Day 3: Saturday, 20th January 2024

Timings & Venue	Event & Session details	Speakers/Experts/Panellists
09:00 AM - 12:30 PM	<p>EXPLORING BIOMATERIALS IN OCULAR DISEASE RESEARCH</p> <p>Session Moderators: Che Connon , Falguni Pati, Vineet Joshi</p> <p>Co-ordinators: Deeksha Prasad & Arun Kumar Raut</p>	<p>Heli Skottman (TAU, Finland) Che Connon (NCU, UK) Sayan Basu (LVPEI) Nirmal J (BITS Pilani, Hyd) Falguni Pati (IITH), Swati Singh (LVPEI) Charanya Ramachandran (LVPEI) Sanhita Roy (LVPEI)</p>
09:00 AM - 09:10 AM	Commencements / Session Beginnings	
09:10 AM - 09:35 AM	<p>SPEAKER : Heli Skottman TITLE : Development of functional bioink platform and 3D bioprinting to cure corneal blindness</p>	
09:35 AM - 10:00 AM	<p>SPEAKER : Che Connon TITLE : What can Tissue Engineering tell us about the biology of the cornea?</p>	
10:00 AM - 10:25 AM	<p>SPEAKER : Falguni Pati TITLE : 3D bioprinting of corneal stroma with a biometric hydrogel</p>	
10:25 AM - 10:50 AM	<p>SPEAKER : Charanya Ramachandran TITLE : Taking the silk route: Silk fibroin for the culture of corneal endothelium</p>	
TEA BREAK (10:50 AM - 11:10 AM) / POSTER SESSIONS		
11:10 AM - 11:25 AM	<p>SPEAKER : Vineet Joshi TITLE : Exploring new materials and techniques for corneal hydrogel</p>	
11:25 AM - 11:40 AM	<p>SPEAKER : Nirmal Jayabalan TITLE : Role of biomaterials in ocular drug delivery</p>	
11:40 AM - 12:00 PM	<p>SPEAKER : Pravin Krishna Vaddavalli TITLE : Xenia for Keratoconus</p>	
12:00 PM - 12:15 PM	<p>SPEAKER : P V Mohanan TITLE : Peptide embedded hydrogel to combat corneal infections</p>	
12:15 PM - 12:30 PM	<p>SPEAKER : Viswanath Chinthapenta TITLE : TBD</p>	
12:30 PM - 01:00 PM	<p>BRAINSTORMING SESSION</p> <ul style="list-style-type: none"> • Suturibility & Tensile strength. • Transperency vs Stiffness vs Cross linking. • Full thickness vs Stromal Length. 	
01:30 PM - 02:00 PM	<ul style="list-style-type: none"> • AWARD CEREMONY • VOTE OF THANKS 	
BON APPÉTIT : 02:00 PM onwards ; VENUE: ART GALLERY, LVPEI		