

FMI PhD Program

One of the aims of the FMI is to provide young scientists from all over the world with an opportunity to participate in top-level scientific research. To this end, the institute has established a competitive International PhD Program. The course of study, which is guided by a Thesis Committee, consists of research supervised by an FMI Group Leader, attendance at University seminars and lectures, and completion of an examination on a written PhD thesis. PhD students are usually matriculated in the University of Basel and are expected to fulfil both the requirements of the Faculty in which they are enrolled and the additional requirements of the FMI. These guidelines are relevant for PhD students who are matriculated in the Science Faculty of the University of Basel. MD/PhD students shall consult the FMI MD/PhD Program guidelines.

The FMI provides financial support to the PhD students in accordance with the scale of the Swiss National Science Foundation. FMI PhD students are selected through a competitive institute-wide interview process. The FMI has a designated Dean of Students to help them with questions concerning their PhD or the University of Basel.

These guidelines are in accordance with the regulations of the University of Basel Faculty of Science. They apply to all FMI PhD students who started after August 1, 2016.

For further details, see the "Promotionsordnung" of the Faculty of Science (available in German only) or consult the FMI Dean of Students.

1. Matriculation

- a. <u>Pre-registration</u> (Voranmeldung) at the University of Basel (Student Services).
- b. Submission of the "Doctoral Agreement" (see Annex IV) (Dean's office of the Science Faculty of the University of Basel) within the first 6 months at FMI.
- c. Within the first 6 months at FMI, the student submits a provisional thesis title and names of Thesis Committee members (at least two of which must be group leaders at the FMI), prepared in consultation with his/her Thesis Advisor, to the FMI Student Office.
- d. If the First Supervisor (Thesis Advisor, Dissertationsleiter) is not a member of "Gruppierung I" of the UniBasel Science Faculty, the student in consultation with the First Supervisor must choose a Second Supervisor who is a member of "Gruppierung I". The Second Supervisor must be appointed within the first 12 months at FMI.
 - The FMI Group Leaders who belong to "Gruppierung I" are listed in Annex I.
- e. The Supervisor from "Gruppierung I" requests Faculty approval of a noncertified Thesis Advisor. Initial approval requires that the prospective Thesis Advisor submit his/her CV to the Faculty.



f. For students who have not received an M.Sc. from a Swiss university, the Gruppierung I supervisor must request Faculty recognition of the student's M.Sc./Diploma.

2. Function and constitution of the Thesis Committee

- a. Purpose
 - i. Provides advice, clarifying the:
 - · Scope of the project
 - · Potential impact of the project
 - Potential risks involved in the project
 - ii. Monitors progress, including:
 - Evaluation of the student's technical aptitude
 - Overall assessment of the student's performance
 - iii. Mediates between the student and advisor, if required
- b. Meetings of the Thesis Committee
 - i. By 12 months at the FMI, the First Supervisor (Thesis Advisor) and student organize the first Thesis Committee meeting with at least 3 members present. A first meeting within 12 months is required for contract continuation. In addition, any new PhD student is welcome to write up a project proposal, and meet with the internal (FMI) members of his/her committee to discuss it, by the end of the first 6 months of his or her PhD. After the first Thesis Committee Meeting, the student arranges meetings at 12-month intervals.
 - ii. Prior to the Thesis Committee meetings, the student will submit a written summary of the project, progress to date, and ideas for future study not exceeding 3 pages as the basis for discussion. The student is expected to prepare a 20-minute presentation including background, rationale, experimental strategy, present results and outlook followed by a discussion. Recommended meeting time is 60 minutes. At the end of the meeting the student will meet with the Thesis Committee, in the absence of the Thesis Advisor. Subsequently the Thesis Committee, in the absence of the student, discusses her/his performance (design, performance and analysis of experimental work, critical scientific thinking and theoretical knowledge).
 - iii. At the end of the first Thesis Committee meeting the Committee approves continuation of the thesis or can request a repeat of the meeting. In either case the Thesis Committee provides immediate and detailed feedback to the student.
 - iv. In case the Thesis Committee requests the first meeting to be repeated, the second meeting should take place within 3-6



months in the presence of at least one member of the Graduate Studies Committee (Annex V) to decide if the Thesis is to be continued. This entails a written evaluation commenting on the performance of the student.

v. The written comments/recommendations of the Thesis Committee are always to be filed with the FMI Student Office and a copy provided to the student and the Thesis Committee. The discussions and key points should be written by someone other than the First Supervisor (Thesis Advisor).

