Faculty of Science

Regulations for the Doctoral Program
Epidemiology and Biostatistics

Version December 15, 2016

I. General Information

1. The doctoral program “Epidemiology and Biostatistics” (EB) at the University of Zurich (UZH) and ETH Zurich (ETHZ) fosters the research expertise of its doctoral students in Epidemiology and Biostatistics and promotes their acquired skills for careers within and outside academia. The overall goal is to train PhD students in designing, conducting and analyzing research studies in biomedicine. Depending on the specific research area students are expected to acquire core competencies in epidemiology or biostatistics.

2. The program is run by the Life Science Zurich Graduate School (LSZGS), a joint organization belonging to UZH and ETHZ.

3. The doctoral studies are regulated according to the Ordinance for Obtaining a Doctoral Degree and the Doctoral Program Regulations at the UZH Faculty of Science or the Doctoral Program Regulations at ETHZ, depending on where students matriculated for their doctorate.

4. Obtaining a doctoral degree from the EB program depends on the fulfillment of the following requirements:
   - Composition and successful defense of a dissertation containing original research.
   - Earning of 12 ECTS Credits that fulfill the curricular requirements.
   - Completion of all the relevant conditions and additional requirements set by the institute or department where the student matriculated.

5. The doctoral degree is awarded by the UZH or ETHZ, respectively.

II. Admission

1. Candidates with a Master of Science in Epidemiology, (Bio)statistics, Biology, Mathematics, Physics or an equivalent subject will be admitted to the program without additional requirements. Candidates with a master’s in Human Medicine, Dentistry, Veterinary Medicine, Psychology or Sociology (or with equivalent degrees) will be admitted without additional requirements, if they fulfill the following requirements:
   - Over the course of their education, they actively participated in research for at least 6 months/30 ECTS Credits/900 hours, such as during a master’s thesis or an MPH program, in which epidemiological or biostatistical methods played a major role.
   - Candidates have 30 ECTS Credits of foundational education in the natural sciences (Biology, Chemistry, etc.) or in methodological subjects (Epidemiology, Biostatistics, etc.). They must have earned at least 10 ECTS Credits in each of these two subject areas.

All other candidates will be set additional requirements in order to fill any gaps in their knowledge at the beginning of their doctorate. Candidates belonging to this second category will be admitted specifically to the EB program and may not switch to a different program within the LSZGS.

Candidates need not have completed their master’s degree at the time of their
application and admissions interviews, though it should be complete once they begin their dissertation. Candidates are admitted to the program via one of the two tracks described below.

2. Track I: Online Application on the LSZGS Website
   The application deadlines are July 1st and December 1st. A committee (consisting of multiple members of EB with the right to confer PhDs and a program coordinator) selects candidates. The program coordinator informs the candidates 4 weeks at the latest after the application deadline whether they are invited to an admissions interview or not. The three-day interview period takes place in February (week 6) or September (week 36). Over the course of these three days, candidates have the opportunity to meet with research group leaders who have open PhD positions. A admissions committee (consisting of at least two members of EB with the right to confer PhDs and a program coordinator) hold the interviews. If candidates pass the interview, they are admitted to the Life Science Zurich Graduate School. By the Tuesday following the interviews, candidates as well as research group leaders submit a list of preferences to the program coordinator. The matching of candidates to research group leaders is conducted simultaneously for all PhD programs according to the rules set by the Life Science Zurich Graduate School. If candidates cannot find a research group leader to advise their dissertation within half a year, they will lose their membership at the Graduate School.

3. Track II: Direct Application to a Research Group Leader
   Candidates may also apply directly to a research group leader, who can accept them as a doctoral student. To be admitted to the EB program, PhD students must apply to the program within six months of beginning their dissertation. The same rules apply for the interview and admission to the program as in track I. There are no application deadlines or predetermined interview dates.

4. The program’s official language is English. The admissions committee uses the interview to determine whether a candidate’s English abilities suffice for communication in science.

5. All candidates must be matriculated at the university where the research group in which they are working is located. Conferral of a doctoral degree is determined by the respective University.

