

Rules for Doctoral Research at the Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Berlin

All pronouns in their male form refer equally to men and women.

Preamble

Quality and innovation: The Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB) aims to conduct research at the highest level. The research carried out by the doctoral candidates is fundamental in achieving this aim.

Excellent research conditions: The IGB provides state-of-the-art facilities, broad scientific and technical expertise, and an inspiring international and interdisciplinary working atmosphere favouring the successful development of its doctoral candidates.

Excellent doctoral candidates: The IGB puts major efforts into recruiting highly motivated and skilled doctoral candidates. All candidates are strongly supported in their development toward independently thinking researchers. They establish excellent topic-specific expertise, develop important networks, and advance their scientific and social skills.

Responsibility for development: Doctoral candidates are fully responsible for actively seeking advice and using the manifold opportunities for networking and scientific training that the IGB provides. The obligatory advisory committee offers individual guidance to conduct excellent research and mentoring support for well-tailored career paths. The advisors are responsible for providing aims feasible in a three-year timeframe and timely and constructive feedback. The committee promotes the scientific maturation of the doctoral candidates, developing from students to peers.

The IGB doctoral programme: The doctoral programme is continuously tailored to the specific needs of the candidates in order to advance their soft and hard skills in areas relevant across the wide range of topics the IGB spans.

Expected output: Doctoral candidates are expected to conduct high-quality research within a tight timeframe, to present and publish their results adequately, and to actively engage in the IGB's professional and social life. When finishing, they are well prepared for their aspired career inside but also outside of academia.

The time frame (3+1 years): In general, the IGB offers all doctoral candidates a three-year contract, and aims for doctoral thesis to be submitted in this time. However, doctoral candidates are allowed to spend up to one additional year at the institute – if justified. The main advisor and the doctoral candidate bear full responsibility for funding and for supporting research during an additional period.

The following rules and regulations apply to the contracting of all doctoral candidates at IGB:

1. Advice and structural integration

A thorough supervision and guidance of each doctoral candidate aims to provide individually tailored support in order to optimise the development of skills and knowledge of each doctoral candidate and to maximise the scientific output while keeping the duration of the doctoral research in a timeframe of three years.

1.1. Advisory committee: composition and tasks

- Mentorship and supervision of each doctoral candidate is the task of the advisory committee, consisting of at least one main/principal advisor, a second supervising scientist, and a mentor.
- All advisory committee members, except the mentor, are scientific advisors. One of the scientific advisors must be a group leader at IGB, all other members of the advisory committee can be either from IGB or from other renowned institutions.
- The principal advisor, usually the project leader or a member of the project leader's group, is responsible for the practical every-day advice. He is responsible for familiarising the doctoral candidate with the institute's rules and regulations and for introducing him to all persons initially connected to the project work.
- The second supervising scientist adds complementary expertise, and may serve as primary advisor for certain parts of the project. If not predetermined by the project or programme, he is jointly selected by the doctoral candidate and the main advisor within the first three months following the official start.
- The scientific advisors have to assist and support the doctoral candidate in planning and conducting the research to obtain a doctoral degree, in defining aims, keeping the time frame, and restructuring the research plan when necessary.
- A mentor is selected by the doctoral candidate within the first year of the doctoral contract. His task is to monitor and mentor the career development of the doctoral candidate, recommend skill or career advancing activities and to provide guidance in the case of difficulties with the scientific advisors.
- Additional advisors can be added at any time. Advisors and mentors may be replaced in agreement with the committee members and the department head. This has to be documented in writing. University regulations may add constraints that need to be considered.
- The respective department head has the overall personal responsibility for each doctoral candidate, and therefore needs to be informed about the composition of the committee and any issue raised by either the candidate or the advisor(s). He may take appropriate decisions if required.
- There is an electronic system supporting and monitoring milestones of the research and the supervision process. Additional deliverables and deadlines can be added and monitored. The electronic files are accessible to all members of the advisory committee,

the doctoral candidate, as well as the department head and the coordinator of the doctoral programme.