TC meetings must be listed and signed by one of the supervisors as part of the Doctoral Agreement. Written comments of the thesis committee are also part of the Doctoral Agreement and are required for Faculty approval of the student's thesis.

c. Thesis Committee Composition

- i. The Thesis Committee consists of at least three members, two of which must be Group Leaders at the FMI and one external expert. Additional scientific experts at the Principal Investigator (Group Leader) level may be included up to a total of 5 members of the committee.
- ii. First Supervisor (Erstbetreuer, PhD Thesis Advisor)
 - 1. Scientific supervision of the student's research
 - 2. Serves as 1st Reader of the PhD thesis and writes an evaluation, responsible for evaluating and presenting the thesis for Faculty approval
 - 3. Ensures that the student's course of studies meets the requirement of the Faculty
 - Does not fill out the TC meeting forms. Can chair the yearly Thesis Committee meetings, although it is highly recommended that TC meetings are chaired by the second supervisor.

iii. Second Supervisor (Zweitbetreuer)

- 1. Fills out the TC meeting forms and summarizes the discussion points and recommendations in sufficient detail.
- 2. Serves as 2nd Reader of the PhD thesis and writes a second, independent evaluation. If First Supervisor is a member of "Gruppierung I", written evaluation is optional.
- 3. Must be a member of "Gruppierung I" if First Supervisor is not. If First Supervisor is a member of "Gruppierung I", Second Supervisor can also be a member of "Gruppierung II".



4. Second Supervisor must be chosen no later than 12 months from the beginning of PhD.

The "Gruppierung I" supervisor presents the thesis to the Faculty for approval

iv. External Expert

- 1. Provides the Faculty with a 3rd (2nd if First Supervisor is a member of "Gruppierung I) independent evaluation of the thesis
- 2. The External Expert must be from outside the FMI/University of Basel and have a university appointment at the rank of "Privatdozent" or higher.
- 3. The External Expert must be present at the thesis defense, but participation at each Thesis Committee Meeting is not necessary.

Note that the CVs of group leaders or experts without Habilitation or Professorships who are desired as second supervisors or external experts have to be proposed to the Faculty of Sciences for approval. The request will be sent from the Director's office.

3. Course Work

- a. At least 12 credits (1 Credit Point = 30h work expended) of course work as required by the Faculty in which the student is enrolled:
 - i. A minimum of 6 credit points (CPs) have to come from the University of Basel approved <u>graduate teaching program</u>. Within the program pass/fail requirements are defined individually by the person in charge of a specific lecture, but usually require regular attendance, active participation or presentation and/or an exam.
 - ii. A maximum of 6 CPs can be collected by active participation in meetings, practical courses, etc.:
 - Tutoring of undergraduate students (2 CP per semester)
 - PhD retreat (1 CP per semester)
 - Summer classes (1-2 CP assigned by class)
 - Conferences (1-2 CP per meeting). Students must present their own data in either a poster or oral format.
- b. For all the events outside the official University of Basel graduate teaching program, students need to fill out a **Learning Contract**.
- c. Learning contracts must be prepared in advance using the Web application MOnA (https://services.unibas.ch/). The FMI Dean of Students will sign this contract once the student presents a record of attendance. The signed contract will then be sent to the Faculty for approval by the FMI student office.



d. The student is encouraged to include courses outside the area of his/her immediate interest.

4. Tenure

- a. The initial appointment for a graduate student fellowship is for three years. The probation period is 3 months, commencing with the start date. During the probation period, the period of notice is 14 days. Thereafter, during the first year the contract may be terminated at the end of a month by giving one-month notice. After the first year the contract may be terminated at the end of a month by giving three months notice.
- b. The student, Thesis Committee and the First Supervisor must agree by the end of the third year on a timetable for completing the thesis. This must be communicated to the HR office. Continuation after 3 years is possible for a further year, but requires the written recommendation of the Thesis Committee based on the outcome of their 3rd year meeting with the student. Continuation beyond 4 years requires a joint meeting of the student with the Director and the First Supervisor. The student will be informed in writing about an extension of the initial appointment or in case the appointment shall not be extended. For extensions of four months or less beyond the 4th year, a meeting with the Director is not necessary but written justification from the First Supervisor and a time plan for finishing the thesis is required.

