



# Certificate course in Cell-Omics and Disease Biology

September 19 to December 17, 2022

## ABOUT US

Aravind Medical Research Foundation (AMRF), a research arm of Aravind Eye care System (AECS), is a registered society enhancing education and research. The combination of high clinical load with abundant biological samples for research, state-of-the-art diagnostic and treatment facilities make AMRF a unique organization for conducting basic and translational research. AMRF has the necessary infrastructure and a dedicated band of scientists to conduct cutting edge research in eye care. Basic and translational research are being carried out with active coordination of various disciplines and expertise - Molecular Genetics, Microbiology, Immunology, Proteomics, Ocular Pharmacology, Stem Cell Biology and Bioinformatics. AMRF offers PhD program in the above disciplines in affiliation with neighbouring Universities. Key findings of research that has been translated for patient care include establishment of a genetic testing centre for retinoblastoma, genetic counselling for albinism and biomarkers for age related eye diseases.

## ABOUT THE COURSE

With the advent of high-throughput technologies, the field of medicine has been witnessing a major revolution in terms of diagnosis, therapeutics and treatment. This advanced course is designed to provide hands-on experience towards understanding cellular events through omic approaches in normal and diseased state. Human cell lines will be used for the Genomic, Transcriptomic and Proteomic analysis. At the completion of the course, the participants will be equipped to employ this integrated approach in their research work.

### FIELDS OF TRAINING

- Tissue Culture - Maintenance of Cell Lines, Establishment of Disease Models
- Genomics - Sanger Sequencing, Next Generation Sequencing
- Transcriptomics - Gene Expression Analysis, Real Time PCR
- Proteomics - 2D Electrophoresis, Mass Spectrometry
- Bioinformatics - Omics Data Analysis

### COURSE FACULTY

- AMRF Scientists ([www.amrf.org.in](http://www.amrf.org.in))
- Clinicians from AECS ([www.aravind.org](http://www.aravind.org))
- Invited Experts

### WHO CAN APPLY?

- i. M.Sc - Any branch of Life Sciences
- ii. B Tech/ M Tech Biotechnology

## REGISTRATION FEE

Rs. 30000 (DD/Cheque in favour of "Aravind Medical Research Foundation" payable at Madurai)

- Registration fee does not include accommodation and food.
- Number of participants will be limited and selection will be based on interview @ centres - Madurai, Coimbatore, Chennai, Pondicherry

## CONTACT

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Last date for the receipt of filled in registration form - 31 August 2022  
For registration and course details, please visit: [www.amrf.org.in](http://www.amrf.org.in)

ARAVIND MEDICAL RESEARCH FOUNDATION  
DR.G.VENKATASWAMY EYE RESEARCH INSTITUTE