- Every doctoral candidate has the right to appropriate support and professional advice for his thesis work and career development, provided by the advisory committee. This includes:
 - Regular meetings, at least upon the doctoral candidate's request, with at least the main advisor to discuss the progress of the thesis work
 - Semi-annual meetings with all scientific advisors to discuss the research progress, and to adapt the aims and time plan if required (monitored by the electronic support system)
 - Regular, at least semi-annual private communication with the mentor reflecting on the scientific supervision and career development measures
 - Professional and practical support for writing publications
 - Constructive feedback on all written documents (e.g. experimental designs, paper drafts) within an appropriate time frame (i.e. within two weeks unless otherwise agreed).
 - A designated work space/desk, including a PC and internet access
 - Participation in institute-wide and work-group specific colloquia and training courses
 - An introduction to the rules of good scientific practice through the advisory committee
 - A proper introduction to all people at IGB relevant to the doctoral research
 - The opportunity to participate in the IGB doctoral programme
 - The opportunity to participate in conferences, seminars, or summer schools

1.2. Structural integration

- Within their department, doctoral candidates should participate in scientific and organisational activities.
- Within the first year of the doctoral contract, each candidate (in collaboration with the advisory committee) determines the university and department where he will submit and defend his dissertation. It is the doctoral candidate's duty to ensure that he meets all university criteria and obligations to obtain the desired doctoral degree.

2. Employment conditions

The IGB offers, in general, a three-year contract to all doctoral candidates to enable them to feel secure and to fully concentrate on their research. However, a timely completion of the doctoral thesis is aspired to continue successful career development of the doctoral candidate and to manage the IGB's resources in a sustainable manner.

2.1. General aim and effort

- The topic of the dissertation forms the basis for the doctoral research, and as such needs to be explicitly included in the doctoral contract.
- Only projects that are likely to yield findings of high scientific merit are suitable for doctoral research.
- All doctoral candidates receive financial support for a three-year period (salary or stipend, level depending on funding organization). The (employment) contract of the candidate with the IGB specifies the details. To complete a dissertation within three years generally requires full-time work.
- Side jobs are only allowed under justified and exceptional circumstances, and require prior written approval by the advisory committee and the institute's personnel office.
- Since all doctoral candidates at IGB receive a three-year contract, the thesis should be completed and submitted before the end of the third year. An appropriate project that fits to this time frame needs to be developed, and the main advisor has to ensure adequate payment during the entire period.
- After two years it has to be determined if and how an extension of payment beyond three years is feasible. If not, measures leading to a completion of the thesis within the 3-year contract have to be planned, documented, and implemented. This includes the alternative to submit the thesis as a monographic document, instead of being based on accepted publications.
- In well-justified cases, the doctoral candidate and the advisors could extend the duration of the thesis for a maximum of one additional year. It is within the responsibility of the doctoral candidate and the advisory committee to sustain the research activities during this period, including financial support for the doctoral candidate. It is an important aim to complete the doctoral thesis within the time of payment.
- If the doctoral thesis is not submitted within the time of payment (normally three years, or after additional extension of up to one year), the doctoral candidate and the advisory committee have to meet with the department head (and if necessary with the director) to present a plan how the thesis can be finished with minimum additional time. The minimal requirements of the respective university with respect to the number of accepted papers are relevant here. If these requirements are not yet met at the end of

the payment period, submission of the thesis as a monographic document has to be enforced.

- If a thesis will not be finished with a maximum duration of four years, the doctoral candidate and the advisory committee must submit a well-justified petition to the IGB director and the respective department head to discuss the case (at least three months before the end of the 4th year). Only in exceptional cases, the IGB director will grant an extension of the use of IGB facilities.
- In case a doctoral candidate leaves IGB before submitting his thesis, the candidate and the advisory committee have to agree if and how the supervision and the finalisation of the thesis are continued. This agreement has to be documented in writing and electronically submitted.
- Doctoral candidates should concentrate all efforts on their dissertation work. This explicitly includes the participation in conferences, the visit of other labs to build up a scientific network and to increase expertise, and the attendance of courses and colloquia to broaden skills and knowledge.

2.2. Probationary period and termination of employment

- The first six months of employment are considered a probationary period, during which time termination of employment by either party is possible, in writing, two weeks before the end of each month.
- After five months at the latest, there must be a meeting of the doctoral candidate and all members of the advisory committee (and in critical cases the responsible department head), evaluating the state of the work. The aim is to decide about the termination or a continuation of the contract of the doctoral candidate. The documented result of this meeting has to be electronically submitted.
- If required, a second formal assessment (candidate, advisory board, and department head) will be held at month eleven.
- After the end of the probationary period, termination of employment is only possible in well-justified cases. The cases need to be personally discussed and documented in writing by the entire advisory committee and the doctoral candidate. The department head must be informed and if necessary involved in the decision making process.

