UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE MEDICAL BIOTECHNOLOGY PROGRAM ROCKFORD

Achieve a state-of-the-art education focused on the scientific techniques and disciplines used in the medical biotechnology industry.

PROGRAM OVERVIEW

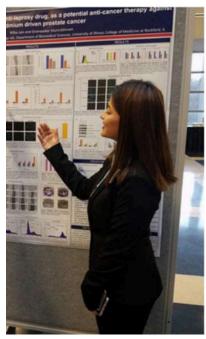


Degree candidates will acquire a versatile skill set, encompassing research, analytical, communication, and business expertise, while gaining a comprehensive understanding of biotechnology's impact on society and the ethical and regulatory frameworks guiding the field. Leveraging the exceptional resources of the University of Illinois, the program is delivered by a distinguished faculty comprising leading academic scientists, industry professionals, and medical experts, offering an unparalleled blend of theoretical knowledge and realworld application.

Situated on Rockford's picturesque 20-acre campus, the program features small class sizes and flexible schedules, fostering an engaging and personalized learning environment designed to meet the needs of ambitious students and dedicated faculty alike.

CURRICULUM OVERVIEW

In the first year of the program, students will engage in foundational courses including Molecular Biology, Immunology, Protein Biochemistry, Bioethics, Biostatistics, and Cell Biology, alongside a selection of elective subjects tailored to their interests. These electives provide an opportunity to deepen both theoretical knowledge and hands-on experience in key biotechnology techniques and processes. In the second year, students will specialize further, with coursework and research projects aligned to their chosen track, allowing for a personalized academic and professional path.





ADMISSION REQUIREMENTS



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Applicants to the master's in medical biotechnology program must:

- Meet the admission requirements of the UIC Graduate College.
- Have completed a baccalaureate degree or its equivalent in a science or engineering-related field from an accredited college or university, except in special cases.
- Have taken and completed academic coursework in college mathematics, general biology, general chemistry, or equivalent engineering courses.
- Have a 3.00-grade point average (A=4.00) for the final 60 semesters (90 quarters) hours of undergraduate study.

Applicants are evaluated based on academic performance, recommendation letters, Statement of Purpose (SOP), and other relevant qualifications. The GRE is no longer a requirement; however, in certain cases, individuals who can demonstrate their suitability for the program through additional evidence may be considered for admission.

Application information can be found at https://applygrad.uic.edu/portal/programs

HOW TO APPLY?

Submit your Online Application at https://applygrad.uic.edu/apply/

Pay the \$70.00 Application Fee (non-refundable).

To submit your application, you must name 3 recommenders (name and email ID) and upload academic credentials (mark sheets/transcripts, Degree Certificate, or Provisional Degree Certificate if you have graduated). All other documents (Resume, Personal Statement) can be uploaded later.

DEADLINE : For Fall 2025 admission, the deadline to submit the application:

Feb 15th, 2025 (International students) May 15th, 2025 (Domestic students)

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PROGRAM STRUCTURE

Track Requirement	Research Track	Course-work- only track	Course-work with internship track
Core Courses	20 Hours	20 Hours	20 Hours
Electives	6 Hours	14 Hours	6 Hours
Master's research Program	8	N/A	N/A
Internship (600 hours, 15 week, FT)	N/A	N/A	8
Total Credit Hours	34	34	34

PROGRAM COST

The minimum total cost for completing the degree program is approximately \$50,000 for out-of-state and international students and \$31,000 for in-state students, based on a course load of 11 credits per semester. Please note that this represents the minimum cost, and the actual cost may vary depending on the distribution of credits chosen.



CURRICULUM

Our program aims to produce technically competent graduates and as such our courses are planned with sufficient laboratory components. Upon completion, students will gain excellent technical training in Molecular and Cellular Biology, Protein Biochemistry, and Immunology.

