



CHILDREN'S EDUCATION SOCIETY (REGD).
THE OXFORD COLLEGE OF SCIENCE, ARTS, COMMERCE & MANAGEMENT

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DEPARTMENT OF ZOOLOGY AND GENETICS

| SL.NO | DETAILS OF THE EVENT | |
|-------|--------------------------------------|--|
| 1. | Title Of The Event | Lab On Web Series: Gel Electrophoresis and Fluorescence In Situ Hybridization (FISH) |
| 2 | Day and Date | Tuesday, 15 th September 2025 |
| 3 | Venue | Room No. 108, The Oxford College Campus, HSR Layout |
| 4 | Organizing Secretary/ Co-Coordiators | Dr Deepa Gopinath, Assistant Professor |
| 5 | Faculty In-charge | Dr Deepa Gopinath |
| 7 | Participants | UG Students, V Semester, Genetics |



Dr Deepa Gopinath and Ms Lakshmi Ratnakaran, faculty in-charge, enabling students to gain hands-on experience via online lab simulations - Gel Electrophoresis and FISH techniques

The Department of Zoology and Genetics organized a two-hour virtual laboratory session for final-year undergraduate students to provide simulated practical training in Gel Electrophoresis and Fluorescence In Situ Hybridization (FISH). Designed to bridge the gap between theory and practice, the program used interactive simulations to demonstrate step-by-step protocols, data analysis, and real-world applications of these molecular biology techniques. The first module introduced electrophoresis, enabling students to observe protein separation, visualize banding patterns, and troubleshoot errors through quizzes and discussions. The second module focused on FISH, guiding students through probe labeling, hybridization, and detection of chromosomal abnormalities, supported by case studies in diagnostics and research. Active learning was fostered through polls, Q&A sessions, with faculty providing continuous guidance. Student feedback highlighted that the integration of explanations, interactive tasks, and realistic simulations significantly enhanced their understanding, problem-solving skills, and confidence in applying these essential tools in genetics and biotechnology.

Coordinator

Head

Principal