

# Master's Programme in Molecular Biology, Molecular Genetics and Biotechnology

**LUND UNIVERSITY | SWEDEN** 

- Master of Science in Molecular Biology
- 2 years, full-time, 120 ECTS credits
- Department of Biology
- Lund Campus
- Application deadline: January 2024
- Programme start: August 2024

#### **PROGRAMME OVERVIEW**

This programme connects fundamental research with its applications and integrates genetics, gene technology, cell biology, molecular biology, molecular biotechnology and bioinformatics. All these disciplines have a common basis in molecular genetics, which is the discipline that explains how the information in the genes is expressed and how it can give rise to various traits of an organism. Emphasis is also put on genetic mechanisms underlying disease, genetic mapping, molecular genetic techniques and diagnostic methods.

## Special features of the programme:

- Courses in genetics, molecular biology, molecular biotechnology and medical genetics
- Courses contain practical training in molecular biology techniques
- Includes training in the innovation process, entrepreneurship and the commercialisation of molecular biotechnology

## PROGRAMME MODULES/COURSES

#### Courses and number of credits:

**Semester 1:** Molecular Genetics of Eukaryotes (15 credits), Immunology (15 credits, elective) or Plant Function (15 credits, elective) or Molecular Microbiology (15 credits, elective) or Structural Biochemistry (15 credits, elective).

**Semester 2:** Molecular Biotechnology (15 credits), Genetic Analysis (7.5 credits), Bioinformatics (7,5 credits).

**Semester 3–4:** Immunology (15 credits, optional), MSc thesis project (30, 45 or 60 credits).

Most courses are full-time studies, and you take only one course at a time. The courses are typically teaching-intensive with lectures, seminars, theoretical and practical exercises as well as self-studies.

During one semester, you usually take two courses of 15 credits (i.e. a total of 60 credits per year).

#### **CAREER PROSPECTS**

The knowledge and skills you will gain on this programme open doors to employment within many sectors in industry, academia, and society, for example in the biotechnology or pharmaceutical industries

The programme provides you with a solid grounding for PhD studies. A majority of the students that graduate from the programme continue with PhD studies, often within the biomedical research field.

# **ENTRY REQUIREMENTS AND HOW TO APPLY**

## **Entry requirements**

A Bachelor's degree of at least 180 credits or the equivalent, of which 120 credits must be in natural science/ biomedicine/engineering, including 45 credits in molecular biology comprising genetics, cell biology and microbiology, and 30 credits in chemistry comprising biochemistry. English Level 6.

## How to apply

- **1. Apply online:** Go to <a href="www.lunduniversity.lu.se/molecu-lar-genetics-biotechnology">www.lunduniversity.lu.se/molecu-lar-genetics-biotechnology</a>. Click on "Apply" and follow the instructions for the online application at <a href="www.universityad-missions.se">www.universityad-missions.se</a>, the Swedish national application website. Rank the chosen programmes in order of preference.
- **2. Submit your supporting documents:** Check what documents you need to submit (i.e. official transcripts, degree diploma/ proof of expected graduation, translations, proof of English, passport) and how you need to submit them at <a href="https://www.universityadmissions.se">www.universityadmissions.se</a>.
- Programme-specific supporting documents: When applying for this programme, you must also submit a 'Summary Sheet' with your application. See the programme webpage for details.
- 3. Pay the application fee (when applicable).

# Selection criteria/additional info

The selection will be based on grades awarded for previous academic courses and the statement of purpose (from the applicant's 'Summary sheet').



"In one of my courses, we were divided into small groups and participated in a research project led by a professor. Through this, I gained many practical skills, good research experience and new inspiration. If you are interested in molecular biology, you can consider Lund University because they have a lot of nice facilities with experienced lecturers. The professors are very open to sharing their experience and to facilitating your own research and studies."

Margareth Sidarta from Indonesia



#### **Tuition fees**

Tuition fee SEK 170 000 per year for non-EU/EEA citizens. No fee for EU/EEA citizens. See <a href="www.lunduniversity.lu.se">www.lunduniversity.lu.se</a> for details on tuition fees

# ABOUT THE DEPARTMENT OF BIOLOGY

We have outstanding competence in education and research, covering a large number of biological disciplines from molecular biology to large-scale ecology. Several of our research groups are world-leading in their topic and a large number of international projects is coordinated by the department of Biology. As our education is integrated with the department's research, you will have researchers as teachers and get involved in ongoing projects during your studies. Our courses range from basic to Master's level. We offer around 50 advanced level courses as well as an extensive postgraduate programme.

# **ABOUT LUND UNIVERSITY**

Lund University was founded in 1666 and is repeatedly ranked among the world's top universities. The University has around 45 000 students and more than 8 000 staff based in Lund, Helsingborg and Malmö. We are united in our efforts to understand, explain and improve our world and the human condition.

Lund is considered one of the most popular study locations in Sweden. The University offers one of the broadest ranges of programmes and courses in Scandinavia, based on cross-disciplinary and cutting-edge research. The unique disciplinary range encourages boundary-crossing collaborations both within academia and with wider society, creating great conditions for scientific breakthroughs and innovations. The University has a distinct international profile, with partner universities in approximately 75 countries.

Lund University has an annual turnover of EUR 892 million, of which two-thirds go to research in our nine faculties, enabling us to offer one of the strongest and broadest ranges of research in Scandinavia.

## **CONTACT**

Programme webpage www.lunduniversity.lu.se/molecular-genetics-biotechnology

Study Advisor Christina Ledje christina.ledje@biol.lu.se Lund University was founded in 1666 and is repeatedly ranked among the world's top universities. The University has around 45 000 students and more than 8 000 staff based in Lund, Helsingborg and Malmö. We are united in our efforts to understand, explain and improve our world and the human condition.

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