Core and elective courses with lab components	Credit hours of laboratory components	
MBT 504 - Principle and Techniques in Protein Biochemistry	1 credit (3 hours per week)	
MBT 505 - Principle and Techniques in Molecular Biology	1 credit (3 hours per week)	
MBT 506 - Principle and Techniques in Immunology	1 credit (3 hours per week)	
MBT 511 - Statistics for Biotechnological Research	1 credit (2 hours per week)	
MBT 521 - Techniques and Processes in Medical Biotechnology	2 credits (6 hours per week)	
MBT 528 - Basic Bioinformatics	1 credit (2 hours per week)	
MBT 529 - Introduction to Flow Cytometry	1 credit (3 hours per week)	
MBT 530 - Recombinant DNA Technology	2 credits (6 hours per week)	
MBT 538 - Laboratory Animals Use and Care	1 credit (2 hours per week)	
MBT 594 - Cell-Based Assay	2 credit (6 hours per week)	

Where our 2023 & 2024 graduates have been placed.

- Senior Research Associate, Vertex Pharmaceuticals, Cambridge, MA
- Research Associate, Beth Israel Deaconess Medical Center, Boston, MA
- Scientist II, Analytical Development, Eurofins, Boston, MA
- Research Associate, Dana Faber Cancer Institute, Boston, MA
- Research Assistant, Brigham Young Women's Hospital, Boston, MA
- Research Associate, Generate : BioMedicines, Cambridge, MA
- Research Associate, CRISPR Therapeutics, Cambridge, MA
- Research Associate, Oddity Labs, Cambridge, MA
- Research Associate, Corvus Pharmaceutical, Burlingame, CA
- Research Associate, Arc Institute, Palo Alto, CA
- Research Associate, Mammoth Biosciences, Brisbane, CA
- MCS Associate, Amgen, Thousand Oaks, CA
- Associate Scientist, Amgen, Thousand Oaks, CA
- Scientist, ARC Institute, Palo Alto, CA
- Research Associate, Celltheon Corp, Fremont, CA
- Research Associate, St Jude's Children's Hospital, Nashville, TN
- Histotechnologist, Vanderbilt University, Nashville, TN
- Research Technologist, Vanderbilt University, Knoxville, TN (2 position)
- Clinical Laboratory Operator II, Natera Inc, Austin, TX
- Research Assistant, Baylor College of Medicine, Houston, TX
- Research Associate, University of Texas Medical Branch, Galveston, TX
- Associate Scientist II, Alexion Pharmaceuticals, New Haven, CT
- Cellular Biologist, The Jackson Labs, Hartford, CT
- Research Associate, Enceladus Bio, Manhattan, NYC, NY
- Associate Researcher, Icahn School of Medicine at Mt Sinai , New York, NY
- Analytical Development Associate, Quagen Pharmaceuticals, West Caldwell, NJ
- Scientist II , Eurofins Scientific, Columbia, MO
- Lab Associate III, Quest Diagnostics, Cleveland, OH
- Research Technician, Emory University, Atlanta, GA
- Researcher, University of Wisconsin, Madison, WI
- Research Specialist, **University of Wisconsin**, Milwaukee, WI
- Clinical Research Coordinator, Mercy Health, Rockford IL
- Scientist, AbbVie, North Chicago, IL
- Senior Research Associate, AbbVie, North Chicago, IL
- Research Associate, Flashpoint Therapeutics, Evanston, IL
- Research Technologist, Northwestern University, Evanston, IL (2 positions)
- Research Specialist, **University of Illinois at Chicago**, Chicago, IL
- Research Specialist, University of Illinois College of Medicine, Peoria, IL
- PhD, Southern Illinois University, Carbondale, IL
- MD Program, Midwestern University, Phoenix, AZ

