

# Stem Cell Culture & Characterization

7-13<sup>th</sup> May 2026, MKU-RUSA Supported  
Skill Workshop



- With MKU-RUSA support, Stem Cell Culture and Characterization skill workshop is scheduled at the Dept. of Genetics, School of Biological Sciences, Madurai Kamaraj University, during from May 7-13.
- To enable the faculty members and researchers to learn the stem cell-based experiments effectively, this workshop on “Stem Cell Culture & Characterization” is designed. Faculty members and research students are encouraged to register in the link before **April 24<sup>th</sup>**

<https://forms.gle/CbKH6R2vAmiKSSfz6>



## LEARNING TARGETS

- 1) Biosafety, Bioethics & Safe Cell Handling
- 2) Culture & Maintenance of Human Cell Lines
- 3) Culture of Fibroblast Cells
- 4) Culture of Mesenchymal Stem Cells (MSCs)
- 5) Genomics of Stem Cell Biology
- 6) Resources & Isolation of Stem Cells
- 7) Maintenance & Expansion of MSCs
- 8) MSC Differentiation into: Adipocytes / Osteocytes / Chondrocytes
- 9) Fibroblast to Myofibroblast Differentiation
- 10) Gene Expression in Fibroblasts
- 11) Transcription Factor Analysis & Stem Cell Marker Analysis (Immunofluorescence)
- 12) Flow Cytometric Characterization of Stem Cells
- 13) High Content Imaging (Cellular Phenotyping)
- 14) Stem Cells & Drug Screening
- 15) Gene Overexpression / Silencing in Fibroblasts

## Course Coordinator:

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