Among other things, a justified case for the dismissal of a doctoral candidate is

- by the employer: If there is evidence that the doctoral candidate does not make a reasonable and necessary effort to fulfil the purpose of his employment
- by the doctoral candidate: If the candidate no longer wishes to complete his dissertation.

3. Deliverables by the doctoral candidate (monitored)

In order to evaluate the progress and adapt plans and aims to the remaining time, semi-annual progress meetings with all scientific advisors are conducted. Presentations of plans and results give the doctoral candidate the opportunity to receive input from IGB colleagues with a wide range of expertise and experience.

3.1. Thesis proposal (Exposé)

Within the first three months of the doctoral contract, each candidate is required to develop a proposal outline ("exposé") of his dissertation project, in close interaction with the advisory committee. The thesis proposal, written in English, must include the following information:

- The overall topic and scope of the dissertation
- A well-referenced state of research
- Goals, hypothesis, methods
- Material and staff resources
- Planned publications (if possible with potential authorships)
- Aspired conference or workshop visits and further career development activities
- A time plan

The thesis proposal has to be electronically submitted to the scientific advisors, who will evaluate it within one month at the latest, providing meaningful feedback to the doctoral candidate

3.2. Oral presentation of exposé, attendance of research colloquia

The planned research outline has to be presented to the entire scientific community of IGB ("exposé talk"; in English) within the first six months of the doctoral contract. All deviations from this schedule have to be discussed with the advisors and the doctoral programme coordinator.

Doctoral candidates are expected to attend the IGB research colloquia to broaden their general knowledge and practice scientific discussions.

3.3. Semi-annual reports and progress meetings

- All doctoral candidates need to electronically submit twice per year a brief but substantial report to the advisory committee, addressing the following topics:
 - The current state of the work compared to the original schedule.
 - If applicable, reasons for deviations from the original proposal, as well as any challenges that have emerged.
- Following a thoughtful discussion, a revised and agreed work and time plan must be submitted (via electronic support system).

• If the doctoral degree has not been obtained within the aspired three years, the above outlined progress meetings and reports must be continued until the thesis is submitted (at least as long as any kind of formal contract between the candidate and the IGB is in place).

3.4. Oral presentation of results

During the last half year of the doctoral research, each candidate is required to give a final seminar at IGB (as part of the IGB's weekly colloquia series).

3.5. Publications

- The research outcomes are expected to be submitted to and published in peerreviewed journals. In line with the overall mission of the IGB, quality is strongly valued above quantity. Any publication has to meet the IGB's "Rules of good scientific practice".
- If doctoral candidates fail to publish their results (i.e. they have not submitted a manuscript or manuscripts with the results within one year after completion of their doctoral thesis or the end of the supervised research), advisors can publish the obtained results, meeting the "Rules of good scientific practice". Deviating agreements must be made in writing.
- In general, the doctoral thesis should be composed as a cumulative piece of work rather than a monograph. However, this is decided by the doctoral candidate based on a discussion with the advisory committee and also depends on the regulations of the respective university.
- Publications must contain the IGB as first affiliation and the respective university as an additional affiliation.
- When handing in the thesis, the doctoral candidate has to provide a CD/DVD or network folder to the main advisor with both an electronic copy of the thesis and the data or, for large quantities of data, appropriate summaries.

3.6. Monitoring of results

- Doctoral students are obliged deliver their data and results in a comprehensive form to their main advisor or another appropriate IGB scientist anytime upon request and the latest before leaving the IGB.
- Doctoral students have to electronically register the required information about the submission and outcome of their doctoral thesis into the electronic system and provide IGB with at least an electronic copy of their thesis.
- The main advisor is responsible to ensure this information flow, including for doctoral candidates who left the IGB before completion of their thesis.

4. Replacement of previous guidelines

The present "Rules for Doctoral Research at the IGB" replace the "Employment Guidelines for Ph.D. Candidates at the IGB" of 13./18.12.2000, 25.05.2004, 24.10./06.11.2008, and 20.05.2009. The rules are an integral part of the employment contract between the IGB and the doctoral candidate. Doctoral candidates who started their doctoral research at IGB before June 1st 2016 have to choose within two months if they want to shift to the new guidelines.

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