



Agreement of the Research Training Group R3

Preface

The DFG Research Training Group R3 is a scientific institution of the Department of Biology of the University of Konstanz. It is designed to support doctoral researchers to complete excellent theses, to foster collaborations and interdisciplinary thinking in environmental research, and to prepare doctoral researchers for their later professional career in academia as well as in applied environmental sciences.

§ 1

Doctorate Regulations

By default, all RTG R3 students are registered as doctoral students of the University of Konstanz (U KN). It is also the U KN who awards the doctor's title (the German Dr. rer. nat. which is equivalent to the American PhD). The graduation criteria of the U KN, as laid down in the General Doctoral Regulations of the University of Konstanz and in the department-specific regulations of the Department of Biology, are therefore applicable to their full extent. The thesis should be completed within three years. All scientific work in the program is subject to the Guidelines of Good Scientific Practice and for Handling of Academic Misconduct of the U KN.

§ 2

General Structure of the RTG R3 Program

The RTG R3 program consists of the thesis project and an additional qualification program.

- (1) The project will be conducted under the guidance of the direct supervisor and a PhD advisory committee (PAC).
 - a. *Doctoral thesis.* Following the guidelines at the U KN and the rules for writing doctoral thesis in the RTG R3, the thesis of a doctoral researcher enrolled in the RTG R3 should preferentially consist of three manuscripts publishable in international journals, and a general introduction and discussion. One of the manuscripts should have been published or be accepted for publication with the doctoral researcher as first author. The other two manuscripts should be publishable and the doctoral researcher must at least be coauthor. It is expected that the thesis will be written in English, but German is also allowed.
 - b. *Direct supervisor.* Principal investigator and RTG R3 member in whose lab the doctoral researcher is performing his/her work.
 - c. *PhD Advisory committee.* Committee of at least three scientists who will guide the doctoral researcher in all aspects of his/her research.
- (2) The additional qualification program contains
 - a. *Platform courses.* The platform course is a visiting program to provide insights into different labs and research groups of the RTG R3.
 - b. *Annual progress meetings.* Two-day retreat of all members of the RTG R3 to discuss the different research projects.
 - c. *Jour fixe meeting.* Bi-weekly meeting during the academic year consisting of an internal seminar of all doctoral researchers and an external lecture of a guest speaker.



- d. *International symposium.* Symposium with internationally renowned speakers organized by the RTG R3.
- e. *One week courses / individual activities.* Doctoral researchers are expected to participate in at least two training activities that each last about one week.
- f. *Transferable skill courses.* Courses to help the doctoral researchers to improve their interdisciplinary skills.
- g. *Teaching experience.* The doctoral researchers will have the opportunity to co-supervise Master students within the “Vertiefungsmodule” of the MSc program.
- h. *Additional scientific courses.* The doctoral researchers can complement their qualification program by choosing scientific courses fitting to their specific demands.

§ 3 Supervision

The central component of the mentoring program of the RTG R3 are PACs. A PAC will be set up for each candidate at the beginning of his/her thesis work, and will consist of at least three scientists advising and guiding the doctoral researcher through his/her thesis project and the qualification program.

(1) PAC members

The direct supervisor will usually be a member of the PAC. In addition, at least two further PAC members will be selected by the doctoral researcher and the direct supervisor. One of the additional PAC members must be associated to the University of Konstanz and one must be external to the University of Konstanz. The external PAC member should preferentially be a female scientist and come from a non-German institution. The external PAC members cannot be expected to participate in all compulsory activities for RTG members, but will visit the doctoral researcher at least twice during the three-year time period of a doctoral thesis. Additionally, they will meet with the doctoral researchers at conferences and use electronic media (e.g. video conferences) to stay in close contact and participate in the mentoring of the doctoral researchers. Further opportunities for personal exchange with the external PAC member are lab visits by the doctoral researcher and invitation of the external PAC members as guests or lecturers in the invited external lecture series or the annual retreat of the RTG. The doctoral researcher and his/her PAC will sign a supervision agreement specifying the framework of supervision.

(2) PAC Meeting

Mentoring of the doctoral researcher by the members of the PAC will be at regular intervals, but the entire committee will meet with the doctoral researcher at least twice per year. If a PAC member cannot join the PAC meeting in person, she or he may participate via a video conference.