III. Structure of the Doctoral Program

1. Curricular Portion
   All students who started their PhD after April 1st 2016 are required to attend the 2 hour LSZGS introductory course on Scientific Integrity.

<table>
<thead>
<tr>
<th>Module/Course</th>
<th>ECTS Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPI 301 Introduction to Epidemiology or STA 404DP Clinical Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>Free choice in accordance with supervisor</td>
<td>2</td>
</tr>
<tr>
<td>EB Methods Seminar</td>
<td>2</td>
</tr>
<tr>
<td>Pro-doctoral exam</td>
<td>2</td>
</tr>
<tr>
<td>Transferrable skills</td>
<td>min. 3</td>
</tr>
<tr>
<td>Total</td>
<td>min. 12</td>
</tr>
</tbody>
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2. Teaching Assistance
   A teaching assistance of at least 100 hours and no more than 420 hours is a component of all doctoral programs at MNF (UZH).
The following can be counted toward the required teaching assistance: Teaching bachelor and master’s students, supervising and grading exams, supervising master’s students, teaching at the Science Education Center.

Realization of the teaching requirement should be conducted in consultation with the Studies Coordination in Biology (and potentially with the Studies Coordination in Mathematics or the preclinical Organization Office at the Faculty of Medicine) 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 is determined by the direct PhD advisor with the understanding of the PhD student at the latest three months after the beginning of the dissertation. The committee consists of at least three members:
1. The direct thesis supervisor who is a member of the EB PhD program.
2. If the direct supervisor does not have Promotionsrecht, an EBPhD member with Promotionsrecht has to be determined as official supervisor and is also member of the thesis committee.
3. A further member of the EB PhD program program.
4. An external (to the EB PhD Program) member holding a PhD degree, preferably an established scientist from the field of research of the thesis.
5. Either the second member or the external member needs to have Promotionsrecht.

The first meeting should take place within 6 months. A follow-up meeting should be scheduled every 12 months. The defense is considered the last meeting. At least two members of the committee must be present at every meeting. The external member must attend at least one meeting and should, if possible, be present at the defense.

For their first meeting, PhD students should prepare a research proposal, in which they describe their project and its scientific background, document their first results and describe specific goals, such as a plan for how to compose the required manuscripts. PhD students should send out this research proposal to the committee and the program coordinator two weeks ahead of the meeting. During the first meeting, PhD students present and defend their research proposal. In addition, the components of the PhD’s curricular portion should be defined during this meeting.

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 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, the committee’s decision (requirements fulfilled/ not fulfilled), any specific recommendations and the list of curricular coursework. The program coordinator gives students a form for the report. The first report should be signed by all the doctoral committee members as well as the PhD student and will serve as the doctoral agreement.

PhD students should send the members of the doctoral committee and the program coordinator a progress report two weeks ahead of all subsequent meetings. During these meetings, they present their research findings and compose a transcript, which records the proceedings and will be presented to all committee members.

PhD students are responsible for organizing the doctoral committee meetings. If a PhD student repeatedly fails to fulfill the requirements of these meetings, the Steering Committee can expel him or her from the EB program.

4. Pre-PhD Defense
The presentation and defense of research findings during the doctoral committee’s second meeting is considered a pre-PhD defense. Students must successfully complete the pre-PhD defense to be allowed to submit their dissertation. The goal of the pre-PhD defense is to ascertain whether candidates have the necessary knowledge and abilities to
complete the research for their dissertation. A successful pre-PhD defense is awarded 2 ECTS Credits. In the case of an unsatisfactory performance, doctoral students can repeat the pre-PhD defense within three months. If they fail a second time, they will be expelled from the EB program.

IV. Doctoral Degree

Both the Ordinance for Obtaining a Doctoral Degree and the Doctoral Program Regulations at the UZH Faculty of Science as well as the Doctoral Program Regulations at ETHZ provide detailed information on the regulation of doctoral degrees.

Specifically, the Zirkulationskreis is defined to consist of at least five EB PhD Program members with Promotionsrecht who are not on the thesis committee, it can be enlarged to include external faculty at the discretion of the supervisor.

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 investigator. 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.