

Faculty of Science

Regulations for the Doctoral Program Neuroscience

Version July 1, 2013

I. General Information

1. General Information

The goal of the International PhD Program in Neuroscience is to recruit exceptional young scientists and provide them with a broad and solid education in modern neuroscientific disciplines. The program is particularly useful to students working towards a career in neuroscience.

The International PhD Program in Neuroscience belongs to the Center for Neurosciences Zurich (ZNZ) and the Life Science Zurich Graduate School (LSZGS).

Doctoral studies at UZH are regulated according to the MNF Ordinance for Obtaining a Doctoral Degree (January 31, 2011) and the MNF Doctoral Program Regulations (December 13, 2012).

Doctoral studies at ETH are regulated according to the ETH Ordinance for Doctoral Studies at ETH (July 1, 2008) and the president's Implementation Provisions (1 September 2008) as well as the Detail Provisions of the respective departments (D-HEST, D-BIOL, D-PHYS, D-MAVT, D-ITET).

2. Program Overview

In the ZNZ's International PhD Program in Neuroscience, students with master's degrees in various different disciplines can earn a Dr. sc. nat. UZH or a Dr. eth. in 3-4 years. Depending on where students are matriculated, they will receive their degree either from the University of Zurich or the ETH Zurich.

PhD students in all ZNZ research groups doing neuroscientific research should in principle be enrolled in the ZNZ's International PhD Program in Neuroscience.

To complete the program, students must fulfill the following requirements:

- Attend the Introductory Course in Neuroscience (Part I and II, over two semesters) and pass the two-part final exam (4 ECTS Credits in total).
- Participate in at least one two-day PhD retreat, ideally during their first year (1 ECTS Credit).
- Earn at least 7 additional ECTS Credits.
- Regular meetings with the doctoral committee.
- Submission and defense of a dissertation documenting the students' own original scientific research.
- Fulfillment of any other requirements set by UZH or ETHZ.
- 3. If students successful defend their dissertation and have fulfilled the requirements listed above, the PhD program will award them the ZNZ certificate.

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. The admissions interviews and lab tours take place over the course of three days in February (week 6) and September (week 36). Admission interviews take place on the first day, 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, the applicants and the research group leaders should 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. If candidates cannot immediately find a PhD position, their acceptance to the program will still be valid should they find a PhD position in a ZNZ research group at a later time.

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. For admission to the International PhD Program in Neuroscience, PhD students must apply to the program with the understanding of their PhD advisor within three months of beginning their dissertation.

For admission, candidates must also complete a formal admissions interview with their PhD advisor and at least one other faculty member, who will both sign to confirm that the candidate fulfills the admissions requirements.

4. The program's official language is English. The admissions interview will serve 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
I. Compulsory modules (generally 1 year)	
Introductory Course in Neuroscience, Part I (Semester course with a final exam) 2 ECTS Credits	-
Introductory Course in Neuroscience, Part II (Semester course with a final exam) 2 ECTS Credits	5
Retreat (2 days) 1 ECTS Credit	
II. Subject-specific courses (starting in the 2nd year) Freely electable, though they must have a clear connection to the dissertation project or to neuroscience	2-4
Subject-specific semester courses and block courses at UZH and ETHZ (selected from the ZNZ Credit Points Course List and the offerings at both universities) as well as summer school and external methodological courses and workshops (e.g. Microscopy, Spectrometry, Imaging).	
III. Institute and group seminars with a personal contribution or active participation	max. 2
Institute seminar	
Research colloquium/journal club	

IV. Transferrable skills	max. 4
Scientific Writing	
Ethics	
German course for foreign students	
Other courses	
Total	min. 12

Additional Information:

At least one third of the required ECTS Credits must be earned outside a student's own research group, but within the field of neuroscience.

No ECTS Credits will be awarded for English courses, as proficiency in English is a requirement for acceptance to the program. Courses in other languages can only be accredited if it can be demonstrated that knowledge of this language is essential to the dissertation.

2. Teaching Assistance

Obtaining a doctoral degree requires students at MNF (UZH) to 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).

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).

3. Doctoral Committee and Doctoral Committee Meetings

The doctoral committee consists of at least three members:

- The direct advisor.
- A research group leader working in the same area of research, who is familiar with the dissertation's topic.
- An experienced scientist working in a different area of research whose expertise lie in neuroscience, but outside the topic of the dissertation.

At least one member of the doctoral committee must be a research group leader at ZNZ. The member working in a different area of research may also work at a different institution.

The PhD students select the members of the committee with the understanding of their advisor and are responsible for organizing meetings. At least three members (including the PhD advisor) must attend. The first meeting must take place within the first 12 months. Follow-up meetings should be scheduled annually.

Students should prepare a research proposal for the first meeting, in which they describe their project, its scientific background, preliminary results as well as future goals and experiments. The program coordinator should give the PhD students guidelines for how to write their research proposal. PhD students should send their research proposal to the committee members before the meeting. After the meeting, students should submit their definitive proposal with the committee members' signatures to the program coordination (Doctoral students at ETH Zurich submit their research proposal to their department in order to definitely be accepted to the doctoral program).

PhD students should send the members of the doctoral committee a progress report two weeks ahead of all subsequent meetings. After each meeting, the PhD student should

submit the definitive progress report with the committee members' signatures to the program coordination.

IV. Doctoral Degree

1. Cumulative Dissertation

It is permissible for a dissertation to be a compilation of various published articles if at least one of these articles is published in a high impact journal and has the PhD student listed as its primary author. In addition, the dissertation should contain an introduction and discussion written by the PhD student.

2. 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.