

**HANDS ON TRAINING PROGRAMME
ON
"BASIC TECHNIQUES IN ANIMAL
TISSUE CULTURE"**

(12-15 NOVEMBER, 2018)

Sponsored from UGC XII plan grant

**Conducted at:
School of Biotechnology
Devi Ahilya University, Indore**

**Head
Dr. Anil Kumar**

**Coordinator
Dr. Hamendra Singh Parmar**

Program Schedule

Day 1: 12.11.2018

10:30-10:45 AM-Brief summary about the program by Head of the department

10:45-12:00-Lecture on Basic animal tissue culture methodologies

12:00-12:30- Video movie on sterile culture and cryopreservation

12:30-13:45- Practical on culture media preparation

13:45-14:30- Lunch break (**at first floor ICH**)

14:30-16:00-Practical on Trypsinization of the cells and counting

16:00-17:30-Practical on Heat inactivation of serum and cryopreservation

17:30-18:00- Question answer session of the lessons learnt

Day 2: 13.11.2018

10:00-10:45 AM-Practical on thawing and seeding the cells

10:45-11:15- Video movie on MTT assay with documentary

11:15-12:45- Practical on MTT

12:45-13:15- Video movie on wound healing assay with commentary

13:15-13:45-Video movie on migration and invasion assay with commentary

13:45-14:30- Lunch break (**at first floor ICH**)

14:30-15:30-Practical on wound healing assay

15:30-16:30-MTT observation and result interpretation

16:30-18:00- Practical on cell migration assay using transwell inserts

Day 3: 14.11.2018

10:00-10:30 AM-Theory on apoptosis assays

10:30-11:00-Video on cell death detection assay

11:00-12:15-Theory on gene expression studies using real time PCR& microarray

12:15-12:45- Observation of wound healing results and interpretation

12:45-13:45- Observation of migration assay and results interpretation

13:45-14:30- Lunch break (**at first floor ICH**)

14:30-18:00-Practical on Cell death detection ELISA (apoptosis)

Day 4: 15.11.2018

09:00-10:00 AM-Theory lecture on tissue engineering and stem cell biology

10:00-12:00- Practical on RNA isolation for quantitative gene expression analysis

12:00-13:45- DNA isolation for mitochondrial DNA quantification

13:45-14:30- Lunch break (**at first floor ICH**)

14:30-17:30- Practical on real time PCR for gene expression quantification

17:30-18:00- Certificate distribution and Concluding remark by Head of the department