



Università di Torino

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Presentazione del Corso di Laurea Magistrale in  
**Molecular Biotechnology**

12 luglio 2021



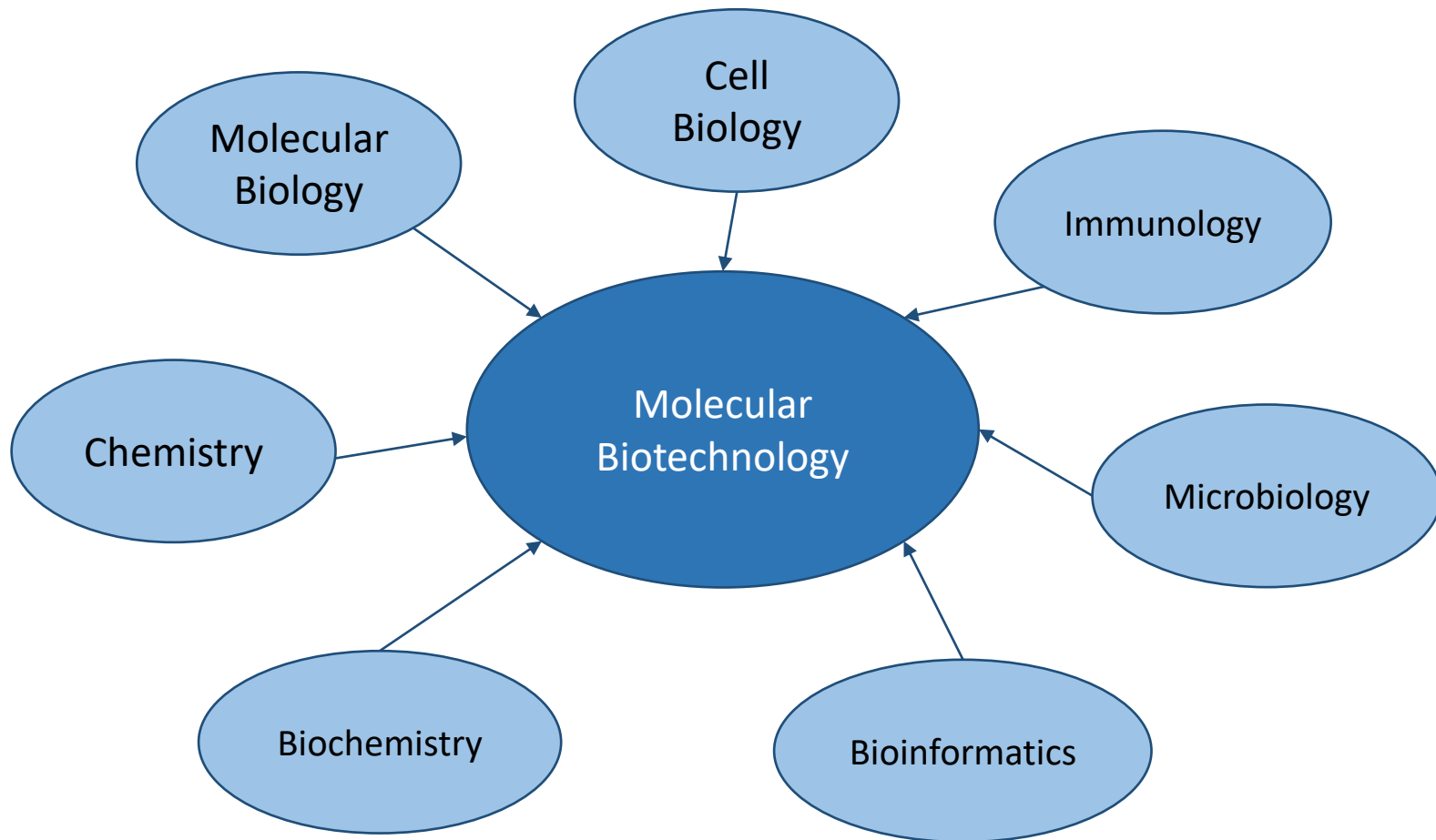
University of Torino

# Master Program in **Molecular Biotechnology**

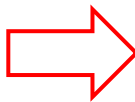
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## What is Molecular Biotechnology?

