

EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



Guidelines for **Supervisors**

Graduate Training Centre
of Neuroscience

International Max Planck Research School of Cognitive &
Systems Neuroscience



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Comments & feedback on these guidelines are most welcome! Send to:
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Dear colleagues, dear supervisors,

in the following, we have compiled a set of instructions and guidelines that are meant to support you in placing your future doctoral students in the doctoral program of the Graduate Training Centre of Neuroscience / International Max Planck Research School of Cognitive & Systems Neuroscience (GTC/IMPRS). Knowing and adhering to these guidelines will ensure that the application and admission procedure will be completed shortly and the doctoral phase until graduation will run smoothly.

In addition to the information compiled in this booklet, you may find answers and explanations on the GTCs website. Nevertheless, in case you still have questions don't hesitate to contact the GTCs staff, in particular **Dr. Monika Lam**, the coordinator of the doctoral program. She is in charge of most of the operational tasks and of counseling both, doctoral students and supervisors.

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The doctoral regulations, both in German and English, can be downloaded from the GTCs website at:

<http://www.neuroschool-tuebingen.de/>

The GTCs staff – *Who is in charge of what ?*

| Monika Lam | Marc Himmelbach | Katja Thieltges |
|---|--|---|
| General counseling, 1 st meeting with doctoral applicant <i>and</i> supervisor | Appointment of advisory board, thesis reviewers, and examination board | Accounting - requests for financial support |
| Submission of application materials | Advise regarding the format of a dissertation: monograph <i>vs.</i> ‘cumulative’ | Reimbursement of travel costs, fees, language courses, etc. |
| Support / advice of any kind during the doctorate phase | Approval of the quasi-final draft of the dissertation before submission | |
| Submission of the final dissertation and the required documents | Appointment of a 3 rd reviewer in case of a <i>summa</i> -procedure | |
| Issues the doctoral degree- and IMPRS-certificates | Appointment of the examination board for the thesis defense | |
| Organization of and admission to doctoral courses | | |

Guidelines for supervisors who *intend* to place doctoral students in the GTCs graduate program

In the past years, the number of doctoral students at the GTC has increased dramatically. On the one hand, this is a positive development reflecting the still growing neuroscience community in Tübingen and, furthermore, it proves that there is an apparent need for additional training during the doctorate. On the other hand, taking care of more than 250 doctoral students, providing support and organizing doctoral courses is a demanding challenge for the GTC, both with respect to the personnel and the financial means available to the doctoral program.

With the current numbers of registered doctoral students, who already require the GTCs resources, and the recent application rate, we are rapidly approaching our maximal capacity. Therefore, in the future, the GTC will have to critically evaluate every single applicant in order to ensure that the GTCs quality standards remain high and to remain within the limited resources available.

Unfortunately, in the past months, the GTC had to face several applicants of questionable quality and improper qualification (subject studied, degree earned) and it appears that cases like these accumulate. We had to learn that researchers looking for doctoral candidates offer positions to international students and write '*Letters of Admission*' without getting in touch with us beforehand. After their arrival in Tübingen, the students are sent to the GTC for processing their application and admission. In some recent instances, applicants have been of such a poor quality and/or improper qualification that their admission to the GTCs doctoral program was refused.

To avoid these disappointing incidences in the future, we kindly ask you to adhere to the following guidelines:

- Supervisors have to notify the GTC of potential students of the GTCs doctoral program *before* applicants plan their trip to Germany. This is particularly important since GTCs doctoral students are entitled to various benefits. The GTC will check the applicant's academic credentials (transcript of records + degree certificate) and their competence for the planned project and will inform the supervisor whether the applicant is indeed eligible to enter the doctoral program of the GTC. We will not take care of students for whom this hasn't been done or who are not approved while they were still in their home countries. Nevertheless, the final decision on admission as a doctoral student lies with the Advisory Board after the applicant has been carefully interviewed.
- We will not admit students to the doctoral program – in particular international students – that attempt to support themselves exclusively through 'private funds'. Applicants need to prove reliable, long-term funding either through a doctoral position provided by their future lab or by a doctoral scholarship provided by a third party (e.g., DAAD).
- Supervisors who are not familiar with the procedures and the rules of the GTCs doctoral program are required to join their candidate for a first meeting in the GTC. During this meeting, the rights & duties of a supervisor and of a doctoral student of the GTC will be addressed. This has proven to be most valuable in order to ensure that the admission process runs smoothly and will be completed shortly.

