

THEORETICAL COURSE

BASIC CELL CULTURE CONCEPTS:

- Cell culture introduction and basic concepts
- Cell line characterization
- Biosafety levels
- Cell cultures troubleshooting
- Cell Contamination Detection

CELL CULTURE METHODS, TECHNIQUES AND APPLICATIONS:

- Transfection
- Immunocytochemistry in cell culture
- Flow cytometry
- Cell migration and invasion
- Microscopy
- Regenerative medicine
- 3D Cell Cultures

ADVANCED CELL CULTURE METHODS:

- Microfluidic organ-on-a-chip 3D models
- Organoids
- Tissue culture
- Bioprinting
- Electron paramagnetic resonance in cells and tissues

PRACTICAL COURSE

CELL CULTURE TECNIQUES: DEMONSTRATION AND HANDS-ON

- Good practices
- Working in aseptic conditions
- Thawing and cryopreservation
- Subculture of cell cultures

CELL CULTURE METHODS AND APPLICATIONS: DEMONSTRATION AND HANDS-ON

- Contamination detection
- Cell-based assays
- Immunocytochemistry
- In vitro biocompatibility evaluation
- Troubleshooting







IN COLLABORATION WITH