In its broadest sense, molecular biotechnology is the use of laboratory techniques to study and modify nucleic acids and proteins for applications in areas such as human and animal health, agriculture, and the environment.



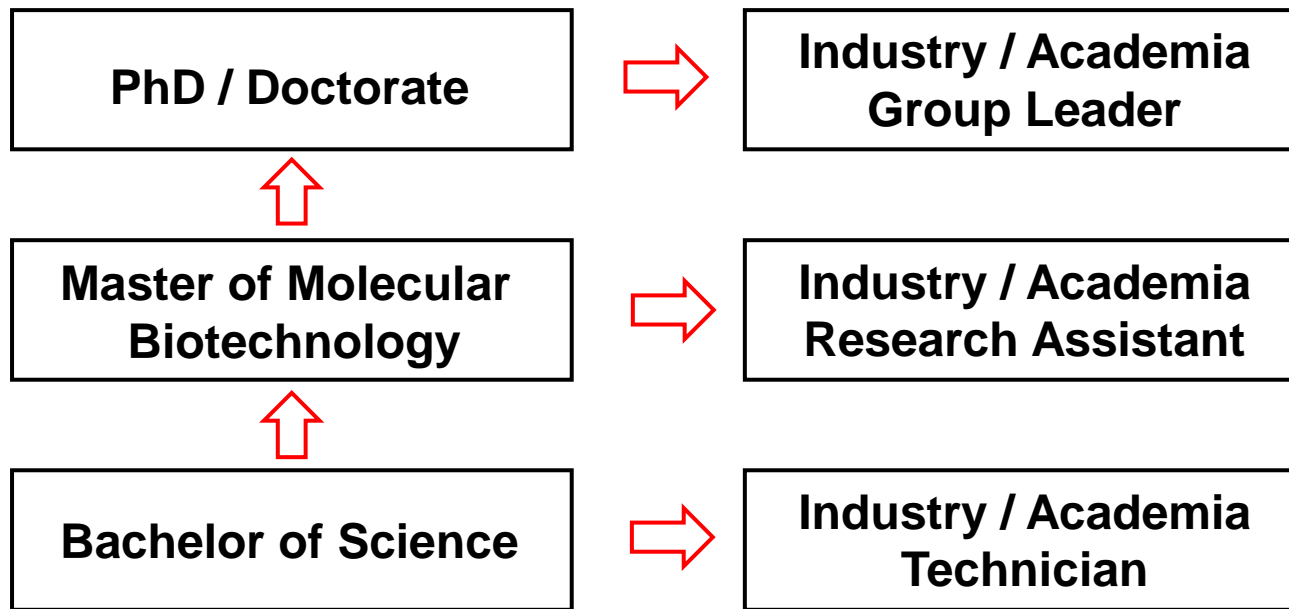
**understanding  
biological processes**



**creating a  
useful product**

The **interdisciplinary** character of the program allows students to specialize according to their interests and prepares them for a scientific career in **Life Sciences**

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# The study program in Molecular Biotechnology prepares students for a career in Life Sciences

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## **Bachelor of Science**



Students learn the basics in Biology, Chemistry, Mathematics, Statistics, Physics and Bioinformatics