UI

EMPLOYERS



AbbVie, Worchester, MA

Arbor Biotechnologies, Cambridge, MA

Ascidian Therapeutics, Boston, MA

Biogen, Cambridge, MA

BioNTech, Cambridge, MA

Boston Scientific, Raynham, MA

City Therapeutics, Cambridge, MA

CRISPR Therapeutics, Cambridge, MA

Dicerna Theraputics, Boston, MA, now under Novo Nordisk

Dyne Theraputics, Boston, MA

Editas Medicine, Cambridge, MA

Elicio Therapeutics, Cambridge, MA

Generate Biomedicines, Cambridge, MA

MASSACHUSETTS

Intellia Therapeutics, Cambridge, MA

HifiBio Therapeutics, Cambridge, MA

Moderna, Cambridge, MA

Nvelop Therapeutics, Cambridge, MA

Novartis (NIBR), Cambridge, MA

Oddity Labs, Cambridge, MA

PharmaEssentia Innovation Res. Center, Cambridge, MA

ROME Therapeutics, Boston, MA

Sana Biotechnology, Cambridge, MA

SalioGen Therapeutics, Natick, MA

Tango Therapeutics, Cambridge, MA

Tessera Therapeutics, Cambridge MA

Thymmune Therapeutics, Cambridge, MA

Vertex Pharmaceuticals, Cambridge, MA Adicet Bio, Mountain View, CA

Alector, South San Francisco, CA

Amgen, San Francisco Bay Area, CA

BioMarin, San Rafael, CA

BD, San Jose, CA

Bristol Meyer Squibb, Redwood City, CA

Celltheon Corp., Union City, CA

Corvus Pharmaceuticals, Burlingame, CA

cTRL Therapeutics, San Francisco, CA

CytomX Therapeutics, SF, CA

CALIFORNIA

Genentech, South SF, CA

GigaGen Inc., San Carlos, CA

IGM Biosciences, Mountain View, CA

Kezar Life Sciences, South SF, CA

Kite Pharmaceuticals, Santa Monica, CA

Mammoth Biosciences, Brisbane, CA

Nurix Therapeutics, South SF, CA

ThinkCyte, San Carlos, CA

Sartorius, Los Angeles, CA

S2 genomics, San Francisco, CA

Tempest Therapeutics, Brisbane, CA

EMPLOYERS



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	AbbVie Inc. Greater Chicago Area, IL
ILLINOIS	Abbott, Greater Chicago Area, IL
	Asahi Kasei, Glenview, IL
	Belay Diagnostics, Chicago, IL
	Biosense Webster, Danvers, IL
	Entegris, Bartlett, IL
	Medline Industries, Greater Chicago Area, IL
	PCI Pharma Services, Rockford, IL
	Pfizer, Vernon Hill, IL
	Thermo Fisher Scientific, Rockford, IL
WISCONSIN	Aldevron, Madison, WI
	IONIS Pharmaceuticals, Madison, WI
	Arrowhead Pharmaceuticals, Madison, WI
	Catalent Pharma Solutions, Madison, WI
	LabCorp, Madison, WI
	Bristol Myers Squibbs, East Syracuse, NY
NY	Enceladus Bio, Manhattan, NY
	Regeneron, Tarrytown, NY
NJ	Catalent Pharma Solutions, Princeton, NJ
	Quagen Pharmaceuticalls, West Caldwell, NJ
	Life Edit Therapeutics, Cary, NC
NC	Novartis Gene Therapies, DRCH Area, NC
МО	Impetus Agriculture, St Louis, MO
MD	Biomarker Strategies, LLC., Gaithersburg, MD
СТ	Alexion Pharmaceuticals, New Haven, CT
	The Jackson Labs, Hartford, CT



Academic/ Research Institutes		
Beth Israel Deaconess Medical Center	Children's Mercy Kansas City	
Dana Faber Cancer Center	Banner Tucson Medical Center	
Wyss Institute	University of California, Davis	
Children's National Hospital	Vanderbilt University Medical Center	
St Jude's Children Research Hospital	University of Texas Medical Branch	
Scripps Research Institute	Baylor College of Medicine	
MD Anderson Cancer center	University of Wisconsin, Madison	
Fred Hutchinson Cancer Research Center	University of Wisconsin, Milwaukee	
Seattle Children's Research Institute	Northwestern University	
Arc Institute	University of Illinois at Chicago	





