

Central University of Jammu Centre for Molecular Biology in collaboration with DIQA is organizing



3 Days Hands-On Training in Molecular Biology Tools and Genome Editing

From 15th - 17th April, 2025





VENUE

Brig. Rajinder Singh Auditorium and Centre For Molecular Biology Central University of Jammu, Rahya-Suchani, District Samba-181143, Jammu & Kashmir , INDIA



The Central University of Jammu came into existence on August 08, 2011. It was established by the Central Universities Act, 2009 (Act No.25 of 2009 read with the Central Universities Act, 2009).



MISSION OF UNIVERSITY

- Mission of University is to impart education which in its breadth and scope represents the three main symbols in our logo: iridescent like the rising Sun, immortal as the Banyan Tree and infinite like the Sky.
- Inculcate self-confidence; which when combined with disciplinary study, leads to faith in one's strength and conviction.
- Develop talent for sustainable growth in academics, administration, business, and research by laying emphasis on organized thought, self-discipline, and discriminative faculty.
- Encouraging inter-disciplinary focus, as also collaborative research with leading Institutions aimed at the optimum development of human resource and integration of new ideas and innovations.
- Play participatory role in the affairs of the people of surrounding areas and civil society in general.

CENTRE FOR MOLECULAR BIOLOGY

The Centre for Molecular Biology (CMB) at Jammu is focused on teaching and research in the interdisciplinary areas of biology, which includes basic as well as applied biological sciences and use this knowledge to advance understanding of the biological world and help to improve human health, environment, and march towards the fulfilment of sustainable development goals. Our mission is to create a highly competitive research and teaching environment that will help the students as well the faculty members to excel in this field of biological science. The centre offers PG program (M.Sc. Biotechnology) both supported by DBT Govt. of India and based on CUET (PG) entrance exam, Integrated. M.Sc. Biotechnology (UG-PG) and Ph.D. program in Biotechnology. Our curriculum is designed to provide a holistic learning experience, integrating theory, practical sessions, and research projects. We also offer opportunities for specialized training and internships with leading research institutions and industries.

MISSION OF CENTRE

The mission of the Centre is engaging in the highly competitive research and training to develop the trained human resource for advancing of the human health and environment using biotechnological tools for sustainable development.

ABOUT THE WORKSHOP

This 3-day hands on training workshop modules are designed to provide the skill building exercise to the participants in the basic and advance molecular biology discipline and to understand the process of scientific experimentation for development of the curiosity driven inquiry. The workshop will combine lectures by eminent speakers and hands-on practical sessions by the resource persons.

KEY FOCUS AREAS

- Molecular Biology & Genetic Engineering Essentials
- Blood Smear Prep & Grouping Techniques
- DNA Isolation, Purification & Analysis
- Gel Electrophoresis & PCR Applications
- Microbial Isolation & Culturing From soil samples
- Hemocytometer for Cell Counting
- Bacterial & Yeast Isolation & Culturing Methods



HANDS-ON TRAINING SESSIONS

Participants will gain hands-on expertise in:

- Isolation and culturing techniques of microbes from soil samples
- Blood Smear Preparation & Blood Grouping
- DNA isolation from Blood/ Yeast samples and quantification methods
- DNA Isolation & Gel Electrophoresis
- PCR Techniques
- Plasmid Isolation & transformation
- Restriction Fragment Length Polymorphism
- Design of guide RNA & CRISPR Cas9 Genome Editing (In-Silico)
- Small molecule screening and use of Hematocytometer in cell counting and Analysis

REGISTRATION FEE:

Registration fee for the workshop is ₹1500.

REGISTRATION LINK:

https://docs.google.com/forms/d/e/1FAIpQLSfG9k7r1-Qx628zdAmNK6MVk2rtt2ev8kXm5qHn-xskEel1QQ/viewform?





CONTACT DETAILS

Convenor: Dr. Narendra K Bairwa, Head, CMB Organizing Secretory : Dr. Sudhir Singh ,

E-mail: <u>narendra.molb@cujammu.ac.in</u> sudhir.molb@cujammu.ac.in; office.molb@cujammu.ac.in

Phone: 9596281073, 6362760571

GUIDELINES FOR PARTICIPANTS

1. The candidates willing to participate in the workshop may register through the registration link provided in the brochure and can send request to the listed email address.

2. Registration fee receipt needs to be uploaded in the google form.

3. Maximum 30 seats are available for the workshop on first come first serve basis.

4. The registration is accepted till April $10^{\rm th},\,2025$

LOCAL ADVISORY COMMITTEE MEMBERS

- Prof. Sunil Dhar, Dean, Life Sciences, CUJ
- Prof. Yashwant Singh, Registrar, CUJ
- Prof. Vinay Kumar (Dean, School of Basic & Applied Sciences), and DIQA coordinator, CUJ
- Prof. Suram Singh, Dean, Academics, CUJ
- Prof. Uday Pratap Singh, Associate Dean, Academics, CUJ
- Dr. Ashwini Nanda, Dept. of Economics, CUJ
- Prof. Niranjana Bhandhari, CCRC, CUJ
- Prof. Rakesh Jha, Department of ECE, CUJ
- Prof. Deepak Pathania, Ex-Dean, Research Studies, CUJ
- Prof. Pawan Kumar, Associate Dean, Research, CUJ
- Prof. Swarker Sharma, Department of Zoology
- Mrs. Shafla Parihar, Deputy Registrar, GSW, CUJ
- Mr. Mohammad Iqbal, Finance officer, CUJ
- Mr. Udit Mahajan, System Analyst, CUJ



UNDER THE PATRONAGE OF Honourable Vice Chancellor Prof. Sanjeev Jain

GUEST SPEAKERS





Prof. Raghuvir Singh Tomar IISER, Bhopal

Prof. Mritunjay Suar (Prof. & Director General R<u>&D, KIIT)</u>





Dr. Samer Singh Banaras Hindu Univesity

Dr. Admas Berhnau Berisso University of New Hampshire

ORGANISING COMMITTEE





CONVENOR Dr. Narendra K Bairwa, Director, CMB)



CO-CONVENOR Dr. Praveen K Mehta



CO-CONVENOR Dr. Shelly Sehgal



ORGANIZING SECRETORY

Dr. Sudhir Singh

CO- ORGANIZING SECRETORY Prof. Mushtag Ahmed , CMB



Dr. Audesh Bhat



WORKSHOP COORDINATOR Dr. Fareeda Akhtar

WORKSHOP CO-COORDINATORS:

Research scholar, M.Sc. students and supporting staff