

Exploring New
Frontiers of Ocular
Research



PROGRAM SCHEDULE (Tentative)

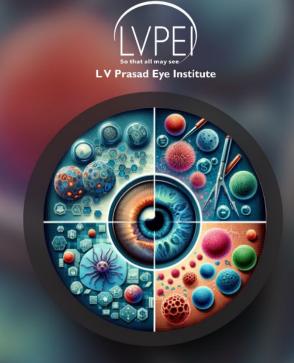
Day 1: Thursday, 9th January 2025

Timings & Venue	Event & Session details	Speakers/Experts/Panelists	
12:00 – 01:00 PM Venue: Art Gallery & Patodia Auditorium, LVPEI	Working Lunch & Registration		
01:00 PM – 01:30 PM Venue: Patodia Auditorium, LVPEI	Welcome Address		
01:30 PM - 06:00 PM	FUNDING, COLLABORATIONS & TRANSLATIONAL ROADMAP Session Moderators: Kapil Bharti, Sayan Basu & Vivek Singh Coordinators: Jilu Jaffet & Sonali Mohapatra	Sayan Basu (LVPEI) Kapil Bharti (NIH) Vivek Singh (LVPEI) Stefan Schrader (University of Oldenburg) Virendra Sangwan (Dr.Shroff's Charity Eye Hospital)	
01:30 PM - 01:45 PM	Kick off and Welcome: Sayan & Vivek		
01:45 PM - 02:10 PM	SPEAKER: Virendra Sangwan TITLE: Innovation and Collaboration		
02:10 PM - 02:35 PM	SPEAKER :Kapil Bharti TITLE : Indo-US Collaborations and Opportunities		
02:35 PM - 02:55 PM	SPEAKER :TBD (DBT) TITLE :Grant Opportunities in Wellcome Trust		
02:55 PM - 03:10 PM	SPEAKER :Geeta Vemuganti TITLE : Importance of global Collaborations in Research		
03:10 PM – 03:30 PM	SPEAKER :Sujata Mohanty TITLE : Regulation for Clinical Translation in India and government's perspective		
03:30 PM – 03:50 PM	SPEAKER :Ponnari Gottipati TITLE : Overview of Research Funding and Collaborative Initiatives at LVPEI		
PAUSE, 1	TAKE A BREATHER ! (03:50 PM – 04:20 PM)	/ Group photo session	
04:20 PM – 04:40 PM	SPEAKER :Stefan Schrader TITLE : Indo-European Grant and Collaboration Opportunities		
04:40 PM – 04:50 PM	SPEAKER :Sayan Basu TITLE : Stem Cell and Biomaterial research in LVPEI		
04:50 PM - 05:00 PM	SPEAKER :Rani Pallavi TITLE: Re-entry Fellowship		
05:00 PM – 05:20 PM	SPEAKER :ICMR Representative (TBD) TITLE: Funding Opportunities from ICMR		
05:20 PM- 05:50 PM	Advancing Gene Editing Therapies to resource limited settings by Debojyoti Chakraborty and Souvik Maiti		



Strings-e-Santur: A special musical session by Debojyoti Chakraborty

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Day 2: Friday, 10 th January 2025 (SESSION-1)

Timings & Venue	Event & Session details	Speakers/Experts/Panelists	
	CELL AND GENE BASED THERAPY: REPAIR, REGAIN AND REGENERATION	Stefan Schrader (University of Oldenburg) Sonja Mertsch (University of Oldenburg) Kapil Bharti (NEI,USA) Kiran Kumar Bokara (CCMB)	
09:00 AM – 1:00 PM	Session moderators:	Arkasubhra Ghosh (NN)	
	Arkasubhra Ghosh, Indumathi Mariappan	Debojyoti Chakraborty (IGIB)	
	Coordinators:	Geeta Vemuganti (UOH)	
	Tejaswini Pingali & Gufran Siddiqui	Vivek Singh (LVPEI)	
09:00 AM - 09:25 AM	SPEAKER :Sonja Mertsch TITLE : Development of Causative Insufficiency by Tissue Engineering and Ce	Treatment strategies for Lacrimal Gland Il Therapy	
09:25 AM - 09:50 AM	SPEAKER : Kapil Bharti TITLE : Patient-specific iPSC-deriv Modeling and Drug Testing	: Patient-specific iPSC-derived 3D Outer Blood Retinal Barrier For in vitro AMD	
09:50 AM - 10:15 AM	SPEAKER :Arkasubhra Ghosh TITLE :Mutation independent ap	:Arkasubhra Ghosh :Mutation independent approaches for ocular gene therapy	
10:15 AM - 10:40 AM	SPEAKER :Koushik Chakrabarty TITLE : Gene editing and cellular	:Koushik Chakrabarty : Gene editing and cellular programming for treating ocular dystrophies	
10:40 AM - 11:05 AM	SPEAKER :Stefan Schrader TITLE :Corneal repair and regene constructs	:Stefan Schrader :Corneal repair and regeneration-from keratoprosthesis to bioartificial	

