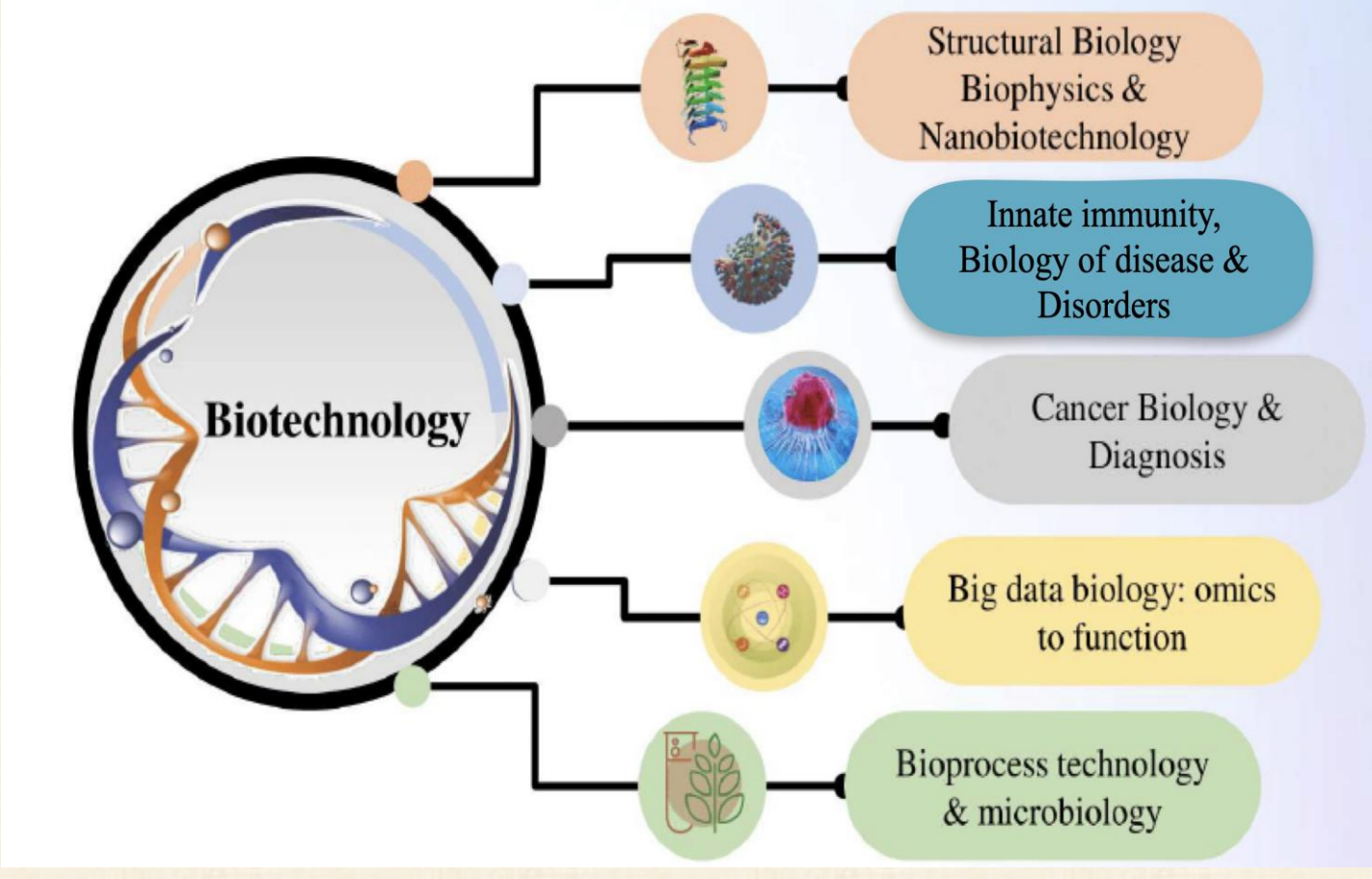
Department of Biotechnology

Indian Institute of Technology Hyderabad

भारतीय प्रौद्योगिकी संस्थान हैदराबाद
Indian Institute of Technology Hyderabad

Ph.D. Admissions Brochure [July 2026]

Website: https://biotech.iith.ac.in/



Department of Biotechnology

The Department of Biotechnology, established in 2010, offers outstanding research programs in the frontier areas of biotechnology encompassing both applied and basic research spanning various experimental and computational frontiers. Research activities in the department are funded by national agencies such as DBT, DST, ICMR, CSIR, etc.

The mission of the Ph.D. program is to develop a new generation of scientific leaders with scientific vigor, critical thinking, ethics, and multitasking managerial skills to thrive in the fast-paced technology-driven industry and academia. We foster innovations through cutting-edge technologies and interdisciplinary research.

