



D Y PATIL INTERNATIONAL UNIVERSITY, AKURDI, PUNE

School of Biosciences & Bioengineering

DEPARTMENT OF LIFE SCIENCES AND BIOTECHNOLOGY

M.SC. IN MEDICAL BIOTECHNOLOGY

Translational Medicine, Molecular Diagnostics, Genomics, and Advanced Therapeutics

★ ₹1.39 Cr ICMR Precision Oncology Project

UGC 2(f) Recognized State Private University

Approved Intake: 30 Seats

1.5 Semesters Pure Research



The Department of Life Sciences and Biotechnology at the School of Biosciences & Bioengineering (SoBB), DYPIU, Akurdi, Pune, delivers advanced postgraduate education bridging basic life sciences with clinical translational medicine and biomanufacturing. Established under Govt. of Maharashtra Act No. VI of 2018 and recognized by the UGC under Section 2(f), the department trains scientific leaders who pioneer precision molecular diagnostics, recombinant biologics, and targeted cancer therapeutics.

Visionary University Leadership



Hon. Dr. D. Y. Patil

Founder President, DYP Group
Former Governor (Bihar, WB)



Hon. Dr. Sanjay D. Patil

Chancellor, DYPIU Pune
President, DYP Pratishthan



Hon. Shri Tejas S. Patil

Trustee
DYPIU Pune



Prof. (Dr.) Manish Bhalla

Vice Chancellor, DYPIU Pune
FRSC (Royal Society of Chem)

Institutional Vision & Mission

Vision

Creating technologically equipped action leaders of Future in a wide range of spheres by providing best-quality experiential training and value-based education.

Mission

To impart futuristic transformative education in medical biotechnology through experiential learning, translational research, and cutting-edge clinical diagnostics.

Programme Structure & Intake (2026–27)

Degree Awarded	Master of Science (M.Sc.) in Medical Biotechnology
Department	Department of Life Sciences and Biotechnology (HoD: Dr. Parth Sarthi Sen Gupta)
Duration	2 Years (4 Semesters) Full-Time Optional Integrated Ph.D. Pathway
Approved Intake	30 Seats (Guaranteed individual workstation & cleanroom access)
Eligibility	Bachelor's in Biotechnology / Biosciences / Biochem / Microbio / Life Sciences / B.Pharm (min 50% / 45% reserved).
Tuition Fee	Rs. 70,000/- per Semester (Rs. 1,40,000/- p.a.) Caution Deposit: Rs. 10,000/-
Fellowships	Merit-based Teaching Assistantships (₹5,400 to ₹20,000 / month) for eligible scholars.

Academic & Executive Leadership Desk



Dr. Anupama V Patil
Dean, Faculty of Engg. & Tech.

"Our focus is on building strong fundamentals while encouraging hands-on learning, modern laboratories, innovation, and interdisciplinary thinking."



Prof. (Dr.) Ramendra Pati Pandey
Deputy Dean (R&D) & Director, SoBB

"With 1.5 semesters dedicated purely to research, our postgraduate scholars author peer-reviewed manuscripts and graduate publication-ready."



Dr. Parth Sarthi Sen Gupta, Ph.D.
Head, Life Sciences & Biotech

"Our scholars master molecular diagnostics, mammalian cell culture cleanrooms, and biomarker validation under active funded research grants."

Core Academic & Research Pillars

Translational Oncology

Molecular mechanisms of carcinogenesis, ATAD2 epigenetic targeting, biomarker identification, and targeted drug assays.

Molecular Diagnostics

Real-time qPCR assays, ELISA platforms, STR genotyping, liquid biopsy methodologies, and infectious disease diagnostics.

Biologics & Biosimilars

Mammalian cell line engineering, recombinant monoclonal antibodies, upstream bioreactor culture, and downstream purification.

World-Class Laboratory Infrastructure



Cell Culture Cleanroom: Class 10,000 facility with Biosafety Cabinets & inverted microscopy.



Molecular Diagnostics Suite: Student conducting real-time diagnostic assays.

Dedicated Postgraduate Research Laboratories

Cell Culture Cleanroom

Class II Biosafety Hoods & CO₂ incubators for mammalian cell lines.

Molecular Diagnostics

Real-time qPCR, thermal cyclers, and gel documentation suites.

Analytical Biochemistry

UV-Vis spectrophotometers, ELISA readers, and refrigerated centrifuges.

Computational Genomics

High-end Linux workstations for RNA-seq and variant analysis.

Bioprocess Engineering

Automated bioreactors for microbial and cell bioproduction.

Funded R&D Ecosystem

Over ₹2.4 Crores research base (ICMR, DST-SERB, UCOST).

- ✓ **1.5 Semesters Dedicated Research:** Hands-on dissertation and hospital/biopharma clinical internship.
- ✓ **Direct Extramural Grant Integration:** Students participate in live ICMR ₹1.39 Cr precision oncology research.

Placement & Industry Recruiter Network



Direct corporate internship and placement connections across Serum Institute, Biocon, Dr. Reddy's, Syngene, and diagnostic majors.

Student Achievements & Laurels

Research Accolades

FABA Innovation Cluster award won by M.Sc. scholar Sagar Buche; competitive admissions to premier Ph.D. institutes in India and abroad.

Publishing Output

21 postgraduate research manuscript drafts authored under SoBB's Scientific Manuscript Writing Initiative; regular contributions to *Scinion* magazine.



INNOVFEST Laurels: SoBB students winning 1st Prize at Entrepreneurship Summit in DYPIU Auditorium.



DYPIU Residency — Safe & Secure Campus Living

Comprehensive on-campus multi-storey residential towers providing a safe, secure, and modern living facility for outstation students with 24/7 security, high-speed Wi-Fi, dining hall, recreation, and medical care.

Admissions & Contact Page

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Sector 29, Nigdi Pradhikaran, Akurdi, Pune, Maharashtra – 411044

Admissions Helpline: +91 8600091180 / +91 8600091190 | Email: admission@dypiu.ac.in

Vice Chancellor: Prof. (Dr.) Manish Bhalla, FRSC (vc@dypiu.ac.in)

Dean, Faculty of Engg. & Tech.: Dr. Anupama V Patil (anupama.patil@dypiu.ac.in)

Deputy Dean (R&D) & Director, SoBB: Prof. (Dr.) Ramendra Pati Pandey (dean.sobb@dypiu.ac.in)

Head, Life Sciences & Biotech: Dr. Parth Sarthi Sen Gupta (parth.gupta@dypiu.ac.in)

Official Web: www.dypiu.ac.in/msc-medical-biotechnology



SCAN TO APPLY