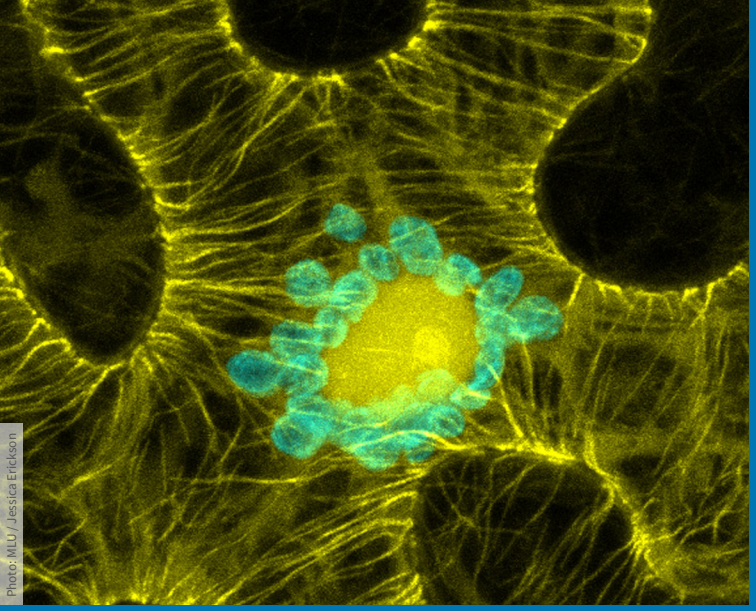

Photo: MLU / Jessica Erickson

# Molecular and Cellular Biosciences

## Master of Science
## International Master‘s Programme

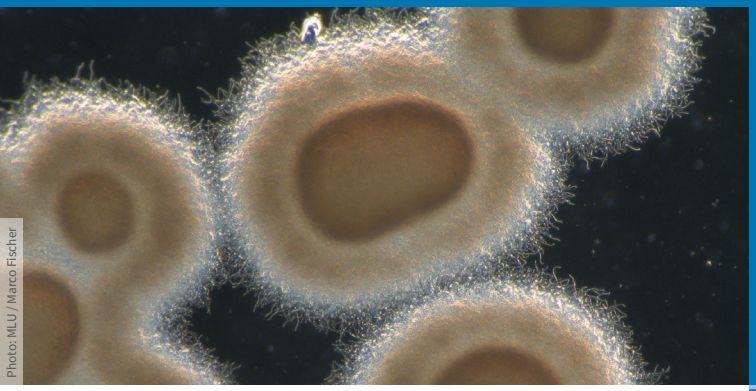

Photo: MLU / Marco Fischer


MARTIN-LUTHER-UNIVERSITÄT
HALLE-WITTENBERG

FACULTY OF NATURAL SCIENCES 1 – BIOSCIENCES


## → ADMISSION REQUIREMENTS

**Applicants to the programme:**

- have a Bachelor degree, or equivalent, in Biosciences
- have certified proficiency in English (level B2)

Applicants should also have basic general knowledge in molecular biology, biochemistry, genetics and physiology.

**How to apply:**

- Applicants who obtained their Bachelor degree in Germany must apply via www.uni-halle.de/bewerben by the **15th July*** (for winter semester) or the **15th January** (for summer semester).
- Applicants who obtained their Bachelor degree abroad must apply via https://www.uni-assist.de/en/ by the **30th April*** (for winter semester) or the **31st October** (for summer semester).

* Please note: Due to the corona virus pandemic, the application deadlines have been extended for the upcoming winter semester (2020/2021) to the 20th August 2020 (for German Bachelor degrees) and the 15th July 2020 (for International Bachelor degrees).

**Contacts:**

*Programme advisor* Prof Dr Ralf Bernd Klösgen
klosgen(at)pflanzenphys.uni-halle.de
*Office of student affairs* PD Dr Ulrich Arnold
pruefungsamt(at)biologie.uni-halle.de

**For MLU newcomers:**

Information regarding health insurance, residence permits and visas, student housing, getting-to-know Halle, etc. can be found here:

Study Orientation

International Office

Alternatively contact Mrs Gritt Eisenkopf for further details gritt.eisenkopf(at)international.uni-halle.de.

MLU = Martin Luther University Halle-Wittenberg

## → STUDYING IN HALLE

Located on the beautiful river Saale, Halle is the largest city in the federal state of Saxony-Anhalt. It is easily reached by train from the capital of Germany, Berlin (75 min), or its own international airport (15 min) shared with its neighbouring city Leipzig (30 min).
Halle is the home of the German National Academy of Sciences „*Leopoldina*“, which provides the Federal Government and the general public with information and advice on all scientific matters, and the Martin Luther University (MLU) Halle-Wittenberg, the largest university in the federal state Saxony-Anhalt. It is one of the oldest universities in Germany (founded in 1502) and offers a full complement of faculties in Social, Medical and Life Sciences.