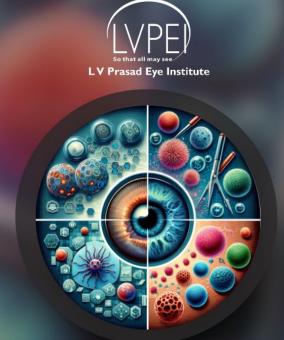


TIMEOUT! (11:05 AM - 11:30 AM) / Group photo session

11:30 AM - 11:40 AM	SPEAKER TITLE	:Raja Narayanan :iPSC-derived RPE for macular dystrophy; LVPEI Update
11:40 AM - 11:50 PM	SPEAKER TITLE	:Trilokyanath Panigrahi :Novel rationally designed AAV mutants enhanced transgene delivery
11:50 AM - 12:00 PM	SPEAKER TITLE : capsids	:Vrushali Deshpande Characterization of serotype and process dependent, novel PTMs on AAV
12:00 PM - 12:15 PM	SPEAKER TITLE :	:Rajashri Pal Developing the first pluripotent stem cell based therapy for d-AMD in India
12:15 PM – 12:35 PM	SPEAKER TITLE :	:Ruchi Sharma iPSCs and retinal therapies and way forward.



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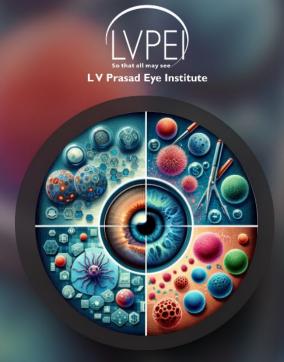
Day 2: Friday, 10 th January 2025 (SESSION-2)

Timings & Venue	Event & Session details Speakers/Experts/Panelists		
02:00 PM - 07:00 PM	MICROBIOME & BIOMARKERS: Tears/Ocular Surface Session Moderators: Merlies Gijs & Swati Singh Coordinators: Rohini Sonar & Anupama Hela	Swati Singh (LVPEI) Swaminathan Sethu Marlies Gijs (Maastricht University) Vivek Singh (LVPEI) Arunashri (LVPEI) Sachin Shukla (LVPEI) Charanya Ramachandran (LVPEI)	
02:00 PM - 02:15 PM	SPEAKER: Swati Singh TITLE: Lid Margin Microbiome		
02:15 PM - 02:30 PM	SPEAKER: Swaminathan Sethu TITLE: Non-invasive tear fluid based-ocular immune monitoring for preventive and personalized ophthalmic care		
02:30 PM - 02:45 PM	SPEAKER: Marlies Gijs TITLE: Tear fluid biomarkers: methodological practices and clinical applications		
	TIMEOUT! (02:45 PM - 03:00 PM) / Group photo session		
03:00 PM - 03:15 PM	SPEAKER: Vivek Singh TITLE: Application of Animal Models in Ocular Research-LVPEI update		
03:15 PM – 03:30 PM	PEAKER: Arunasri TLE: Microbiome of the Ocular Surface		
03:30 PM - 03:40 PM	SPEAKER: Anahita Kate TITLE: Ocular Allergy and Diagnostic	R : Anahita Kate : Ocular Allergy and Diagnostics	
03:40 PM - 03:50 PM	EAKER: Rupjyothi Talukdar LE: Gut Microbiome in Pancreatic Diabetes		
03:50 PM - 04:05 PM	SPEAKER: Jerome Ozkan TITLE: The Ocular Microbiome in Dr		
04:05 PM - 04:15 PM	SPEAKER: Sachin Shukla TITLE: EVs: The emerging biomarker	R: Sachin Shukla : EVs: The emerging biomarkers in ocular research	
04:15 PM - 04:30 PM		Venkata Vamsi Krishna Venuganti Microneedle patch for ocular drug delivery: beyond eye drops and intravitrea	
04:30 PM - 05:15 PM	SPRINT TALKS (E-Poster presentation, 2+1 n	nins)	



GALA DINNER: 06:20 PM onwards; VENUE: TBD

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Day 3: Saturday, 11 th January 2025 (SESSION - 1)

Timings & Venue	Event & Session details	Speakers/Experts/Panelists	
09:00 AM - 01:00 PM	EXPLORING BIOMATERIALS IN OCULAR DISEASE RESEARCH Session Moderators: Vineet Joshi and Birry Mandal Coordinators: Arun Kumar Raut Sahithi Macharla Parul Chaurasia	Nirmal Jayabalan (BITS Pilani, Hyderabad) Neetu Singh (IIT Delhi)	
09:00 AM - 09:25 AM	SPEAKER :Biman Mandal TITLE : 3D printed human organs	:Biman Mandal 3D printed human organs and Tissues: The way forward in healthcare	
09:25 AM - 09:50 AM	SPEAKER : Nirmal Jayabalan TITLE : Empowering Ocular Drugs	:Nirmal Jayabalan Empowering Ocular Drugs: A shift towards biomimetic strategies	
09:50 AM - 10:15 AM	SPEAKER :Neetu Singh TITLE : New Strategies for Monito	:Neetu Singh New Strategies for Monitoring Cancer Progression and Tumor Margins	
10:15 AM - 10:40 AM	SPEAKER :Anil Kumar P. R TITLE : Bioengineered tissue for re	:Anil Kumar P. R Bioengineered tissue for regenerative medicine and organoid models	
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REFRESHMENT BREAK (10:40 AM - 11:00 AM)

