

## FROM SAMPLE - SIGNAL: EXOSOME DIAGNOSTIC WORKFLOWS

Organised by Apollo Hospitals Educational and Research Foundation

05- 07 March, 2026

Venue - AIMS Medical College Auditorium,  
Apollo Hospitals, Jubilee Hills, Hyderabad

Workshop and Hands-On Training in Extracellular Vesicles EV-Based Liquid Biopsy: Isolation and Multi-Modal Characterisation (Nano-Flow Cytometry) with Digital PCR

### WORKSHOP HIGHLIGHTS

- **EV Biofoundry(Exo works) Launch** - Inauguration of the AHERF–CMBRC EV Biofoundry.
- **EV Clinical Consortia (EV-connect)** - Launch of EV consortia: Ophthalmology, Neurology, and Oncology.
- **EV Reference Standards EV-Qual (RUO)**: Exosome Reference Materials for Standardisation
- **Keynote Talks & Panels** - Clinical translation, standards/QC, and real-world deployment of EV diagnostics.
- **EV Ecosystem & Partnerships** - Strengthening the EV ecosystem across stakeholders.
- **Hands-On Training Workshop** - End-to-end workflow: isolation, characterisation (NTA + nano-flow), and digital PCR.

### KEY SPEAKERS



Dr. Mukesh Kumar Gupta  
Director  
ICMR-NARFBR



Dr. M.V.Sasidhar  
CSO  
AHERF, Hyderabad



Dr Pallu Redanna  
President  
FABA



Mr. Shree Ram  
Founder & MD,  
VedaRx Healthcare PL  
Maharashtra, India



Dr. Geeta Vemuganti  
Distinguished Pathologist  
and Scientist, LVPEI  
Hyderabad



Dr. Nooruddin Khan  
Professor  
University of Hyderabad



Dr. Amit Asthana  
Professor & HOD,  
Pharmaceutical Analysis  
NIPER, Hyderabad



Dr. Joveeta Joseph  
Head of Microbiology  
Services  
LVPEI, Hyderabad



Dr. Sayeeda Maricar  
Principal Scientist  
KIMS, Hyderabad, India



Dr. Sairam Atluri  
Founder, CEO  
Tulsi Therapeutics, Hyderabad



Dr. Vengal Rao  
Assistant Professor  
SRM University, AP



Dr. Rama Rao  
Professor  
GITAM University, AP



Dr. Amitava Ray  
CEO & Founder  
Exegen Genomics  
Research, Hyderabad



Dr. Nagarajan Kanipandian  
Assistant Professor  
Sri Sathya Sai University for  
Human Excellence, Karnataka



Dr. Kanagavel  
Deepankumar  
Associate Professor,  
VIT Vellore



Dr. Inderjeet Kaur  
Senior Scientist,  
L V PEI, Hyderabad

### PAYMENT DETAILS

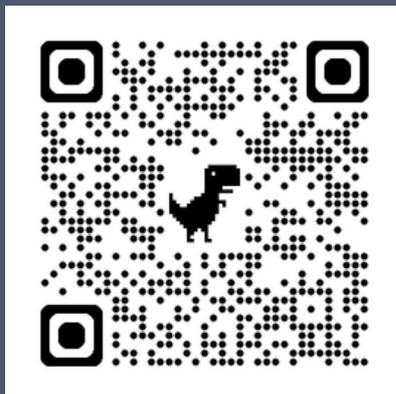
#### REGISTRATION FEE

EARLY BIRD (11th Feb-25th Feb)

STUDENTS: INR 1,500  
FACULTY: INR 3,000

LATE (25th Feb-03 March)

STUDENTS: INR 2,000  
FACULTY: INR 3,500



#### WHO SHOULD ATTEND

- Graduate & PhD Scholars
- Postdocs & Early Faculty
- Diagnostics Developers
- Industry R&D Teams
- QC / Standards Teams

Submit your Abstract for oral presentation.  
Cash prizes for best oral presentations!