As long as the above requirements are fulfilled, we will provide any assistance needed to

support the application and admission process for becoming a doctoral student at the GTC.

We are certainly not telling anybody 'whom' he or she should take as a doctoral student; this is solely the supervisor's decision. However, the GTC will exert influence on 'who' should be admitted to this graduate program. Please keep in mind that in addition to the doctoral program offered by the GTC, students may earn a doctoral degree (Dr. rer. nat.) through the Faculty of Science or through the Medical Faculty as well, the latter awarding both a Dr. sc. hum.- and even a PhD-degree.

General timeline – Application/admission process

- Day 1 Arrival of the doctoral candidate in Tübingen and start with the doctoral project in the research group.
- Shortly thereafter, the student should contact Dr. Monika Lam that she/he intends to apply to the doctoral program of the GTC. She will provide the student with further details.
- International students* who need rapidly a proof of affiliation with the University of Tübingen (in order to secure their visa status and/or room in the dorm) may be issued a letter confirming that they are currently in the ‘process of application and admission’. This letter allows for matriculation at the University for **1 semester only!** Please be aware that the GTC is very strict with issuing these letters – an early admission interview with the Advisory Board is clearly preferred over preliminary admission. Students who got only preliminary admission are not yet entitled to the GTCs benefits.
- 0 – 3 months Within the first 3 months, the doctoral candidate has to submit - in person - his complete application package at the GTC.
- 3 – 6 months After 3–6 months, the doctoral candidate must have completed the interview with her/his Advisory Board. In case of a successful interview, the candidate will receive a ‘Letter of Admission’ from the GTC, which then allows for matriculation as a doctoral student at the University. Matriculation is optional, however, international students are often required to matriculate in order to fulfill their visa requirements.
- After admission to the GTCs doctoral program, the candidate has the status of an ‘active student’ and is, henceforth, entitled to the benefits of the GTC (support, training, and financial means).
- 3 ½ years The status of being an active student and, thus, eligible for benefits expires three years after the initial Advisory Board interview has taken place (= maximally 3 ½ years after the start in the lab). The candidates then become ‘passive students’ and are still members of the GTCs graduate program. However, they are not anymore entitled to financial support and admission-restricted doctoral courses, unless there are vacancies in a particular course.
- Doctoral students who enter the GTC belated (i.e., differing from the timeline proposed above) can become ‘active students’ only for an accordingly reduced period of time. In general, a belated joining of the GTCs graduate program is highly undesired and only possible under specific conditions (e.g., when a new research group moves to Tübingen and the doctoral students prefer to continue their graduate training in the GTC).

Guidelines for ‘Letters of Support’ for students applying to the GTCs doctoral program

Students applying to the GTCs doctoral program need to submit 2 letters of recommendation, in addition to several other documents. One of these letters should be provided by the applicant’s former supervisor, in general the one who supervised the master’s thesis project. The second letter should come from the future supervisor of the doctoral project. In many cases, the future supervisors don’t know the applicants well enough to write an ‘enthusiastic appraisal’ of the candidate’s skills and qualities. On any account, your ‘**Letter of Support**’ should address at least the following issues.

Please state ...

- ... how you got to know the applicant, why the applicant is a perfect fit for the planned project and what exactly qualifies her/him to handle the project well.
- ... that you will be the doctoral students’ **primary** supervisor and assume responsibility for her/him.
- ... briefly that the student is financially secured, either by a **doctoral position** provided by your research funds or by a **doctoral scholarship**. Please be aware that **we do not admit applicants** who attempt to finance themselves exclusively by private means.
- ... that for the planned research project both, infrastructure and funding is available assuring the projects successful realization.
- ... that the doctoral candidate has been assigned an **own, discrete project** that is clearly separated from other ongoing projects in your lab, in particular other doctoral projects.
- ... that you are aware of the timeline of the application/admission process and that you will fully support your student to get the mandatory Advisory Board-meeting done within the next 6 months (... by ‘month’ / ‘year’ the latest.).

Functions & duties of an ‘Advisory Board’

The GTCs doctoral regulations stipulate in § 3 that doctoral students are guided and supervised by a Doctorate Committee, also known as ‘Advisory Board - AB’ (for details on potential members and the appointment of an AB, see § 3, clauses 1-3).

The duties of an AB are detailed in § 3, clause 4:

The doctorate committee tests the competency of the candidate (§ 4 para. 5):

The AB has the most crucial task to check the applicants’ competency and qualification for the proposed doctoral project. In order to do so best, the AB members should ideally come from different departments, be independent of each other, have diverse scientific and methodological backgrounds and, thus, in a way complement each other.

