Workshop on "Extracellular Vesicles: Isolation, Characterization, and Applications"



October 24 - 25, 2024 | Aravind Medical Research Foundation (AMRF), Madurai

Aravind Medical Research Foundation is an arm of Aravind Eve Care System that focuses on improving eve care through research and development. AMRF encompasses the departments of Molecular Genetics. Microbiology. Immunology, Stem Cell Biology, Proteomics, Bioinformatics and Ocular Pharmacology. Apart from AMRF, Aravind Eye Care System includes clinical care (Aravind Eye Hospitals), Aravind Institute of training (Lions Community Ophthalmology) and manufacturing (Aurolab).

As a part of the translational initiative for the basic research programmes at AMRF, we have established the state of art facility "Exosome Innovation Center" to facilitate exosome research in ocular and other related areas. Extracellular vesicles (EVs) including exosomes are lipid bilayered non dividing nano vesicles, produced by all cell types and delivered into extracellular space. EVs carry physiology altering biological information in the form of regulatory nucleic acid, protein, lipids and metabolites. EVs have the capacity to carry disease specific cargo, they are stable in circulation, have low immunogenicity and can be modified with a defined cargo. Thus, EVs have immense potential in biomarker development, drug delivery and understanding disease pathogenesis.

About the workshop

Noctober SUMMIT 2024

Objectives:

- Impart hands on training on isolating EVs using commercially available kit and ultracentrifugation, characterize EVs using Nanoparticle Tracking Analysis and western blot.
- Learn how to identify disease specific unique/altered EV protein cargo as a biomarker using proteomic analysis.
- Learn from guest lecturers who are experts in the field.

Overall, through handling high end scientific instruments and learning EV proteomic data analysis, the participants should be able to gain knowledge on the potential of EVs in therapeutic applications and independently design and execute EV related projects in their domain.

Participants:

Faculty members, Research scholars and M.Sc, M.Tech students.

Registration Fees:

₹1180 (1000+18% GST). The registration fee includes workshop material and food (lunch, tea/coffee and dinner) for the duration of the workshop.

How to apply

https://forms.gle/WVDmkNQ2aYMgMjXt7

Deadline:

5th October, 2024 (Selected candidates will be informed by 7th October, 2024).

Invited Speakers

- 1. **Dr. Arup Banerjee**, Associate Professor, Regional Centre for Biotechnology, Faridabad.
- 2. Dr. SM Salahudeen, Director, Tri Cell Biologics
- 3. Prof. K. Dharmalingam, Director, AMRF
- 4. Dr. C. Gowri Priya, Scientist, AMRF

Accommodation:

Accommodation can be arranged at our hostel, Inspiration (<u>https://aravind.org/inspiration-2/</u>) which is just 2 minute walk away from AMRF. Travel, accommodation, food and other personal expenses have to be borne directly by the participants.

For further details contact:

Dr. Daipayan Banerjee, Scientist Aravind Medical Research Foundation, No.1, Anna Nagar, Madurai-625020 Email: daipayan@aravind.org



AMRF Aravind Medical Research Foundation Dr. G. Venkataswamy Eye Research Institute

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