

Lady Tata Memorial Teachers' Training Workshop 2024.

A 4-day training workshop was organised from 17-20 Dec 2024, by the School of Biological Sciences under the aegis of the Lady Tata Memorial Trust. About 28 teachers from seventeen different undergraduate and postgraduate colleges across Maharashtra participated in the workshop. Each day started with a Scientific Session talk by an invited expert from the field, followed by a technical lecture by CEBS faculty. They were aided by the JRFs and graduate students of the department throughout the execution of the lab sessions. 70% of the experiments performed were carried out individually by each participant, while 30% were performed in groups. This intense hands-on four day routine took the teachers through the following modules of Molecular and Cell Biology:

Day 1: cDNA PCR, cloning, and transformation using Heat Shock method.

Day 2: Transformation of various systems - *Chlamydomonas* by Glass Beads and electroporation, *E.coli* by electroporation, Fungal transformation by protoplasting.

Day 3: Protein induction and expression in *E.coli*, His-tag affinity purification, and analyses by SDS PAGE & Western blot.

Day 4: Protein protein interactions studies were carried out by Overlay Assay. Animal tissue Culture of cancer cells, subcellular localisation of Tubulin in *Chlamydomonas* and Cancer cells by Confocal Microscopy, Flow cytometry analysis of apoptotic cells.

Although overwhelming, candidates were very excited about each session, and gave generous feedback about the execution for all four days. They were also very pleased with the hospitality, food and accommodation provided. In addition, in their feedback teachers unanimously agreed on highly recommending this workshop for future participants.