In preparation of these meetings, the doctoral researcher is required to hand in a short (<2 pages) report that summarizes the work completed, presents the work plan for the next phase, and explains potential modifications of the research project.

§ 4 Qualification Program

The qualification program for the doctoral researchers of the RTG R3 is composed of several compulsory courses, meetings and activities.



(1) Compulsory courses and meetings

Doctoral researchers are responsible for documenting their participation in compulsory courses and meetings for verification by the RTG R3 coordinator.

- a. *Platform courses.* The platform course is a visiting program among the doctoral researchers to promote fast integration of new doctoral researchers into the RTG R3. The course will provide insights into different labs and research groups, their particular research focus and methods, and will provide the new doctoral researchers with the opportunity to get to know each other better, exchange experiences and discuss possible collaboration with other labs. The first part of the platform course is a four-day visiting tour providing an overview of the location of the different research groups, and a basic introduction to the main methods that are available in the RTG R3.

In the second part, the doctoral researchers identify 2-3 colleagues with whom they intend to collaborate and interact. Teams of 3-4 doctoral researchers visit the laboratories of each team member for 1 day. The members of the team must be notified to the coordinator of the RTG R3. The visited doctoral researcher presents detailed information on his/her research project and demonstrates the techniques employed in this research. Each doctoral researcher has to visit at least 2 other doctoral researchers of the RTG R3 within their first 6 months.

Doctoral researchers are responsible for documenting the visits for verification by the RTG R3 coordinator.

Doctoral researcher who cannot attend the platform course due to a delayed start of their thesis work have to attend an adequate training after their start.

- b. *Annual progress meetings.* Once a year, all members of the RTG R3 will convene to discuss the progress of the different research projects, to support and intensify collaboration between projects, and to identify potential changes that have to be made in the research plans to improve the advancement towards the overall aims of the RTG R3. The annual progress meeting will be held in form of a two-day retreat. Two external scientists will be invited to these retreats to stimulate discussion on future direction of research projects, and to provide an independent evaluation of the progress of the RTG R3. Following oral presentations by the doctoral researchers on their projects, a joint discussion will assess the quality of the projects and the supervision, will stimulate exchange of ideas and collaboration between projects, and will identify lessons learned as well as future perspectives in a summarizing report to be discussed by all participants.
- c. *Jour fixe.* During the academic year, a bi-weekly jour fixe meeting will be organized. This jour fixe meeting will consist of two contributions, an internal seminar and an invited external lecture. The internal seminar is compulsory for all doctoral researchers and the PIs supervising the projects presented. The invited lecture is compulsory for all members of the RTG R3.
- i. *Internal seminar.* All doctoral researchers of the RTG R3, as well as Master and Bachelor students that have thesis projects related to the research topic or to the research techniques used in this RTG, are expected to participate in this seminar series. The intention is to foster scientific exchange among PIs, doctoral researchers, as well as Master and Bachelor students across research groups. Doctoral researchers and Master students will get the opportunity to present their ongoing research in detail, while the Bachelor



students will present their theses. Typically, two presentations will be given during an internal seminar at a jour fixe. The presenting students will receive feedback on their research ideas, methods proposed/employed and on their presentation from the audience. The internal seminar series will be organized by the doctoral researchers of the RTG R3 themselves. Each year, two doctoral researchers will be elected to be responsible for this. This responsibility is rewarded with a credit towards their course work. The supervisors of presenting doctoral researchers, Master and Bachelor students have to participate in the seminar.

- ii. Invited external lecture. The external lecture series is organized by the PIs of the RTG and is compulsory for all members of the RTG R3. It includes both lectures on basic research and on applied issues.
- d. *International Symposium*. A symposium with internationally renowned speakers to increase the visibility of the research school and to provide further opportunities for the doctoral researchers to interact with experts in the field. The latter aspect will be additionally promoted by round-table discussions with the invited speakers. The symposium will thus provide opportunities for the candidates to discuss their research and to make connections for their future career.

(2) Creditable Activities

Each doctoral researcher must participate in at least 6 activities during his/her three-year doctoral program. Two one-week courses / individual activities and one transferable skill course are mandatory. Three other activities can be selected from the list below. Selection of activities must be in agreement with the PAC and the steering committee. Doctoral researchers are responsible for documenting their activities for verification by the RTG R3 coordinator.