While the formal eligibility for admission as a doctoral student (degree, years of study, etc.) is checked by the GTC, the AB members shall focus on the ‘fit’ of the applicant with the aspired project: does the candidates’ previous training qualify her/him to handle the project successfully, both professionally and methodologically? In order to compensate for potential insufficiencies in the applicants’ education, the AB may suggest specific courses to be taken at the very beginning of the doctoral phase (see below).

By the end of this first/initial AB meeting, the AB should reach a decision as to whether or not the applicant should be admitted as a doctoral student at the GTC. Once the GTC office has been notified about the positive outcome of this critical AB interview, the candidate will be provided with a ‘Letter of Admission’ from the GTC, which then allows for matriculation as a doctoral student at the University (matriculation is optional).

With other words, only after the initial AB interview has taken place and was successful the candidate is considered an ‘active doctoral student’ of the GTC and, consequently, entitled to the benefits the GTC has to offer (support, education, financial means).

The doctorate committee decides on the scope and content of the doctoral studies and possibly additional work to be provided (§ 5 para. 3):

Depending on the applicants’ previous training and knowledge in ‘neuroscientific topics’, the AB members may recommend specific courses to be taken from the curricula of our three masters programs. This may help to better prepare the candidate for tackling a demanding doctoral project.

Furthermore, in case the applicant belongs to the group of students specified in § 4 (3), the AB has to define the requirements to be fulfilled (which and how many courses to be taken) for the aptitude test (*Eignungsfeststellungsverfahren*), before final admission to the doctoral program can be granted.

The doctorate committee discusses the doctoral candidate's concept (§ 5 para. 5) and comments in writing on the latter's interim reports (§ 5 para. 6):

Another major duty of the AB is to critically evaluate the candidates' thesis proposal, based on a written thesis outline and her/his presentation of the project in the first AB meeting (is the suggested time-line realistic, can the aspired project be concluded in this time period, are the proposed methods adequate, etc.).

Later during the doctoral phase (at least once in the middle and in the end), the AB should be presented a progress report in order to check if the student and the project are still on the right track. In a last AB meeting, the doctoral candidate should get the "o.k." for completion and submission of the thesis.

In this respect, the AB has a crucial steering function. By 'mentoring the student and monitoring the work progress', the AB not only ensures the generation of genuine scientific data that meet the requirements for a doctoral thesis but also ensures the completion of the doctorate within a reasonable period of time.

The doctorate committee forms together with another examiner the examination committee for the oral examination (§ 15 para. 1). For the evaluation of the thesis the extended doctorate board is responsible in accordance with § 2 para. 2.

In general, the AB members will also be appointed as 1st and 2nd reviewers for the dissertation and as examiners for the defense. In case a 3rd review is required (in cases of summa cum laude), a reviewer from outside of Tübingen will be appointed.

To summarize, the AB members resume a responsible function in supervision and guidance of doctoral students at the GTC and, thus, shall contribute to the successful realization and completion of high quality-doctoral studies. The AB members and the candidate have to meet **altogether at least 3x** during the doctoral phase (begin – midterm – end) and the meetings have to be documented with date and signature on a form (provided by the GTC). In the end, the candidate is required to submit this form along with his 'Application for Admission to the Doctorate Procedure' (compulsory document!).

The GTCs doctoral regulations in brief

In May 2011, the University has published the revised doctoral regulations of the Graduate Training Centre of Neuroscience, which is now legally binding for all doctoral students of the GTC (Amtliche Bekanntmachungen 2011, Nr. 5, S. 187). Both, a German version and an English translation of the regulations are available and can be downloaded from our website.

In the following, key elements of the regulations that are important to know for you as a supervisor are briefly summarized.

1. The GTCs doctoral regulations apply to all doctoral students of the three Graduate Schools (§ 1). The degree awarded is “Dr. rer. nat. in Neuroscience”.
2. Doctoral students are guided/supervised by a doctorate committee, also known as Advisory Board (AB), consisting of the primary supervisor and two additional scientists of the field. Please pay attention to the required composition and the duties of the AB (detailed in § 3, clause 3, 4, respectively).
3. Potential candidates must apply for acceptance as doctoral students and submit an application package including several documents (§ 4, clause 1). The general (minimal) requirements for admission as a doctoral student, such as subject studied, degree, years of study, etc. are detailed in § 4, clause 2-4 (please read § 4 carefully, as the issues addressed here are often decisive whether or not an applicant is eligible for the doctoral program and, if yes, under which conditions).