#### SCAN THE QR CODE FOR REGISTRATION



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### PAYMENT LINK

For enquiries:  
Reach out at [info@aherf.net](mailto:info@aherf.net) or  
+91-7904220464

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# Day 1 – March 5, 2026

## Theme: Inauguration + Launches + Scientific Talks + Interactive Blocks

Time	Session	Speaker/Lead
08:30–09:00	Registration	Secretariat
09:00–09:05	Welcome + workshop overview	Dr. Praveena (Urvogelbio Pvt Ltd)
09:05–09:15	AHERF Ecosystem address	Prof. N.K. Ganguly, Principal advisor; Research, AHERF
09:15–09:25	Chief Guest address	TBC
09:25–09:35	Special address (National research ecosystem)	TBC
09:35–09:45	Ecosystem address	Dr Pallu Reddana, Director, FABA
09:45–10:15	Launch keynote (30 min): Inauguration of EV Biofoundry (EV works) + Opthamology, Oncology & Neurology Consortia (EV connect); EVqual (EV reference standards)	Dr. M. V. Sasidhar, CSO, AHERF
10:15–10:25	Launch ceremony: EV Biofoundry + Oncology EV Consortium + Neurology EV Consortium (unveiling + leads announcement)	AHERF leadership + Guests
10:25–10:40	Teabreak	
10:40–12:40	Morning Scientific Session (Chair: TBC)	Session Chair: Dr. Geeta Vemuganti, Distinguished Pathologist and Scientist, LVPEI
10:40–11:00	Engineered Outer Membrane Vesicles (OMVs) as an Oral nano-vaccine delivery platform against Poultry Pathogens	Dr. Nooruddin Khan, Professor, University of Hyderabad
11:00–11:20	Advanced EV characterisation with omics platforms.	Dr. Srinivas , GeneInsights
11:20–11:40	U18666A-Induced Cholesterol Accumulation Decreases Tumor-Derived Exosomes Load and Modulates Malignant Transformation	Dr. Sayeeda Maricar, Principal Scientist, KIMS, Hyderabad
11:40–12:00	Milk derived extracellular vesicles: Isolation and therapeutic potential	Dr. Vengal Rao, Assistant Professor, SRM University,AP
12:20–12:40	Healing the Scar- Reversing Liver Failure	Dr. Sairam Atluri, CEO, Tulsi Therapeutics
12:40–13:20	The EV Village: Aligning Stakeholders from Discovery to Delivery	Moderator: Dr M. V. Sasidhar + panelists: Dr Sairam Atluri,CEO Tulasi Therapeutics, Mr Shriram, CEO VEdarx, Dr Joveeta Joseph,Associate Professor, LVPIE . Dr Rajesh Bendre, HOD,Apollo Diagonitics

# Workshop Schedule- Day 1- March 5, 2026

**Theme: Inauguration + Launches + Scientific Talks + Interactive Blocks**

Time	Session	Speaker/Lead
13:20–14:00	Lunch	
14:00–15:40	Afternoon Diagnostics Session	Session Chair: Dr Sayeeda Maricar, KIMS, Hyderabad
14:00–14:20	Integration of miRNA-loaded exosomes with Protein-based patch for targeted diabetic wound healings	Dr. Kanagavel Deepankumar, Associate Professor, VIT Vellore
14:20–14:40	Innovations in glioma diagnosis using exosome platform	Dr. Amitava Ray, CEO & Founder Exsegen Genomics Research, Hyderabad
14:40–15:00	Understanding the Potential Involvement Of MiRNA Regulated Genetic Pathways in the Extracellular Vesicles of Uveitis Patients	Dr. Indrajeet Kaur, Senior Scientist, LVPEI Hyderabad
15:00–15:20	Nano-scale flow cytometry for EV analysis (interactive mini-quiz). Takeaway: controls + gating template	Thermo Fisher Scientific
15:20–15:40	Digital PCR for EV RNA analysis	Thermo Fisher Scientific
15:40–16:00	Bacterial Derived EVs for Ophthalmology diagnosis	Dr. Joveeta Joseph, Head of Microbiology Services LVPEI, Hyderabad
16:00–16:40	Student lightning talks (5 × 8 min)	Chair: Dr. Joveeta Joseph ; Co-chair: Dr. Rasmita Samal
16:40–17:00	Development of microfluidic based devices for EV characterisation - path towards EV-IVD	Dr. Amit Asthana, Professor & HOD, Pharmaceutical Analysis NIPER, Hyderabad
17:00–17:20	Silencing CD 151 gene in donor TNBC cells attenuates exosome driven functions of recipient cells	Dr. Rama Rao, Professor, GITAM, AP
17:20–17:40	Human Mesenchymal Stem Cells Derived Exosomes Serve as an Efficient Nano-carriers for Targeted Drug Delivery in Cancer Cells	Dr. Nagarajan Kanipandian Assistant Professor Sri Sathya Sai University for Human Excellence, Karnataka
17:40–18:05	Panel: “Exosomes in Precision Diagnostics: Clinical Promise, Technical Challenges, and Future Directions”	Moderator: Dr. Prathap Naidu, Panelists: Dr. Sasidhar, Mr. Nikhel Goel, Dr. Sairam Atluri, Dr. Indrajeet Kaur, Dr. Amit Asthana
18:05–18:15	Close + Day-2 lab instructions	Organizing team