## **Master of Molecular Biotechnology**



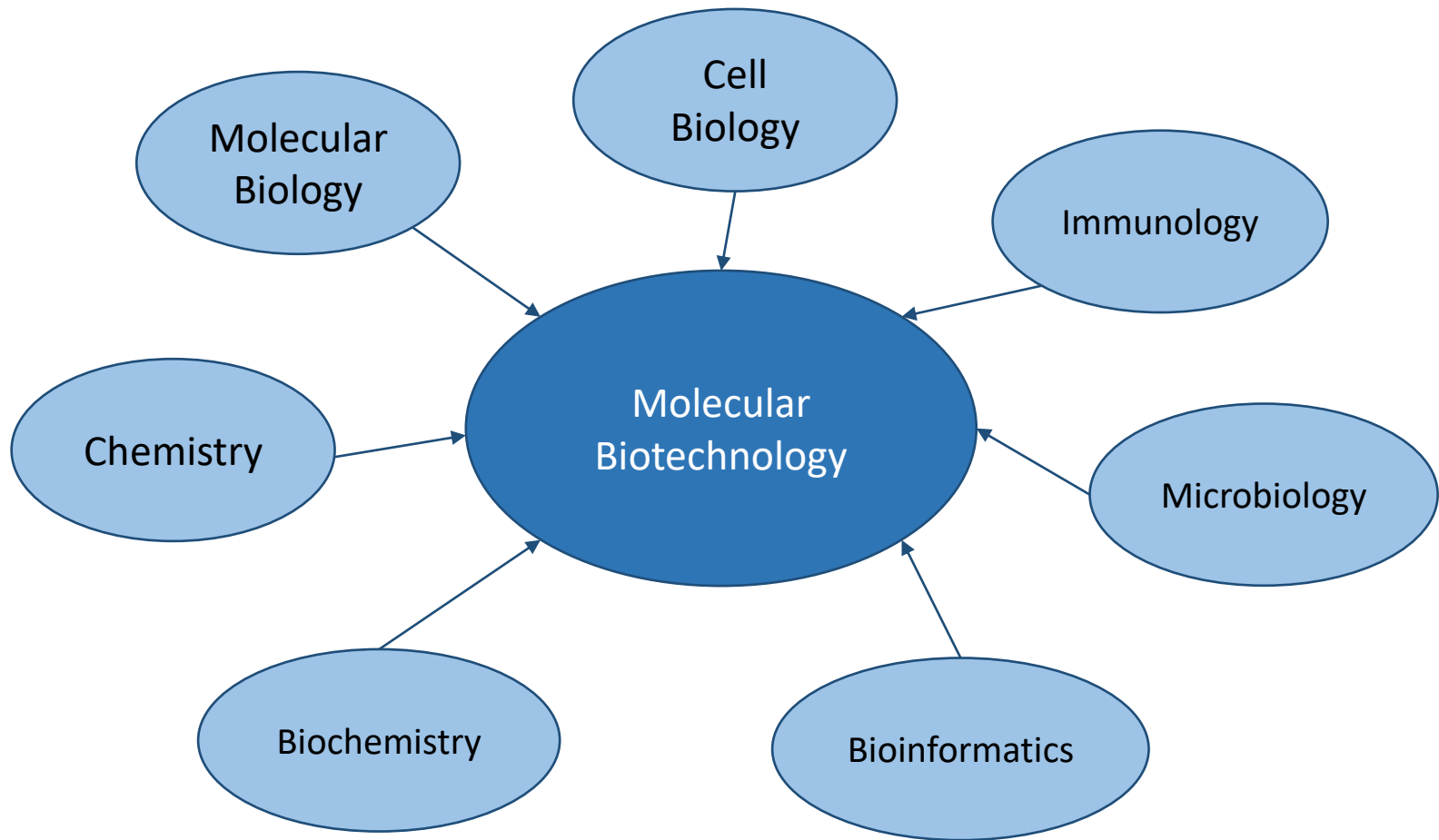
Students get to know different scientific fields and environments during their internships and get the chance to get into contact with scientists around the world.

## **PhD / Doctorate**

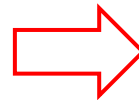


Students profit from their profound basic knowledge, their ability to think and work both interdisciplinarily and translationally as well as from their early specialization and high level of independence.



