

## **Department of Biotechnology & Genetics**

### **Report on**

#### **Two Days Research oriented Workshop on**

#### **“Basics of Animal Cell culture”**

**25<sup>th</sup> and 26<sup>th</sup> August 2022**

Two days research oriented workshop on Basics of Animal Cell Culture was jointly organised by the department of Biotechnology & Genetics and Stroma Biotechnologies Pvt. Ltd, Bengaluru, for the II sem. M.Sc. students on 25<sup>th</sup> and 26<sup>th</sup> August 2022, held at Sir M. Visvesvaraya auditorium and Animal cell culture Laboratory, MSRCASC, Bengaluru.

The main objective of the workshop was to gain the theoretical and practical knowledge of culturing mammalian cells. Further more to bridge the skill gap for the industry requirement in the field of Animal Cell Culture. As there is a constant demand for well-trained animal cell culturists in academia, research and industry, this workshop shall provide exposure to students who want to take up cell culture as a career.

The workshop was inaugurated by Dr. Vatsala G, Principal, MSRCASC, Dr. Puspha H, Vice Principal, Dr. Jayashree D R, Professor and Head, department of Biotechnology and Genetics, Dr.Channarayappa, Head of Research & Development, Dr. Ramakrishnaih T N, IQAC Co-ordinator. The Principal addressed the students regarding the scope and importance of the workshop for their future academics and research career. The workshop was conducted by Mr. Veeresh Nandikolmath, Reseach Director, Stroma Biotechnologies Pvt. Ltd. and his associate Mr. Subhrajyoti Maity.

After the inauguration, Mr. Veeresh Nandikolmath delivered a lecture on **“Introduction to Animal Cell Culture”** the talk comprised the dawn of cell culture technology, basic characteristics, types, facilities and applications of cell culture.

The second lecture was on **“Thawing/revival of HeLa cells”**.

In the afternoon, the skill of revival of culture was explained and the students performed the protocol and learnt the method of thawing and reviving the culture in the Animal cell culture laboratory.

On the second day, in the morning session, a lecture was delivered by Mr. Veeresh on **“Trypsinisation and Passaging”**. The students learnt about subculture, cell adhesion molecules, extra cellular matrix, methods of cell disaggregation. In the afternoon the practical session was conducted and the students performed the trypsinisation and subcultured the cells.

Sixteen students participated in the two days workshop and learnt the methods of sterilization, use of media, enzymatic disaggregation, subculturing, maintenance of the culture and documentation of the cultures, with its applications in research. At the end of each session, discussion with resource persons was held to clarify the doubts of the students.

The lectures were attended by a good number of interested students and faculty members. The sessions were interactive with discussions on facilities, precautions, safety measures and ethical considerations that are critical for working in Animal Cell Culture laboratory.

The valedictory function was presided by Dr. Pushpa H, Vice Principal and Dr. Jayashree D R, Professor and Head, department of Biotechnology and Genetics.

A positive response was received from the students for the workshop. The students were happy that they got a first hand experience on the skills of animal cell culture and were enthusiastic to observe the cells under the inverted microscope, which they had cultured. They gave a positive feedback about the workshop and expressed that the workshop should have been extended to few more days and also expressed more such programs to be conducted in future.



Inauguration of the workshop by Mr. Veeresh Nandikolmath, Research Director, Stroma Biotechnologies Pvt. Ltd., Dr. Vatsala G, Principal MSRCASC and Dr. Jayashree D R Prof & HOD Dept. of Biotechnology and Genetics.

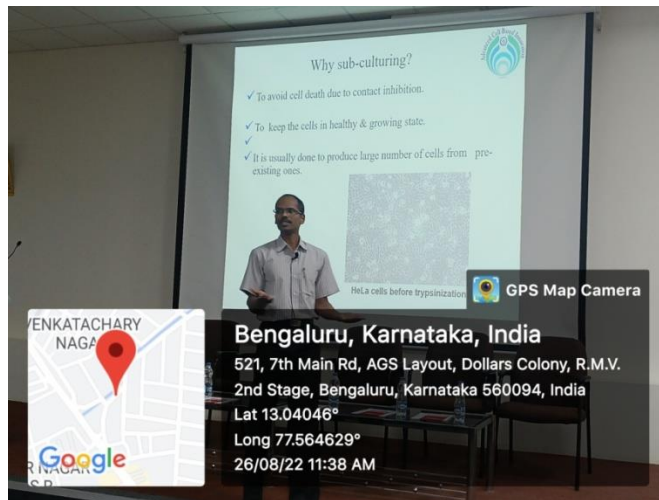


Principal Dr. Vatsala G Addressing the participants



Faculty and students at the lecture session





Dr.Veeresh N, delivering the lecture



Reviving cells from cryopreservation



Students seeding the cells in the Biosafety cabinet



Students enumerating the cells in Haemocytometer

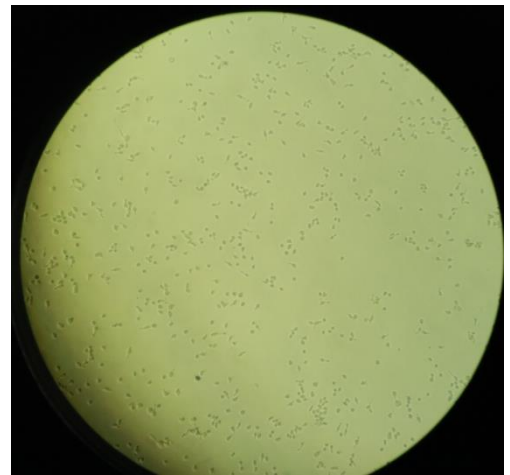


Students observing the cells





Students observing the cultured cells



Cells as viewed under microscope



Dr.Vatsala G presenting mementos to Mr. Veeresh N and Mr. Subhrajyoti Maity



Dr. Pushpa H, Vice Principal, addressing the students and presenting the certificates.



Presenting the certificates to the participants

Student expressing her feedback.



Group Photo of the participants and Faculty