

Faculty of Science

Regulations for the Doctoral Program Molecular and Translational Biomedicine (MTB)

Version December 1, 2014

I. General Regulations

1. Overall Concept

The goal of the PhD program in Molecular Life Sciences is to recruit exceptional young scientists from across the world and to further educate them at the intersection between molecular biology and medical research.

2. Program Overview

Over the course of the PhD program in Molecular and Translational Biomedicine (MTB), students will progress from a master's degree to a Dr. sc. nat. UZH or a Dr. eth. in 3-4 years. The program belongs to the Life Science Zurich Graduate School (LSZGS). PhD students may select their research project from a wide variety of topics and their work will contribute to the ground breaking research at the University of Zurich and ETH Zurich. Participation in the program depends on admission by a qualified admissions committee. To complete the program, students must fulfill the following requirements:

- Participation in at least 2 block courses.
- Participation in 2 of the program's yearly retreats, including at least a poster presentation if not a presentation at each retreat.
- PhD students may earn a maximum of 3 ECTS Credits by organizing the scientific events for the program.
- Submission and defense of a dissertation documenting the students' own original scientific research.
- Fulfillment of any other requirements set by UZH or ETHZ. This involves earning at least 12 ECTS Credits (including the credit point earned as part of the PhD program).
- 3. Depending on where students are matriculated, they will receive their degree either from the University of Zurich or the ETH Zurich.

II. Admission

- 1. Applicants must have earned a master's or an equivalent degree when they begin their dissertation. However, they need not have finished their master's at the time of their application and admissions interview.
- 2. Track I: Online Application on the LSZGS Website
 - Application deadlines are July 1 and December 1. An admissions committee consisting of three to five research group leader at UZH and ETHZ selects the most promising candidates from the pool of applicants to be invited to an admissions interview.

The program coordinator will inform candidates whether they have been admitted at the latest fours weeks after the application deadline.

Shortly after the application deadline, the admissions committee conducts interviews with students residing far away by video conference. Applicants will be informed regarding their acceptance within a few days after the admissions interview.

In February (week 6) and September (week 36), lab tours and additional admissions interviews will take place over a three day period.

Admission interviews take place on the first day (if applicants did not complete their interview by video conference), lab tours over the course of all three days. During this time, applicants have the opportunity to meet with research group leaders who have open PhD positions.

By the Tuesday following the interviews, applicants who have successfully completed their interviews and research group leaders submit their list of preferences to the program coordinator.

According to the rules of the Life Science Zurich Graduate School, the matching of candidates to research group leaders will be conducted simultaneously for all PhD programs.

3. Track II: Direct Application to a Research Group Leader

Applicants also have the option to apply directly to a research group leader, who may accept them as a doctoral student.

To be admitted to the MLS PhD program, doctoral students must apply to the program within six months of beginning their dissertation. The same rules apply as for Track I candidates (online application on the the LSZGS website) except that there is no interview. After the submission of the application the doctoral program cannot be changed any more.

4. The program's official language is English. The admissions committee uses the admissions interview to ascertain whether a candidate's English skills are sufficient for communication in science.

III. Structure of the Doctoral Program

1. Curricular Portion

Module/Course	ECTS Credits
Compulsory modules: Technologies and Systems Approaches in Biology Attendance of 2 yearly retreats of the MTB Program	5-6
Core elective modules (1 must be selected): Diabetes and the Metabolic Syndrome Basic and Applied Cancer Biology Inflammation, Tissue Injury and Tissue Repair	2
Elective modules: Institute and group seminars, participation in a convention with a personal contribution, summer schools, etc.	max. 2
Transferrable skills	min. 3
Total	min. 12

2. Teaching Assistance

Assisting in teaching is obligatory for all doctoral students at MNF.

Implementation of the teaching requirement should be conducted in consultation with the Studies Coordination in Biology according to the rules specified in the document "Teaching requirement for PhD students" (see www.biologie.uzh/studium/Doktorat.html).

All doctoral students at MNF (UZH) must participate in 100-420 hours of teaching.

In addition to teaching at the institutes (teaching bachelor and master's students, monitoring and grading exams, supervising master's students, etc.), students can also complete their teaching requirement at the Science Education Center (in the area of Life Sciences, Mathematics, Physics, Chemistry and Geography).

3. Doctoral Committee and Doctoral Committee Meetings

The doctoral committee consists of three or four members:

- The direct advisor (MTB member).
- At least one other member of the MTB PhD program.
- Preferably one or two external members (not a member of the MTB PhD program).

A member of the doctoral committee, who is not the advisor, should be chosen to head the committee.

Two members, one of which should be the head, must have the right to confer PhDs at MNF.

The PhD students select the members of the committee with the understanding of their advisor.

The PhD students are responsible for organizing meetings. At least three members (including the PhD advisor) must attend.

The first meeting should take place after 6 months. As an exception and in consultation with the program coordinator, the meeting can be postponed to maximally 12 months after the beginning of the dissertation. A follow-up meeting should be scheduled every 12 months. The PhD defense may not take place more than 18 months after the doctoral committee's last meeting.

Within the first 6 months and before the first committee meeting the doctoral students write a reasearch proposal in the form of a grant application. The proposal should contain the scientific background of the project, intermediate results, specific goals and the planned experiments (max. 3000 words without references). The students will should send their research proposal to the committee at least 2 weeks ahead of the meeting. The template of the MTB-program should be used as the title page. The PhD students present and defend their research proposal during the first meeting of the doctoral committee. The PhD advisor sends the research proposal toghether with the recommendations of the doctoral committee to the program coordinator.

In the case of an unsatisfactory performance, doctoral students can repeat the doctoral committee meeting and defense of their research proposal after three months. If they fail a second time, they will be expelled from the program.

The first report shall be signed by all members of the doctoral committee and the PhD student and is considered the doctoral agreement.

PhD students should send the members of the doctoral committee a progress report two weeks ahead of second and third meeting. This report should contain their most recent research findings and an overview of their project's remaining phases.

The head of the doctoral committee should send a brief report to the coordinator after every meeting. The report should record the date, the members present and important comments or specific recommendations made by the committee. The template of the MTB-program should be used.

If a PhD student repeatedly fails to fulfill these requirements, the director of the MTB PhD program can expel him or her from the program.

4. Research Plan and Progress Reports

Format:

- Title page, using the MTB-program template (research plan).
- Progress report, using the MTB-program template (progress report).
- Introduction (suitable for all biologists).

- Description of reaearch questions, hypothesis und goals of the dissertation.
- Experimental strategy.
- Intermediate results from the phase before the submission of the research plan or the main research results from the period before the following meetings.
- Time plan: What goals should be how and when reached.
- List of relevant references cited in the text.

IV. Doctoral Degree

Confidentiality

An important aspect of the doctoral program is the exchange of scientific data and results between the various institutes at both universities. Such results should be treated as strictly confidential by all those involved and may not be passed along to individuals outside of the program if they have not yet been published by the author or their initial discoverer. No member of the doctoral program may use scientific results to the disadvantage of the University. In particular, no member may infringe upon the University's right for the protection of its intellectual property by publishing data prematurely. PhD students are obliged to properly citations in all their scientific work.