Making Cancer History®



Baylor College of Medicine

VANDERBILT VANDERBILT





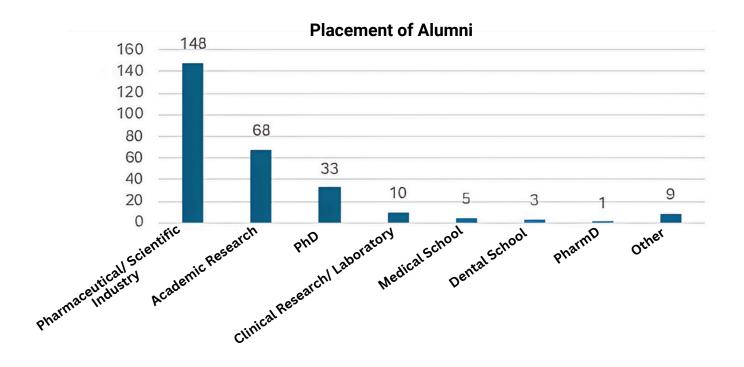
Memorial Sloan Kettering Cancer Center

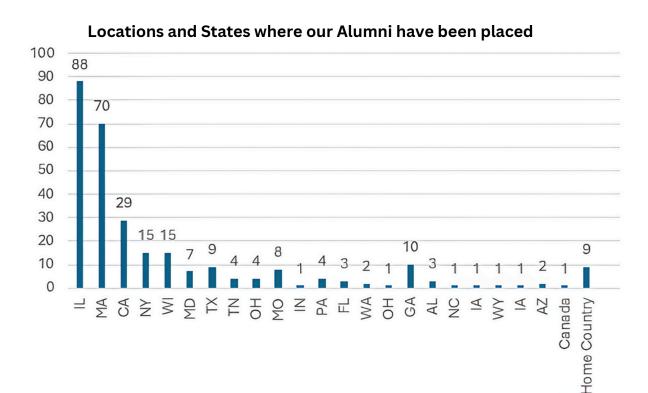
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UIC

Where our 2023 & 2024 graduates have been placed.





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UIC



EVENTS GALLERY

Graduation of class of 24'



Six flags outing 2024



Fall orientation 2024



Diwali 2024



Winter formals 2024



Volcano falls visit 2023



Medical Biotechnology Program Directory



FACULTIES	MAIL ID	LINK
<u>ALAM, MOHAMMAD FAZLE</u> RESEARCH SCIENTIST, BIOPRINTING	MFALAM@UIC.EDU	HTTPS://ROCKFORD.MEDICI NE.UIC.EDU/PROFILES/ALA M-MOHAMMAD/
<u>BIJUKUMAR, DIVYA RANI</u> ASSISTANT PROFESSOR (RT)	DRBIJU2@UIC.EDU	HTTPS://ROCKFORD.MEDICI NE.UIC.EDU/PROFILES/DIVY A-RANI-BIJUKUMAR/
<u>BERNS, JOE</u> PROGRAM/STUDENT ADVISOR	JBERNS@UIC.EDU	HTTPS://ROCKFORD.MEDICI NE.UIC.EDU/PROFILES/JOE- BERNS/
<u>BUTCHER, TARUN</u> ADMINISTRATIVE AIDE	TBUTCHER@UIC.EDU	HTTPS://ROCKFORD.MEDICI NE.UIC.EDU/PROFILES/BUT CHER-TARUN/
<u>CHEN, AOSHUANG</u> ASSOCIATE PROFESSOR (RT)	<u>AOSHUANG@UIC.EDU</u>	HTTPS://ROCKFORD.MEDICI NE.UIC.EDU/PROFILES/AOS HUANG-CHEN/
<u>KALYANASUNDARAM,</u> <u>RAMASWAMY</u> DEPARTMENT HEAD, PROFESSOR OF MICROBIOLOGY AND IMMUNOLOGY	<u>RAMSWAMY@UIC.EDU</u>	HTTPS://ROCKFORD.MEDICI NE.UIC.EDU/PROFILES/RAM ASWAMY- KALYANASUNDARAM/
<u>LI, XUE-JUN (JUNE)</u> PROFESSOR (RT)	<u>XJLI23@UIC.EDU</u>	HTTPS://ROCKFORD.MEDICI NE.UIC.EDU/PROFILES/XUE- JUN-JUNE-LI/
MATHEW THOPPIL, MATHEW DIRECTOR OF FACULTY RESEARCH	MTMATHEW@UIC.EDU	HTTPS://ROCKFORD.MEDICI NE.UIC.EDU/PROFILES/MAT HEW-MATHEW-THOPPIL/

Medical Biotechnology Program Directory



IMPORTANT INFORMATION!

۹ Application deadline ×

Fall 2025 -Feb 15th, 2025 (F1 Visa holders) May 15th, 2025 (Domestic)

Spring 2026-July 15th, 2025 (F1 Visa holders) Nov. 1st, 2025 (Domestic)

Contact Information Program Director: mbt@uic.edu

For instructions on how to complete application, refer to the *MBT Application FAQs*.