Continued on next page

## Day 2 – March 6, 2026 - Workshop 1

Theme: EV Diagnostics Workflow (Pre-analytical → Isolation → RNA readiness)

Time	Session	Lead
08:20-10:30	<ul style="list-style-type: none"><li>• EV Isolation (Kit-Based) from Serum</li><li>• Standardized precipitation/ultrafiltration protocols; Biochemical assays for total protein (BCA/DCA) and lipid (Phospholipids/Neutral lipids via colorimetric kits) quantification. Hands-on optimization for yield/purity.</li></ul>	AHERF Team
10:30-10:50	Tea Break	
10:50-12:00	<ul style="list-style-type: none"><li>• Biophysical Characterization: Nanoparticle Tracking Analysis (NTA)</li><li>• Size distribution, concentration, and zeta potential measurement using Zeta view; Data analysis for EV heterogeneity and QC metrics.</li></ul>	AHERF Team
12:00-13:00	Lunch Break	
13:00-15:30	<ul style="list-style-type: none"><li>• Flow Cytometry for EVs: Setup, Controls, &amp; Acquisition</li><li>• High-resolution gating strategies; Positive/negative controls (e.g., CD63/CD81 markers); Sample prep, voltage optimization, and multi-color acquisition on advanced cytometer. Troubleshooting tips.</li></ul>	Thermofisher Scientific team
15:30-15:50	Tea Break	
15:50-5:30	<ul style="list-style-type: none"><li>• EV RNA Isolation: TRIzol Workflow Briefing &amp; Hands-On</li><li>• TRIzol (phenol-chloroform) phase separation for small RNA-enriched extraction from EVs; QC assessment via NanoDrop (260/280 ratios), integration with downstream RT-qPCR or NGS/RNA-seq.</li></ul>	AHERF Team

## Day 3– March 7, 2026 - Workshop 2

**Theme: EV Diagnostics Workflow (Pre-analytical → Isolation → RNA readiness)**

Time	Session	Lead
08:30-10:30	<ul style="list-style-type: none"> <li>• cDNA Synthesis: Briefing &amp; Hands-On Conversion</li> <li>• Reverse transcription protocols optimized for EV-derived small RNAs/miRNAs.</li> </ul>	AHERF Team
10:30-10:50	Tea Break	
10:50-13:00	<ul style="list-style-type: none"> <li>• ddPCR: Briefing, Setup Checklist &amp; Hands-On</li> <li>• Digital droplet partitioning workflow; Partition integrity checks, droplet generation, and controls (NTCs, positive spikes); Thermo Fisher QX200 system demo with EV-specific assays.</li> </ul>	Thermofisher Scientific team
12:00-13:00	Lunch Break	
13:00-15:30	<ul style="list-style-type: none"> <li>• ddPCR Data Analysis &amp; Interpretation</li> <li>• QuantaSoft analysis: Copy number quantification, Poisson statistics, clustering validation; Case studies on EV biomarker discovery (e.g., miR-21 in cancer); Group discussion on reproducibility and limits of detection.</li> </ul>	Thermofisher Scientific team
15:30-15:50	Tea Break	
15:50-5:30	<ul style="list-style-type: none"> <li>• Certificate Distribution &amp; Closing Remarks</li> <li>• Review of key takeaways, Q&amp;A, networking. Digital certificates with CPD credits for translational EV research competencies.</li> </ul>	AHERF Team

## Leadership, Advisory & Secretariat

### Patron

**Dr. Sivaramakrishnan Venkateswaran**  
CEO, AHERF

### Convenor

**Dr. Manda Venkata Sasidhar**  
CSO, AHERF-CMBRC

<b>Scientific &amp; Clinical Advisory Committee</b>	
Clinical Translation	Dr Jayanthi Swaminathan, Clinical Director, AHERF
Academic Exosome Biology	Dr Amitava Ray, Sr Consultant, Neurology Apollo Hospitals,
Industry & Technology	Dr Dinesh Kundu, CEO, East Ocyon Bio
Quality / Regulatory	Dr Rajesh Bendre, HOD, Apollo Diagnostics
Corporate Advisory	Ms Ishita Shivley, Vice President, AHERF
Institutional Host	Dr P Manohar, Dean, Apollo Medical College, AIMSR,

**Secretariat (AHERF): Dr Patnam Sreekanth, Senior Scientist**

### Workshop Coordinator & Logistics

**Dr. Kartik Kumar**  
info@aherf.net | +91 7904220464

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