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11:00 AM – 11:25 AM	SPEAKER TITLE :	:Kaushik Chatterjee Tissue Bioengineering and 3D Bioprinting in clinical Applications
11:25 AM – 11: 45 AM – 1	SPEAKER TITLE :	:Aravind Kumar Rengan Biodegradable nanohybrid systems for theranostics
11:45 AM – 12:05 PM	SPEAKER TITLE: meaningful pui	:Gowri Balachandran From Organoids to organ-on-a-chip: Transforming biology in 3D for rsuits
12:05 PM – 12:25 PM	SPEAKER TITLE : Decellularized	:Falguni Pati 3D Bioprinting of Anisotropic and Adhesive Corneal Grafts using Corneal Matrix-based Multi-materials System
	SPEAKER TITLE :	:Vineet Joshi Corneal Bioprinting-Clinicians Perspective
12:45 PM - 01:00 PM	SPEAKER : TITLE :	Charanya Ramachandra TBD
01:00 PM – 01:15 PM		Brainstorming Session

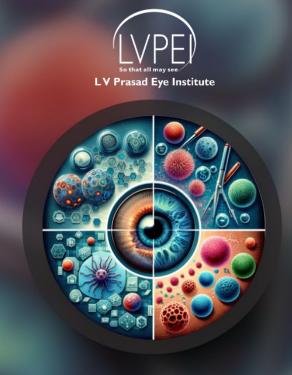
AWARD CEREMONY / VOTE OF THANKS / GROUP PHOTO SESSION



International Conference/ Workshop

THE FUTURE IS HERE II

Exploring New Frontiers of Ocular Research



Day 3: Saturday, 11 th January 2025 (SESSION - 2)

Timings & Venue	Event & Session details	Speakers/Experts/Panelists	
02:00 PM - 06:00 PM	HANDS-ON WORKSHOP: EXTRUSION BIOPRINTING		
02:00 PM - 03:15 PM	Overview of Extrusion Bioprinting Technology and its Applications • Introduction to 3D modeling, demonstrate how to design basic models	Vivek Singh (LVPEI) Swati Singh (LVPEI) Vijeta Jaiswal (CELLINK) Parul Chaurasia	
	Extrusion Bioprinter Setup and Calibration • Setup of the print head and material feed systems, and how to configure the software for precise printing		
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REFRESHMENT BREAK (03:15 PM - 03:45 PM)

Bioink Formulation and Flow Characteristics

 Demonstrate extrusion of bioinks to understand flow characteristics and adjust for optimal performance

03:45 PM - 06:00 PM

Printing Basic Geometric Structures

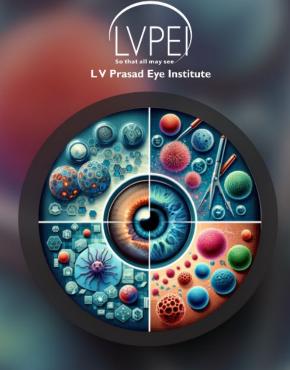
- Demonstrate the printing of basic geometric shapes
- Explain the importance of layer adhesion and initial post-processing techniques such as curing

Advanced Printing and Multi-Material Techniques

• Demonstrate printing of complex, multi-material models

Vijetha Jaiswal (CELLINK) Swati Singh (LVPEI) Arun Kumar Raut Sahithi Macharla

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Day4: Sunday, 12 th January 2025

Exploring the Future of Biomaterials and 3D Bioprinting: Hands-On Workshops (Registered members only)

Timings & Venue	Event & Session details	Speakers/Experts/Panelists	
09:30 AM - 01:00 PM	HANDS-ON WORKSHOP: DIGITAL LIGHT PROCES	SSING-BASED BIOPRINTING	
09:30 AM - 01:00 PM	Overview of Digital Light Processing-based Bioprinting Technology and its Applications	Vineet Joshi (LVPEI) Parul Chaurasia	
	Printer Setup and Calibration Printing High-Resolution Models • Discuss the impact of light exposure on layer curing and detail accuracy	Sahithi Macharla	
	Organoids, 3D and 2D Cultures	Vivek Singh (LVPEI)	
	Complex Printing Techniques and Multi-Material Applications	Vijeta Jaiswal (CELLINK) Arun Kumar Raut Sahithi Macharla	
	Reflection and Q&A • Review key learnings, collect feedback, and address any remaining questions in a Q&A session	Vivek Singh (LVPEI) Vineet Joshi (LVPEI)	
	CERTIFICATE AWARD CEREMONY		
01:00 PM - 01:30 PM	Working Lunch		

L V Prasad Eye Institute Brien Holden Eye Research Centre