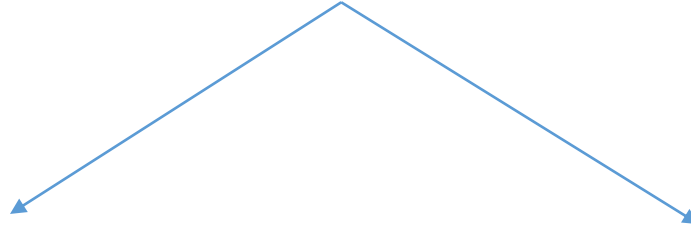


**understanding  
biological processes**



- **Creating new diagnostics tools**
- **Identifying new therapeutic targets**
- **Developing innovative therapeutic approaches**

# Master Program in Molecular Biotechnology



Translational  
Biotechnology

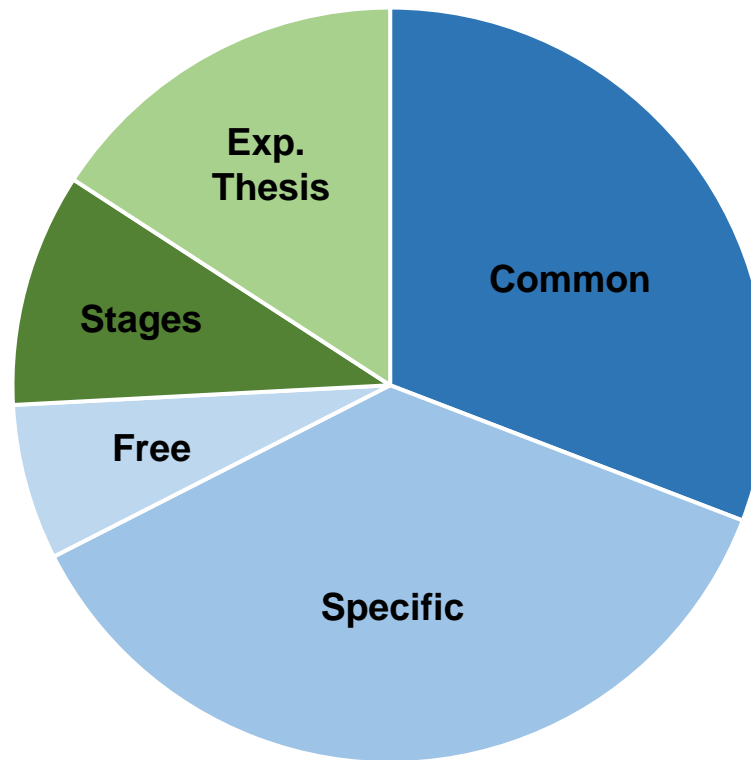
Diagnostics and  
Drug Discovery

The Program is in English  
Duration: 2 years  
ECTS: 120



# ECTS distribution

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The *Translational Biotechnology* Program focuses on the latest advances in genomics and genetic engineering in the biomedicine field with specific reference to technological aspects including next-generation sequencing, high-throughput screening, gene and cell therapy.

The *Diagnostics and Drug Discovery* Program addresses topics in the field of drug discovery and medical diagnostics with a focus on the latest advances in molecular imaging technology.

# Experimental thesis

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## Academia:

- Molecular Biotechnology Center – MBC
- Candiolo Cancer Institute – IRCCS
- Neuroscience Institute Cavalieri Ottolenghi – NICO
- CeRMS– Centro di Ricerca in Medicina Sperimentale

## Industry:

- Bioindustry Park Silvano Fumero, Colleretto Giacosa (TO) (Bracco, Merck-Serono)
- DiaSorin
- Chiesi Farmaceutici

