

*Welcome to the iRTG – your graduate school!*

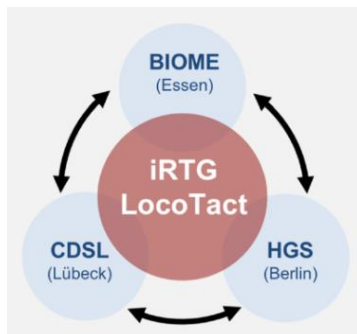


**Integrated Research Training Group  
PhD Program**

This flyer aims to provide a short overview regarding the PhD curriculum of our integrated research training group (iRTG) on “Local Control of Thyroid Hormone Action”- or short: LocoTact. Our mission is to strongly support you on your specific career path. All PhD students working on projects of our CRC/TR 296 are enrolled in the iRTG. Moreover, MD students are highly welcome to join our graduate school as well.

All science-related lectures, seminars and courses will be organized within the iRTG program. This will be complemented by **mandatory** courses in **good scientific practice, ethics and animal welfare** as well as classes in **transferable skills** (scientific writing/presenting/teaching data management, biostatistics, bioinformatics, time management,...) that are embedded in the local graduate school programs in Essen (BIOME), Lübeck (Center of Doctoral Studies) and Berlin (Humboldt Graduate School). Detailed program information can be obtained from the iRTG office.

Apart from your project PI, you will receive mentoring by two additional PIs (if you are a PhD student)/ one additional PI (if you are a MD student) who will accompany and support you on your path to graduation. These PIs will be your thesis advisory committee (**TAC**). Its primary task is to monitor the quality and progress of your project and advise you with regard to potential experimental pitfalls or other thesis-related problems. Furthermore, your TAC mentors are also a contact person who will support you with problems of all kinds. You are free to choose the members of your TAC. However, the members of your TAC should be defined during the first three months of your thesis. A list of LocoTact PIs can be provided by the iRTG office. TAC meetings will take place at least once per year (or on your demand if you need help and advice). For this meeting you will have to prepare a written report as well as a presentation. During the meeting you will discuss your current results, problems, plans and improvements of your studies.



During your PhD studies you will take part in **lectures, workshops, journal clubs, progress reports** and **lab rotations** as well as the **annual meeting** and the **iRTG retreat**. For your attendances you will gain credit points (CP). At the end of your PhD you need to have collected at least **30 CP** in order to fulfill the local requirements for obtaining a PhD degree from your local university. As you can see in the following table, some of those programs are best attended at the beginning of your studies and some should be done at a later point.

In the following you will find an overview of how the lectures, seminars etc. are organized. You can find the different programs and during which PhD year you should ideally participate in them. For each program we prepared a sheet in which you can fill in your attended programs and keep track of your progress. Once you finished a particular program make sure to send your sheet and any certificates to the iRTG office (**yearly updates are required**).

Program	Recommended PhD Year
Lecture series	1 <sup>st</sup>
Journal club & progress report	1 <sup>st</sup> – 3 <sup>rd</sup>
Clinic visits	2 <sup>nd</sup> – 3 <sup>rd</sup>
Technology workshops	1 <sup>st</sup> – 3 <sup>rd</sup>
Lab rotations	1 <sup>st</sup>
Annual meeting	1 <sup>st</sup> – 3 <sup>rd</sup>
iRTG retreat	1 <sup>st</sup> – 3 <sup>rd</sup>
Conferences	1 <sup>st</sup> – 3 <sup>rd</sup>
FELASA B course	1 <sup>st</sup>
Biological safety course	3 <sup>rd</sup>

## Scientific modules

### 1. Lecture series



As you can imagine each PhD student comes from a different background. With this mandatory lecture series you will be brought to a similar knowledge about LocoTact relevant topics. It will take place during the **first year** and cover topics of thyroid hormone (TH) physiology and signaling as well aspects of cardiovascular, brain and liver research. In addition to physiological healthy conditions you will also learn about pathologies such as stroke, myocardial infarction, heart failure, NASH/ASH or liver failure. Lectures will take place **once a week** and last **45 minutes** with place for discussions with the lecturer (webinar Vide@LocoTact with chat room). With this broad knowledge you will be able to better understand your own topic, your colleagues' studies and publications.

### 2. Journal Club and Progress Report

These **monthly** scientific seminars will be held as a video conference (Vide@LocoTact) to enable attendance across the CRC/TR locations. Each meeting is scheduled for **120 minutes**. This **mandatory** seminar will be divided into two parts. In the first section you will have a **journal club**

in an internal meeting (**30 minutes**). Here, a recently published article will be published and discussed. This will not only help you to be ‘up to date’ with current literature about your research field but you will also learn to critically review publications and transfer this critical thinking to your own projects. The presented article will be distributed to all participants in advance and stored in the central iRTG LocoTact server.