In any case, the final admission of an applicant is based on a ‘positive recommendation’ of the AB (§ 4, clause 5, 6) following an initial/first AB-interview of the candidate (which has to take place within the first 6 months of the doctorate).

4. Doctoral students are required to earn 18 ECTS-credit points (§ 5, clause 2). Courses are to be taken according to the “Core Curriculum” (see below), which was developed jointly by doctoral students and lecturers and approved by the Boards of the Graduate Schools.
5. Doctoral students are required to meet with their Advisory Board annually and present a progress report (§ 5, clause 5). These meetings have to be documented – with date and signatures – on a form provided by the GTC. The form needs to be submitted along with several other documents (§ 7, clause 2) by the end of the degree program.
6. The doctoral thesis can be submitted as a ‘monograph’ or as a ‘cumulative thesis’ compiled from ‘publications’, ‘manuscripts in press’ or ‘manuscripts accepted for publication’. Importantly, the individual papers have to deal with a common scientific topic (§ 9, clause 1). The publications must be preceded by a synopsis (15 pages minimum), which convincingly presents the ‘common theme’ of the publications and the major new findings reported, discusses them in the light of the most recent literature in the field, and provides an outlook on future experiments.

In cumulative theses, generally consisting of multi-author publications, students are required to include a statement in which they elaborate their ‘own contributions’ to the individual studies as well as the share of the co-authors (§ 9, clause 2).

7. The period of time granted to the reviewers for writing the thesis evaluation is 2 months (§ 11, clause 1). The period of time the dissertation and the thesis evaluations have to be displayed in the GTC-office is 2–4 weeks (during terms vs. between terms, § 13, clause 2).
8. The grading options both for the dissertation and the defense are quite sophisticated as grades can be differentiated by ± 0.3 (§ 11, clause 2).

The rules for awarding the best grade (excellent / summa cum laude) is quite strict: grade ‘excellent’ will only be awarded in cases where 3 reviewers rate the dissertation as being ‘excellent’ and, in addition, when the oral performance during the defense is rated ‘excellent’ by at least 2 of the 4 examiners (§§ 11, 13, 18). The 3rd reviewer in summa-cases will always be an expert from outside of Tübingen.
9. For the defense, 4 examiners need to be appointed (§ 15, clause 1). The candidate has to give a 30 minutes presentation, followed by 30 to 60 minutes of discussion and questioning (§ 15, clause 3).
10. Previously, thesis supervisors and examiners in doctoral examinations had to be ‘Professors’ or ‘Privatdozenten’. The current regulations stipulate that ‘Junior Research Group Leaders’ are also eligible to supervise doctoral candidates independently and function as evaluators for dissertations and examiners in defenses (§ 3, clause 2). By now, the rector has appointed most of the neuroscience related ‘Junior Research Group Leaders’ (those at the CIN, HIH, BCCN, and the MPI).

Core Curriculum of the Doctoral Program

| Course Category | Fraction % | ECTS* CPs | Examples |
|----------------------|------------|------------|---|
| Hard-skills general | ~ 40 % | min. 7 CPs | <ul style="list-style-type: none"> • Lectures, courses, seminars offered by the masters and doctoral program of the GTC (e.g., neuroscience-, methods-, statistics-, programming courses). • Lectures and courses offered by other faculties at the University (advanced programming or maths courses). • ... or equivalent. |
| Hard-skills specific | ~ 30% | min. 5 CPs | <ul style="list-style-type: none"> • National / international workshops. • National / international summer / fall schools. • Supplementary lab training (in Tübingen or elsewhere). • NeNa-participation, doctoral students retreats. • ... or equivalent. |
| Soft-skills | ~ 25% | 2-4 CPs | <ul style="list-style-type: none"> • Scientific writing, project/time management, etc. • Active participation in teaching (lecture, practical course, tutorial, lab visits, etc.). • Active participation in organizing events (1 CP max.). • German language courses for int. students (3 CPs max.). • ... or equivalent. |
| NeuroColloquium | ~ 15% | 2-3 CPs | <ul style="list-style-type: none"> • Biweekly, compulsory for doctoral students, 80% rate of attendance as proven by attendance lists, 0.5 CPs per term (3 CPs max.). |

*ECTS (European Credit Transfer System): 1 credit point (CP) = 25 to 30 hours workload.