For more details visit: https://biotech.iith.ac.in/

Research areas open for the Jan 2026 round

Applications are invited from suitably qualified & motivated candidates for admission to the Ph.D. program in the Department of Biotechnology, IITH, in the following research areas:

Computational Labs

Research Areas	Faculty
Computational microbial 'omics'; Biomolecular interaction prediction using machine learning	**Prof. Thenmalarchelvi Rathinavelan** https://people.iith.ac.in/tr/Home.html
Computational genomics and transcriptomics, AI/ML and deep-learning for precision medicine, RadioGenomics, predictive biomarkers in cancer, neurodegenerative disorders, epigenomics, Phrmacogenomics, Medical image analysis, development of computational tools/applications.	**Dr. Rahul Kumar** https://people.iith.ac.in/rahulk/index.html
Computational biology, bioinformatics, Transcriptomics / proteomics / metabolomics data-driven & machine-learning models, Biological networks, Metabolism, Parasitology & Immunology	**Dr. Abhishek Subramanian** https://sites.google.com/bt.iith.ac.in/comp-bio-abhishek/home
Microbial genomics, Evolutionary biology, Microbial diversity, Plant Genomics, Plant metagenomics, Microbiome, Plant-microbe interactions, Computational biology, prediction webservers.	**Dr. Gaurav Sharma** https://sites.google.com/view/sharmaglab/
AI/ML analysis of multi-omics datasets of Indian Cancer Patients	**Dr. Ashish Misra** https://cgrblab.bt.iith.ac.in/

Research areas open for the Jan 2026 round

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Experimental Labs

Research Areas	Faculty
Molecular characterization of DNA alkylation damage repair enzymes, Role of DNA alkylation in cancer, autoimmune and inflammatory diseases.	**Prof. Anindya Roy** https://sites.google.com/iith.ac.in/arlab
Investigating disease/toxicity mechanisms using in-vivo zebrafish models. Structure-function relationship of membrane protein using patch-clamp electrophysiology.	**Prof. Anamika Bhargava** https://csl.biotech.iith.ac.in/
Characterization of cancer drug targets, Epigenetics, and DNA repair, Drug/inhibitor design, X-ray crystallography, Biophysics and biochemistry, Computational biology, Liquid-liquid phase separation, and enzyme engineering/design.	**Prof. Rajakumara Eerappa** https://rajakumarae.wixsite.com/rajlab-bt--iith
Circadian rhythm, Neurobiology of aging, Cancers, Mental health, Chronomedicine-novel therapeutics, Integrated multi-omics, Mass spectrometry.	**Dr. Sandipan Ray** https://www.circadianlab-iith.com/
Chromosome dynamics and genetic disorders, single-molecule imaging, chromatin remodeling, cancer therapy target aurora kinase B, cell division, gene regulation, advanced fluorescence microscopy.	**Dr. Gunjan Mehta** https://www.mehtalab-iith.com/
Cancer genomics and biomarker discovery, 3D cancer model development, Drug resistance and repurposing, Long noncoding RNAs, Alternative splicing and RNA metabolism in cancer, Protein Engineering.	**Dr. Ashish Misra** https://cgrblab.bt.iith.ac.in/
Protein Interaction Analysis lab: Human-Virus protein-protein interaction.	**Dr. N.K. Raghavendra** https://sites.google.com/iith.ac.in/pial/home
Exploring the molecular mechanisms of human diseases: Antimicrobial resistance, neurodegenerative disorders, intrinsically disordered proteins in cancer, and small-molecule ligand screening	**Prof. Thenmalarchelvi Rathinavelan** https://people.iith.ac.in/tr/Home.html

Category of Admission & Minimum Eligibility Criteria

Category	Entry Qualification	CGPA Requirement
1. Full-time Institute Fellowship (funded by MoE)	Any candidates with MTech can apply. Any candidates with an MSc/BTech/BE/MBBS (With GATE/NET) can also apply	**(i) MTech/MSc** GN: 6 CGPA (60%, First-class) OBC: 90% of GN cut-off SC/ST: 85% of GN cut-off **(ii) Any 4 Year UG degree** from CFIs (GATE is not mandatory)/non-CFIs: 8 CGPA
2. Fellowship from external funding agency	MTech/MSc/BTech/BE candidates with a valid CSIR-NET-JRF/UGC-NET-JRF/ICMR-JRF/DBT-JRF (Category-I) award or any other equivalent national-level qualification for research fellowship tenable at IITH (e.g., DST-INSPIRE fellowship)	**(i) MTech/MSc (Any 2-year Masters degree)/ Any 4-year UG degree** GN: 6 CGPA (60%, First-class) OBC: 90% of GN cut-off SC/ST: 85% of GN cut-off
3. **Special PhD (High CGPA)** [Special Fellowship of Rs. 80,000/pm for 4 years]	BE/BTech/BS from IITs/ IISc/IISERs/MBBS from AIIMS	9 CGPA

For any applicants Degree should be in Life Sciences/ Biotechnology/ Medical/Physical/Chemical Sciences or closely related fields

Note: ***Prospective applicants must ensure they meet all eligibility criteria before applying. Shortlisting criteria are usually higher than the eligibility criteria mentioned above. The department reserves the right to set any cut-off criteria for shortlisting the candidates.***

Selection Procedure

- Candidates will be shortlisted according to the criteria set by a shortlisting committee and called for an interview subsequently.
- Selection to the Ph.D. program will be based on the performance in the interview(s).
- Request to change the interview date/time will not be entertained.

Interested candidates can apply online through IIT Hyderabad's website: ***http://www.iith.ac.in/phdadmissions/***

For any further information, please contact by email:
phd_biotech@iith.ac.in

Note: ***The department has the right not to select any candidate if appropriate candidates are not found.***

Career Prospects

Biotechnology/Bioinformatics Research & Teaching (Academics)

Pharmaceuticals and Healthcare Industries

Science Writers Science Communicators

Top Companies and Institutes

NIH National Institutes of Health

Indian Institute of Science भारतीय विज्ञान संस्थान

Pfizer

MERCK

Roche

Harvard University

ThermoFisher Scientific

BIO-RAD

NOVARTIS

University of Cambridge

Stanford University

gsk GlaxoSmithKline

University of Oxford

Lilly

Massachusetts Institute of Technology