

Molecular Biotechnology | Master's Degree Program

Are you passionate about medical and molecular biotechnological research?

You are looking for a position with major responsibilities in vaccine and drug development or in stem cell research. You are curious and determined to find the best solutions to problems. In human medical-biotechnological development, you want to be at the forefront. You are a team player and are looking to solve challenging problems. You want to work in a multicultural environment with English as the working language.

Your world is medical and pharmaceutical biotechnology

The English-language master's degree program in Molecular Biotechnology is unique in Austria: the emphases of the master's degree program are Molecular Medicine, Human Genetics, Drug Discovery and Immunology. You will learn about the hot topics of big data, personalized data analysis and data security. You will investigate the causes of diseases at the cellular level and learn how to develop new treatments and therapies for them. Starting in the winter semester 2022/23, you will be studying in the newly constructed building at the main campus with state-of-the-art lecture rooms and excellently equipped laboratories. The degree program is part of a large national and international network at university level.

Biotechnologists - Specialized in Research and Innovation

As a graduate you are mainly involved in medical and pharmaceutical research and development. You also possess the necessary entrepreneurial know-how to ground your own start-up or you may decide to study for a doctorate at an Austrian or an international university.



Overview



4 Semesters
120 ECTS



Master of Science
in Natural Sciences (MSc)



Organizational form
Full-time



40
Study places



Main Campus
1100 Vienna, as of winter
semester 2022/23

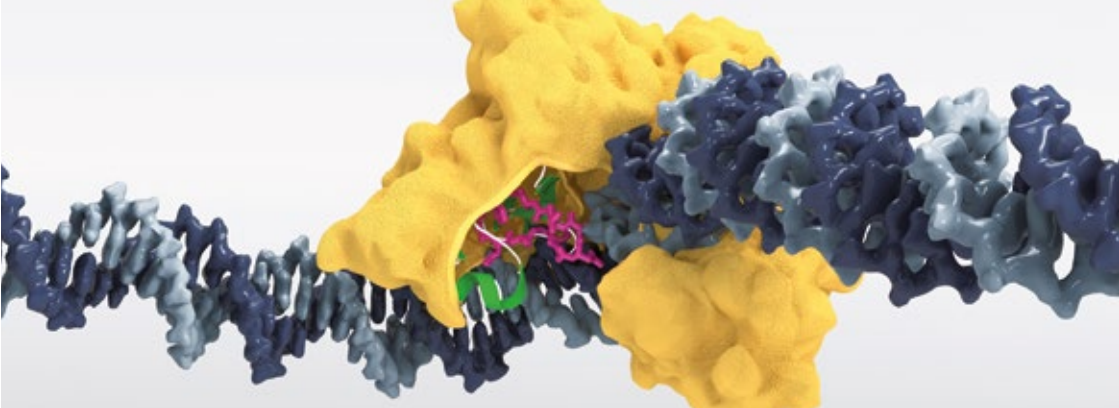


Language of instruction
English



Tuition fee/semester
€ 363.36¹ + ÖH premium + contribution
¹ maximum € 727 for third-country students

Head of Degree Program: Dr. Beatrix Kuen-Krismer



Curriculum

	LECTURE	SCH	ECTS
1st SEMESTER 30 ECTS	Bioethics IC	1	1
	Bioinformatics IC	2	2
	Clinical Drug Development IC	1	1
	General Pathology LE	2	3
	Intercultural Teams in Interdisciplinary Projects IC	1	1
	Medical Genetics LE	2	2
	Medical Genetics LAB	2	2
	Molecular Genetics LE	1,5	2
	Molecular Immunology LE	2	3
	Molecular Pathology LE	2	3
	RNA LE	1	2
	RNA Analysis LAB	3	3
	Scientific Communication I IC	2	3
	Vascular Biology LE	1	2
2nd SEMESTER 30 ECTS	Biologicals LE	1	1
	Drug Screening LE	1	1
	Intellectual Property and Patent Law LE	1	1
	In silico Biology IC	3	3
	Infection Biology LE	2	2
	Innovation in Biotechnology & Start-ups IC	2	2
	Molecular Pathology LAB	3	3
	Molecular Virology LE	1	2
	Scientific Communication II IC	2	2
	Signalling Pathways LE	1	2
	Signalling Pathways LAB	3	3
	Stem Cells LE	1,5	2
	Stem Cells LAB	2,5	3
	Electives (1 ECTS of your choice)		
1. RNA SE	1	1	
2. Drug Discovery SE	1	1	
3. Molecular Immunology SE	1	1	
Electives (2 ECTS of your choice)			
1. Therapeutic Strategies LE	1	2	
2. Vaccine Development LE	1	2	

	LECTURE	SCH	ECTS
3rd SEMESTER 30 ECTS	Allergies & Autoimmune Diseases LE	1	2
	Computational Data Analysis IC	2	2
	Drug Design LE	2	2
	Gene Therapy LE	1	2
	Mass Spectrometry IC	2	2
	Master Project Seminar IC	1	1
	Molecular Immunology LAB	3	3
	Molecular Neurobiology LE	2	3
	Molecular Pharmacology IC	2	3
	Strategic Business Management IC	2	2
	Toxicology LAB	3	3
	Tumour Biology LE	2	3
	Electives (1 ECTS of your choice)		
	1. Computer-assisted Systems & Data Integrity IC	1	1
2. Pharmacovigilance & Regulatory Affairs IC	1	1	
Electives (1 ECTS of your choice)			
1. Scientific Method: Drug Discovery SE	1	1	
2. Scientific Method: Immunology SE	1	1	
4th SEM 30 ECTS	Master Exam		2
	Master Thesis		28

Abbreviations

ECTS	ECTS Credits
IC	Integrated Course
LAB	Laboratory
SE	Seminar
SCH	Semester Credit Hours
LE	Lecture

More information: www.fh-campuswien.ac.at/mb_m-en

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