**Weinberg Campus:**

As one of the largest faculties of the MLU Halle-Wittenberg, the Faculty of Natural Sciences 1 is located on the Weinberg Campus. Together with internationally renowned research institutions (e.g. Leibniz, Max Planck, Fraunhofer) and more than 100 companies in the Life Sciences and Material Sciences industries, it forms the largest science and technology park in central Germany.

Photo: MLU / Faculty Marketing


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## → AIMS

The international Master programme **Molecular and Cellular Biosciences** at the Martin Luther University Halle-Wittenberg aims at providing a broad theoretical and methodological understanding of cellular functions at the molecular level, enabling students to acquire a comprehensive knowledge in one or more areas of molecular and cellular biology. The study programme is designed to broaden and develop the students' ability to work systematically and scientifically, and to train logic-based analytical thinking in order to enable them to carry out scientific research independently in the molecular biosciences.
Students will acquire knowledge in recognising and identifying scientific problems, developing structured approaches to address these scientific problems, to solve key questions experimentally and ultimately expand our knowledge of the subject area. In a collaborative and problem-oriented manner, students will be trained in working as a team with colleagues from different disciplines and to apply basic knowledge in a practical way. The study programme is strongly research-oriented and both, courses and examinations, are held in English.

## → OVERVIEW

| | |
|---|---|
| **Faculty** | Natural Sciences 1 – Biosciences |
| **Institute** | Biology |
| **Degree** | Master of Science |
| **Credit points (CP)** | 120 |
| **Standard period of study** | 4 semesters |
| **Form of study** | direct study, full-time |
| **Language** | English |
| **Tuition fees** | none |
| **Admission** | restricted |
| **Study without Abitur** | no |
| **Specific admission requirements** | yes |

**Further information:**

For detailed information concerning the content, goals and structure of the Master programme, please visit our website: https://studienangebot.uni-halle.de/molecular-and-cellular-biosciences-master-120

→ Faculty of Natural Sciences 1 – Biosciences/profile

## → STUDY PROGRAMME

| | 1st semester | 2nd semester | 3rd semester | 4th semester |
|---|---|---|---|---|
| 1st block (6 weeks) | Fundamentals (Mol. Cell. Biosciences) | Project module 2 | Research internship | Research project module |
| 2nd block (6 weeks) | Project module 1 | Project module 3 | Project study | |
| Credit points | 30 | 30 | 30 | 30 |

## → MODULES

The programme covers aspects relevant to research topics in today's bioscience-related challenges. The curriculum facilitates a graduation from the programme within 2 years of its regular study period (4 semesters).

**Compulsory modules (75 CP):**

- Fundamentals in Biosciences (introductory)
- Research internship (advanced)
- Project study (advanced)
- Research project module (Master thesis)

**Elective modules (45 CP):**

**B1 – Offered by the Institute of Biology**
(minimum of 30 CP):

- Developmental Biology
- Molecular Animal Physiology
- Molecular Genetics of Root Nodulation Symbiosis
- Molecular Mechanisms in Developmental Genetics
- Molecular Microbiology
- Molecular Physiology of Microorganisms
- Molecular Phytopathology and Plant Immunity
- Molecular Plant Physiology

**B2 – Offered by other Institutes**
(maximum of 15 CP):

- Molecular Physiology of Plant Nutrition and Crop Yield
- Nucleic Acid Biochemistry
- Plant Biochemistry
- Cell Biochemistry and Virology

**Summary:**

| | |
|---|---|
| Fundamentals in Mol. Cell. Biosciences (compulsory) | 15 CP |
| 3 Project modules (elective, 15 CP each) | 45 CP |
| Research internship (compulsory) | 15 CP |
| Project study (compulsory) | 15 CP |
| Research project module (Master thesis, compulsory) | 30 CP |
| | **120 CP total** |

**Compulsory module**

**Elective module**

**1 credit point (CP) corresponds to a workload of 30 hours.**

## → CAREER OPPORTUNITIES

The course qualifies for positions in the following fields: university research, PhD positions, research-oriented institutes, industry, production, administration, diagnostics, public service.


Photo: MLU / Faculty Marketing


Photo: MLU / Faculty Marketing


Photo: MLU / Marco Fischer


Photo: MLU / Matthias Ritzmann

The content is provided by the programme coordinator. Designed by Faculty Marketing (Dec 2021).