



High Content Cell Imaging & Drug Screening

Skill Workshop

MKU-RUSA Supported



With MKU-RUSA Support, the Department of Genetics, Madurai Kamaraj University (MKU), is organising skill workshops on the usage of Cell Imaging Methods using a High Content Imaging System (Perkin Elmer / Revvity) at the School of Biological Sciences, MKU.

SCHEDULE OF SKILL WORKSHOPS

- **Batch I** : Aug 12 – Aug 14, 2025 (Participants 15)
- **Batch II**: Sep 1 – Sep 3, 2025 (15)
- **Batch III**: Sep 11 – Sep 13, 2025 (15)
- **HCS Workshop** : Revvity Supported – Aug 28 & 29 (Participants: 15 (8 Internals, 7 Externals))

Registration Link:

<https://forms.gle/RyWT4cBivMsFm91A9>



There is no fee for the participants. These are RUSA-supported Skill workshops. Travel & accommodation charges are to be borne by the participants. On prior request, accommodation would be arranged at MKU hostels / trainee's hostel.

LEARNING TARGETS / EXPERIMENTS

Cell Preparation for Imaging

Fixation and Permeabilization Methods

Organelle Staining

- Nuclear Staining using DAPI or Hoechst
- Mitochondrial Staining & Assessing their abundance and distribution
- Cytoskeletal staining

Immunofluorescence Analysis of Protein of Interest

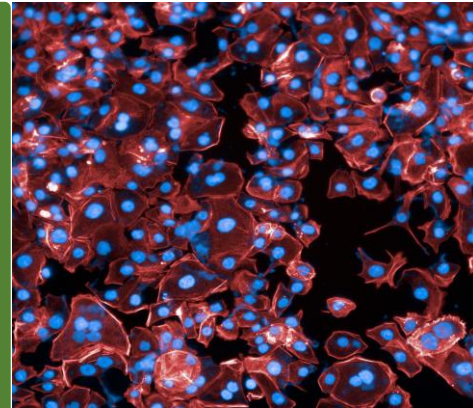
Drug Screening using a drug panel & Impact on Signaling Pathways

Imaging, Analysis, and Interpretation

- Image Acquisition, Multichannel Imaging, and intensity quantification
- High Content Analysis
- Object segmentation (nuclei, mitochondria)
- Quantifying fluorescence intensity, shape, count, etc
- Data Extraction and Dose-Response Curve Generation

COURSE COORDINATOR: Prof.G.Kumaresan

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Alexa 647 + DAPI

