

Are Tointly Organising

International Conference

Biotechnology in Health Science and Therapeutics ICBHST2025



28th - 31st December, 2025







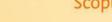






















GENE TO DRUG

A Hands-on Workshop on Multi-omics Gene Expression Analysis and Drug Discovery



Established in 2011, Manipal University Jaipur (MUJ) is a proud member of the globally acclaimed Manipal Group, carrying forward the visionary legacy of Padma Shri Dr. T. M. A. Pai whose mission was to make worldclass education accessible and transformative. With NAAC A+ accreditation, MUJ stands as a multidisciplinary, future-focused university that blends academic excellence with innovation. Offering a wide spectrum of career-oriented programs across engineering, architecture, design, law, management, humanities, sciences, and more, MUJ is committed to nurturing well-rounded individuals prepared for the demands of a global world. The university's reputation is reinforced by national and international recognition: ranked 58th in both the University and Engineering categories by NIRF 2025 and featured in prestigious global rankings such as QS Asia (701–750 band) and Times Higher Education (1201–1500 band). Beyond academics, MUJ is known for its state-of-theart infrastructure, cutting-edge research ecosystem, and a campus built with sustainability at its core. It is the proud recipient of a 5-star GRIHA rating and the ASSOCHAM Award for Best University Campus testaments to its commitment to excellence in every dimension.

About the Department

The Department of Biotechnology & Chemical Engineering (DBCE) at Manipal University Jaipur is a dynamic center for interdisciplinary education and research. Dedicated to academic excellence and innovation, the school offers B.Tech. and doctoral programs in Biotechnology, Computer Science & Bioscience (CSB) and Chemical Engineering aimed at building robust theoretical and technical knowledge with practical skills. Through state-of-the-art laboratories, cutting-edge research facilities, and a team of experienced faculty, the department nurtures a culture of curiosity and discovery. It actively promotes research and industry collaboration, with ongoing projects in emerging fields such as Nanotechnology, Neuroscience, Biochemical Sensors, Genomics, Transcriptomics, Computational Biology, and Cancer Biology. Many of these initiatives are supported by renowned national agencies like ANRF, DST, ICMR and DBT testament to the department strong research credentials and national significance.

This hands-on workshop on offers a technical deep dive into the "Gene to Drug" pipeline, from analyzing multi-omics NGS data to designing therapeutic molecules. Participants will learn how to identify disease-relevant targets through multi-omics gene expression analysis, leveraging cutting-edge tools such as Seurat for single-cell data integration and Multi-Omics Next generation sequencing (NGS) analysis for a holistic view of multi-layered disease and patient datasets. The second part of the workshop will focus on computer-aided drug design, where attendees will gain practical experience virtual drug screening and protein design. We will cover molecular docking and perform molecular dynamics (MD) simulations with programs like GROMACS to study protein-ligand stability. Attendees will also be introduced to current methods for protein structure prediction using Al-based algorithms such as AlphaFold and RoseTTAFold and learn how to use these models for the rational design of novel protein binders and miniproteins using RFdiffusion. A dedicated session will cover the application of fundamental biostatistics principles and Python using libraries like Biopython and pandas for building robust and reproducible analysis workflows.



About ICBHT2025 Conference

The inaugural edition of the International Conference on Biotechnology in Health Science and Therapeutics (ICBHT2025), scheduled from December 28-31, 2025, at the Manipal University Jaipur. Hosted by the Department of Biotechnology and Chemical Engineering, the ICBHT2025 conference serves as a global forum dedicated to advancing biotechnology in human health, therapeutics, and sustainable development. ICBHT2025 will provide platform for innovators, researchers, clinicians, academicians, and policymakers to accelerate the translation of groundbreaking discoveries into effective clinical solutions. This conference is meticulously designed to accelerate the translation of groundbreaking discoveries into effective clinical solutions. Our dynamic program also features thought-provoking keynote lectures, plenary and panel discussions, oral and poster presentations, and dedicated sessions for young scientists. We will delve into critical themes that are shaping the future of medicine, including Infectious Disease Management, Cancer Biotechnology, Neurological and Cardiovascular Health, Precision Medicine through computational biology and omics, Regenerative Medicine, Tissue Engineering, and Environmental Biotechnology with a focus on sustainability and intellectual property rights (IPR). In addition, ICBHT2025 offers a unique and invaluable one-day hands-on workshop on Integrative Approaches in Biomedical Research: From Multi-Omics Gene