# Internationalization

The Program is open to foreign students



The screenshot shows the homepage of the studyportals website. At the top left is the logo for studyportals, which consists of a stylized 'i' icon followed by the text 'studyportals'. To the right of the logo is a navigation menu with the following items: 'About', 'Students', 'Institutions', 'Careers', 'News & Events', and 'Intelligence'. A 'Contact' button is located in the top right corner. The main banner features a background image of a group of diverse students in front of a large, ornate building. Overlaid on this image is the text 'Education choice transparent, globally' in a large, white, sans-serif font. Below this text is a white play button icon inside a circle. Underneath the play button are two buttons: an orange one labeled 'For Students' and a blue one labeled 'For Institutions'. Below the banner, there is a section titled 'Join our mission to make study choice easier' in bold black text. This section contains two paragraphs of text. The first paragraph states: 'Every year we change the lives of millions of students, by allowing them to explore all their study options in one place.' The second paragraph states: 'Discover what the best Universities, Business Schools, Law Schools, or Language Centres have in common. In today's society the possibilities for education are increasingly global. Allow your institution to be where the global students are searching. Ensure your institution is visible and can be chosen by the right students, for the right reasons.' To the right of this text is a photograph of a man in a dark suit standing at a podium, facing a large audience in a lecture hall. At the bottom of the page, there is an orange button with the text 'Promote your courses to students worldwide'.

**studyportals**    About ▾    Students ▾    Institutions ▾    Careers ▾    News & Events ▾    Intelligence    [Contact](#)

## Education choice transparent, globally

Start course search    Promote your courses

**For Students**    **For Institutions**

### Join our mission to make study choice easier

Every year we change the lives of millions of students, by allowing them to explore all their study options in one place.

Discover what the best Universities, Business Schools, Law Schools, or Language Centres have in common. In today's society the possibilities for education are increasingly global. Allow your institution to be where the global students are searching. Ensure your institution is visible and can be chosen by the right students, for the right reasons.

**Promote your courses to students worldwide**

# International mobility

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- Erasmus program
- Agreement Double Degree: Université Grenoble Alpes, UFR de Pharmacie
- Agreement for International Academic Exchange: University of Minnesota

# Admission

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- 1. Basic computer skills** (Microsoft office, internet navigation) and a **minimum B2 English language level** under the Common European Framework of Reference for Languages (CEFR).
- 2. an Italian Bachelor Degree in either class L2 (Biotechnology) or class L13 (Biological Sciences) OR another Italian Bachelor Degree providing a solid background in in General and Inorganic Chemistry, Organic Chemistry, Biochemistry, Cell Biology, Molecular Biology and Genetics.**

The scientific background will be verified by a written test. To be admitted at the verification test, candidates must have:

•if holding an Italian Bachelor Degree, at least:

- 50 credits in one or more of the following scientific areas (SSD): BIO/01, BIO/05, BIO/06, BIO/09, BIO/10, BIO/11, BIO/13, BIO/14, BIO/16, BIO/17, BIO/18, BIO/19, CHIM/01, CHIM/02, CHIM/03, CHIM/06, CHIM/08;
- 10 credits in one or more of the following scientific areas (SSD): FIS/01-FIS/08; MAT/01-MAT/09; SEC-S/01, SEC-S/02, MED/01, INF/01.

•if holding a Degree obtained from a foreign University, an appropriate number of credits in the following subjects: Mathematics, Statistics, Physics, General and Inorganic Chemistry, Organic Chemistry, Biochemistry, Cell Biology, Molecular Biology and Genetics.

**Candidates holding an Italian Bachelor Degree in either Biotechnology (class L2) or Biological Sciences (class L13) obtained with a final score above or equal to 102/110 are exempt from the verification test.**

We accept also candidates not yet holding a Bachelor Degree at the date of application.

# Job opportunities

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Industry: Biotech Companies, Pharma,  
Chemistry

Academia

<https://www.biotechnologi.it/index.php/utili/sbocchi-occupazionali>

<http://www.biotechnologi.org/professione-biotecnologo/>

# Contacts

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