

About the Department and the University

The Department of Biotechnology, The IIS University, Jaipur has well established laboratories with sophisticated instruments. It is currently running under-graduate, post-graduate and research programs.

Various laboratories of the department are dedicated to research in the field of microbial diversity, plant biotechnology, animal biotechnology, computational biology, animal cell culture. During the short span of time, the department has organized national, international seminars, conferences and workshops.

The department has earlier received financial assistance from CSIR, Government of India & DST, Government of Rajasthan.

The IIS University is a to be deemed-university (placed in category one by MHRD, Government of India) under the section 3 of the UGC Act 1956.

Laboratory facilities

Department of Biotechnology, The IIS University, Jaipur is enriched with specialized facilities like:

- PCR machine
- UV-Visible spectrophotometer
- Gel doc imaging system
- Microplate reader
- CO₂ incubator
- Vertical laminar hood BSII
- Inverted microscope
- Autoclave
- Agarose gel electrophoresis system
- PAGE gel electrophoresis system
- Horizontal laminar hood
- Nanodrop spectrophotometer
- Refrigerated centrifuges
- Deep freezer (-20°C)
- Incubator with shaker
- BOD Incubator
- Microtome

ORGANIZING COMMITTEE

Patron
Dr. Ashok Gupta

Vice-Chancellor
The IIS University, Jaipur

Convener
Prof. Pradeep Bhatnagar

Dean, Faculty of Life Sciences
The IIS University, Jaipur

Co-Convener
Dr. Sreemoyee Chatterjee

Sr. Asst. Prof. & Head
The IIS University, Jaipur

Organizing Secretary

Dr. Nidhi Gupta

Research Scientist (SERB)

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Department of Biotechnology

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Workshop on Animal Cell Culture & Related Molecular Biology Techniques (ACCMBT-2014)

AUGUST 04-08, 2014

Organized by
Department of Biotechnology


THE IIS UNIVERSITY

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ABOUT THE WORKSHOP

In the present research scenario, cell culture has become one of the major tools. Tissue culture is the removal of cells, tissues, or organs from an animal or plant and their subsequent placement into an artificial environment conducive to growth. Once in culture, cells exhibit a wide range of behaviours, characteristics and shapes. Cells either grow attached to substrate (monolayer adherent culture) or floating free in the culture medium (suspension culture). Cell culture has rapidly become an important asset of Molecular Biology. This is used as model systems for studies in basic cell biology and biochemistry, the interactions between disease-causing agents and cells, the effects of drugs on cells, the process and triggers for aging, nutritional studies, toxicity, virology and cancer research.

In this workshop, the participants will be familiar with the hands on practices of many basic as well as advanced techniques of animal cell culture handling, maintenance, preservation and usage in various molecular biology aspects.

In this regard, the workshop will be helpful for the participants to learn various techniques associated with animal cell culture and molecular biology, including DNA & protein isolation, electrophoresis, PCR, ELISA etc. Invited lectures from eminent scientists will further facilitate the understanding and learning.

WORKSHOP MODULES

DAY 1 Inaugural lectures - **Dr. Akhil C. Banerjea** (Scientist VII, National Institute of Immunology, New Delhi) & **Prof. Yogendra Singh** (Scientist G, Institute of Genomics and Integrated Biology, Delhi)

Session I Invited lecture on Good Laboratory Practices (GLP) and Bio-safety (Dr. Surendra Nimesh, CURAJ, Ajmer)

Session II Media preparation and sterilization techniques (Mrs. Payal Mehtani, IIS, Jaipur)

DAY 2 Invited lectures on Introduction to Cell Culture (Dr. Sanjeev Kumar, BITS, Pilani) & recombinant DNA technology (Dr. Lalita Gupta, BITS, Pilani)

Session III Hands on training in Cell Passaging, Cryopreservation, Cell Revival from cryo-preserved stocks (Dr. Nidhi Gupta, IIS, Jaipur)

Session IV Transfection experiments (Dr. Nidhi Gupta, IIS, Jaipur)

DAY 3 Invited lecture on DNA isolation and PCR (Dr. Krishan Mohan, BISR, Jaipur)

Session V Hands on training in DNA isolation from cell lines (Dr. Sreemoyee Chatterjee, IIS, Jaipur)

Session VI Polymerase Chain Reaction (Dr. Sreemoyee Chatterjee, IIS, Jaipur)

DAY 4 Invited lecture on Protein isolation, purification and quantitation (Dr. Pankaj Goyal, CURAJ, Ajmer)

Session VII Hands on training in protein isolation from cell lines, separation via vertical gel electrophoresis (Dr. Nidhi Gupta, IIS, Jaipur)

Session VIII Western blot analysis (Dr. Nidhi Gupta, IIS, Jaipur)

DAY 5 Invited lectures on Cytotoxicity and Cell Viability (Dr. Surendra Nimesh, CURAJ, Ajmer) & Flow Cytometry (BD Biosciences, India)

Session IX Cell Viability assays on microplate reader (Dr. Surendra Nimesh, CURAJ, Ajmer)

Session X Demonstration of flow-cytometry (FACS) by BD Biosciences, India.

Who can participate?

Research scholars, graduate and post-graduate students, early-career scientists and faculty members engaged in research/study on animal cells and molecular techniques.

Registrations to the Workshop is limited to 25 participants only on first come first served basis.

Those who will send the filled in registration forms along with respective fees will only be considered for registrations. Registration fee will be refunded to the non-selected candidates.

REGISTRATION

Category of the Participant	Registration Fee
• Industry/ R&D Scientists	₹ 5,000/-
• Faculty members of Academic Institutions	₹ 4,000/-
• Research scholars and Students	₹ 3,000/-

Registration fee includes access to all sessions of workshop manual, snacks and lunch on all the five days.

Accommodation will be arranged only for females, out-station applicants (twin sharing with extra fee).

Travel assistance in Jaipur only are to be requested well in advance by the registered participants only (with extra charge).

How to apply?

Interested participants may send their application in prescribed form along with the registration fees through demand draft drawn in favour of **The IIS University, payable at Jaipur** on or before July 15, 2014.

For registration related queries contact Dr. Nidhi Gupta (+91-9887470223, Email - nidhi.gupta@iisuniv.ac.in)

Last date for registration : **15-07-2014**

Last date for intimation of selection : **25-07-2014**