Expression Analysis to Computer-Aided Drug Design. This workshop will enable researchers with modern-day health informatics tools and techniques, empowering them to navigate the complexities of contemporary biomedical data. A core tenet of ICBHT2025 is its alignment with the United Nations Sustainable Development Goals (SDGs), specifically focusing on SDG 3 (Good Health and Well-Being), SDG 4 (Quality Education), SDG 6 (Clean Water and Sanitation), SDG 9 (Industry, Innovation, and Infrastructure), SDG 13 (Climate Action), and SDG 17 (Partnerships for the Goals). This unique framework emphasizes both scientific excellence and our collective societal responsibility to leverage biotechnology for a healthier, more sustainable world. The conference outcomes are expected to foster new research collaborations, translational pathways from bench to bedside, and impactful scientific publications. Accepted abstracts will be published in the conference proceedings (with an ISBN), and selected high-quality papers may be considered for reputed journals and book series after peer review. In addition, participants will have the opportunity to explore Jaipur's rich cultural heritage, as a Heritage Visit is being organized as a part of the conference, making ICBHT2025 a unique blend of academic rigor and cultural experience. Contribute to global innovation and accelerate the future of medicine, Join us at ICBHT2025 at Jaipur, INDIA.



Conference Tracks

Track 1: Innovations in Infectious Disease Management

- · Rapid diagnostics and point-of-care testing
- Vaccine development and production
- Antimicrobial drug discovery
- Genetic engineering for disease resistance

Track 2: Biotechnology in Cancer Therapeutics & Diagnostics

- Gene and cell therapies (CAR-T, gene editing)
- · Liquid biopsies and molecular diagnostics
- Immunotherapy and targeted therapies
- Cancer nanomedicine

Track 3: Biotechnology for Neurological & Cardiovascular Health

- Gene and cell therapies for neurodegenerative disorders
- Biomarkers for early disease detection
- Regenerative approaches for heart tissue
- Novel drug delivery systems for the central nervous system

Track 4: Computational Biology & Omics for Precision Medicine

- Genomics and Transcriptomics in Disease
- Bioinformatics and Data Integration
- · Computational Modeling and Systems Biology
- Artificial Intelligence and Machine Learning in Biology

Track 5: Regenerative Medicine & Tissue Engineering

- Stem cell research and therapy
- 3D bioprinting and biofabrication
- · Biomaterials and scaffolds
- Clinical trials in regenerative medicine

Track 6: Environmental Biotechnology, Human Health, and IPR

- · Ecotoxicology, Emerging pollutants and human health risks
- Environmental remediation approaches for waste management
- Climate change mitigation and health
- Intellectual property rights (IPR) with environmental and health-conscious green manufacturing



given

to the first, Second, & third place winner in all categories.

Registration Details

Type of Registration	Student/ Postdoctoral Fellow/ Research Staff	Faculty/Scientist/ Industry	International Delegates
Early Registration (Until 30 th November 2025)			
Conference	2500+GST	4500+GST	\$100 USD
Workshop+ Conference	3000+GST	5000+GST	\$120 USD
Late Registration (After 30 th November 2025)			
Conference	3000+GST	5500+GST	\$120 USD
Workshop+ Conference	3500+GST	6500+GST	\$140 USD

Jaipur Heritage Visit: A heritage visit will be organized as part of the conference. Participants who wish to join are requested to inform at the time of registration.

Accommodation: The organizers will arrange accommodation only for delegates & invited speakers in Manipal University Guest house. Other Participants will be provided hostels upon prior request. However, travel and hostel accommodation charges will be borne by the participants.

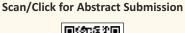
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For International





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For Registration: https://forms.gle/5NPu8SLWSMFr3gfw5

For Abstract Submission:

https://cmt3.research.microsoft.com/ICBHST2025

Important Dates

Deadline for Abstract Submission

31st October 2025 15th November 2025

30th November 2025

Abstract Acceptance Notification

15th November 2025

20th November 2025

05th December 2025

Early Bird Registration Submission of full length paper Last date of registration

30th November 2025 20th December 2025 20th December 2025

Call for Papers

All submitted abstracts will undergo a review process by a panel of experts. The participants are requested to submit the structured abstract in prescribed format at the conference website.

Partnering Journals and Book Series for ICBHST2025 conference:

- 1. Research Journal of Pharmacy and Technology (RJPT) by A and V Publication
- 2. Water Science and Technology Library by Springer
- 2. Advancement in Environmental Pollution Research & Sustainable Societies, NIPA, India

Note: All accepted abstracts will be published in the conference proceedings with an ISBN. Based on the quality and relevance of the abstract submissions, the review panel may recommend suitable full-length paper for consideration in the above-mentioned journals and book series. However, the final acceptance for publication will solely depend on the independent peer-review process of the respective journal and book series. Additionally, more Scopus-indexed journals are in the process of being under negotiation and will be announced soon.

Publication Partners Scopus









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Member
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Member



Jaipur Heritage Visit