5. Writing of the thesis and submission to the Faculty

- a. The FMI recommends that the thesis be written in English.
- b. It is expected that the student should have at least one first-author paper accepted in a peer-reviewed journal prior to submitting the thesis to the Faculty. Exceptions require documented approval by the Thesis Committee.
- c. The thesis should be provided to the First Supervisor, Second Supervisor, and the External Expert at least 4 weeks before the Faculty meeting at which it is approved that the thesis defense can take place.
- d. This approval requires that the First Supervisor, Second Supervisor, and the External Expert write evaluations and give a grade, which the "Gruppierung I" supervisor presents to the Faculty for approval. Minor corrections will be communicated to the student at this time. Reports are to be submitted to the University of Basel Faculty of Science Dean's office according to the deadlines set by the Faculty each semester.
 - If the First Supervisor is a member of "Gruppierung I", a written evaluation by the Second Supervisor is optional.

6. Thesis Defense

a. Once approved by the Faculty, the corrected thesis is distributed to the Thesis Committee (examiners) and the thesis defense can be scheduled.



b. The thesis defense entails:

 A formal examination of maximal one hour. The examiners are all members of the Thesis Committee, including at least the First Supervisor, Second Supervisor, and the External Expert. Participation of the additional scientific experts is encouraged.

The examination is chaired by a member of Gruppierung I or a Titularprofessor of the UniBasel Science Faculty not on the Thesis Committee (FMI Emeriti that were Titularprofessors, Extraordinaria, but not SNF Professors, can also chair the exam). The chair oversees the exam and takes care of the official paperwork. The oral exam is based on but not restricted to, the thesis topic.

 A public presentation of the thesis work (~30 min) is given at the FMI on the day of defense. A presentation of the thesis work as an announced seminar in the institute in a period of 6 months before the defense can substitute for the public presentation on the day of the defense.

7. Guidance Counsellor

Piera Cicchetti, the guidance counsellor for PhD students and postdocs at the FMI, supports individual development to enhance research project outcomes and long-term career success. Piera provides one-on-one counseling for issues with your project/work environment, mentoring, work-life balance, and career outlook, as well as advice for local events of interest, courses to develop skills, and further resources e.g., at the University of Basel, D-BSSE, DBM, Biozentrum and Novartis.

All new students at the FMI should attend an overview presentation of the guidance counsellor office and available resources, and also meet for an introductory one-on-one meeting with Piera within their first six months at the FMI.

8. Conflict resolution

Piera Cicchetti and the FMI Dean of Students, Marc Bühler, can help to resolve problems by acting as neutral intermediaries between the student and his/her Group leader, thesis committee, lab mates, or the academic or administrative areas of the University.

Without your consent, Piera and Marc are not allowed to talk about your concerns or act on your behalf, except in case of violation of existing law.



Annex I

The following Group Leaders are members of "Gruppierung I":

Arber Silvia Matthias Patrick
Bühler Marc Peters Antoine
Caroni Pico Rijli Filippo
Friedrich Rainer Roska Botond
Gasser Susan Schübeler Dirk

Liberali Prisca (SNF Prof.)

Lüthi Andreas

Note that SNF Professors are considered as Gruppierung I for their own students only.

The following emeriti can chair PhD exams:

Nancy Hynes Witek Filipowicz Fred Meins

Annex II

Exceptions

PhD students can transfer into the FMI with new Group Leaders without going through the competitive selection process if they have already started their thesis elsewhere, but each case will be evaluated individually. In general, the University of Basel regulations must be respected in full as well as the FMI requirements described above, unless the student remains enrolled in a recognized, equivalent PhD program.

The composition of the Thesis Committee can be changed or supplemented at the joint request of the student and Thesis Advisor, if the topic of research changes significantly. All stipulations mentioned above apply to new members.

Annex III

Terminology equivalents to University of Basel terms in German.

- 1. Thesis Advisor, First Supervisor = Erstbetreuer/-in
- 2. Second Supervisor = Zweitbetreuer/-in
- 3. External Expert = Externer Experte/-in
- 4. Preregistration = Voranmeldung
- 5. PhD Board of the Faculty = fakultärer Promotionsausschuss
- 6. Dekanat der Naturwissenschaftlichen Fakultät = Dean's office of the Science Faculty
- 7. Doctoral Agreement = Doktoratsvereinbarung

Annex IV

Link to Doctoral Agreement



Annex V

Composition Graduate Studies Committee:

Bühler Marc (Dean of Students) Cicchetti Piera (Guidance Counsellor) Gasser Susan (Director) Grosshans Helge (Head of PhD program committee) Matthias Patrick (Head of MD/PhD program committee)

Basel, August 24, 2016.

Marc Bühler

Dean of Students