- a. *One-week courses / individual activities*. During their doctoral period, the doctoral researchers are expected to participate in at least two educational activities that each lasts about one week. The one-week activities force the doctoral researchers to invest extended continuous time periods into important issues of their education. The doctoral researchers can fulfill the minimum requirement of two one-week educational activities by presenting their own research at two international conferences or workshops. However, these educational activities can also include the participation in summer schools, or short-term stays in laboratories outside the University of Konstanz for learning techniques and for establishing collaborations.
One-week course equivalent activities can also be designed by the candidates themselves, but need to be approved by the steering committee. Equivalent activities could include the organization of workshops or symposia, if the candidates contribute to the science at these meetings.
- b. *Transferable skill courses*. Participation in at least one transferable skill course during the 1st study year is compulsory. Transferable skill courses are for example courses on project management, scientific writing, presentation, teaching, and grant writing.
- c. *Teaching*. The doctoral researchers of the RTG will have the opportunity to supervise Master students within the so-called “Vertiefungsmodule” of each research group, which constitute a central part of the Biological Sciences Master

program at the University of Konstanz. Contribution of the doctoral researcher to the supervision of Master students in a “Vertiefungsmodul” is regulated internally in each research group, since it is depending on the organization of the “Vertiefungsmodul” in each group. Significant contribution of a doctoral researcher in the supervision of Master students must be confirmed by the PI of the research group and reported to the RTG R3 coordinator.

- d. *Additional scientific courses.* Doctoral researchers can complement their study program by participating in other scientific courses e.g. the advanced teaching program at the University of Konstanz.
- e. *Organization of the internal seminar of all doctoral researchers for one year.* (See § 4.1.c)

	<i>Activity</i>	<i>Time</i>
<i>Compulsory courses and meetings</i>	Platform course	within first 6 month
	Annual progress meeting	annually
	Jour fixe meeting	bi-weekly during the academic year
	International symposium	once in 3 years
	Transferable skill course	1 course within first year
<i>Compulsory activities</i>	One-week courses / individual activities	2 courses within 3 years
	Teaching experience	optionally within 3 years
	Additional scientific courses	optionally within 3 years
	Organization of the internal seminar of the Jour fixe	optionally within 3 years

Overview of the qualification program of the RTG R3.

§ 5

Career Advancement

Among the doctoral researchers completing their thesis in 2020, one excellent candidate receives start-up funds to prepare a research proposal to acquire funds for his/her own post-doctoral research position. After completion of the doctoral thesis, the early career researcher will be employed as a post-doc for four months to write a proposal to be submitted to the DFG, the EU or another funding agency. The research of the post-doc should be connected to the topic of the RTG R3. After this proposal is approved by the Group of PIs and submitted to a funding agency, the employment will be continued for a maximum of eight months to provide a financial bridge until a decision on the proposal is reached. During these eight months, the post-doctoral researcher is expected to conduct research connected to the topic of the RTG R3, and will have access to the support of post-doctoral researchers by the U KN. The early-career researcher who receives the start-up funds will be elected by all PIs of the RTG R3. The selection of the doctoral researcher will be based on a short research proposal of four pages and performance during the doctoral research period. The latter is evaluated based on two recommendations, one by the PAC of the doctoral researcher and another by a PI of the RTG R3, who is not a PAC member. The best three candidates will be invited to present their proposals to the RTG R3. These presentations will be integrated into the internal seminar series.



**§ 6
Confidentiality**

Within the RTG R3 an exchange of scientific results is very important. Any results shall be kept confidential by all members of the RTG R3. No participant of the RTG R3 shall use any scientific result to the detriment of other participants, particular, no participant shall impair a host institution’s right to seek protection for intellectual property contained in such results by way of a premature publication or other premature disclosure of results.

**§ 7
Resolution of disputes**

Scientific conflicts of opinion may be discussed and resolved within the PAC.
In case of any other disputes or conflicts, the doctoral candidates are encouraged to approach the speaker or the coordinator of the RTG or the ombudsperson for doctoral research of the University of Konstanz.
The Ombudsperson for research of the University of Konstanz may be contacted in cases of scientific misconduct.

With their signature the doctoral researcher and his/her direct supervisor agree to the Agreement of the RTG R3.

Date

Date

Signature doctoral researcher

Signature direct supervisor