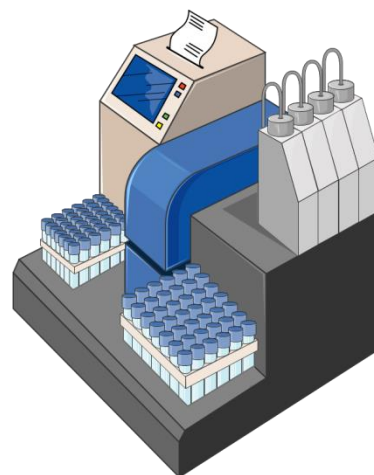
In the second part, one of your PhD students will provide **progress reports** on their theses (**90 minutes** incl. discussions) including an introduction into the topic and methodology. Through these progress reports information exchange between the different locations is ensured and you will train your presentation skills. Additional **thirty minutes** will be dedicated to general aspects, organizational and technical issues. Presenting your data in front of different audiences is an important skill to develop as you will need it to attend conferences and lastly to do a good defense of your thesis!

### 3. Clinic visits

The optional clinic visits give you the opportunity to learn about clinical aspects of human diseases. It lasts 1-2 days during which you will accompany MDs in **outpatient clinics** and during **ward rounds**. Thereby, you will learn about certain diseases and gain knowledge about the clinical background and potential treatment options for patients.

### 4. Technology workshops

In order to expand your **technical knowledge**, you are requested to attend at least one technology workshop per year. Please contact the iRTG office for the list of workshops currently offered. The workshops will be arranged by LocoTact PIs and cover a broad variety. You will thereby have the opportunity to learn **state-of-the-art methodology** and profit from hands-on training. Please contact the iRTG office if you are interested in a particular workshop. While choosing your workshops consider which will be most useful for your project, for example which methods you might want to use in future experiments. Should your workshop of choice already be closed because the maximum number of participants was reached, you could also schedule a laboratory rotation (**see 5.**).



If you are interested in a workshop offered at another location do not worry! Travel and accommodation costs can be covered by a **travel allowance** and will be organized by the iRTG central office. Please plan any external stays in time and consider that you have to write a request for leaving your lab as well as receiving the funding.

## 5. Laboratory rotations

In addition to the technology workshops you can also join another laboratory of your choice for 1-2 weeks. This period can be used to learn new methods or techniques and to team up with other iRTG members. The iRTG will organize these lab rotations and cover travel/accommodation costs. If you urgently need to learn a method, which is not available within the CRC, you can also visit a group outside the CRC consortium.

## 6. Annual meeting

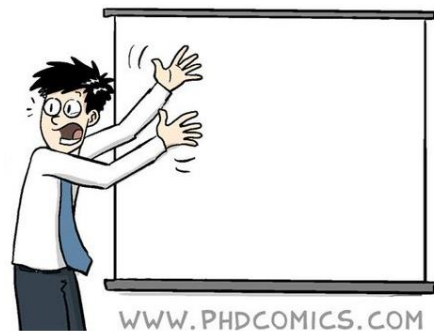
Participation in the annual meeting is mandatory for all students. During the annual meeting you will meet all PIs, postdocs and fellow PhD students from the locoTact consortium. Here, you will not only attend talks from PIs and postdocs but also present the current state of your work as a poster. Overall, this meeting is a great opportunity to establish contact with researchers in all positions and get feedback on your own work. Practicing poster presentations will help you to prepare for national and international conferences.

## 7. iRTG retreat

The iRTG retreat will take place at the beginning of your third year. It will be organized by the iRTG fellows, so you! The scientific program will contain poster presentations, selected oral presentations and key-note lectures by renowned speakers from different fields such as science, industry and administration. Those speakers will introduce you to potential fields of work after the doctorate. Travel and accommodation for all participants of the iRTG retreat will be provided by the iRTG central office.

## 8. Conferences

Presentation of your own data and scientific discussion with experts in the field is an important element of your scientific education. Therefore, you are strongly encouraged to attend and contribute to national and international conferences with poster or oral presentations. At the beginning of your studies we recommend attending educational meetings such as the annual “Arbeitsstagung experimentelle Schilddrüsenforschung” (AESF) or the European Summer School of Endocrinology as they will give you first



experiences in presenting and discussing your own data with experts in the field in a relaxed and friendly environment. In the second and third year, the annual meeting of the German Society of

Endocrinology (DGE), or international meetings such as the European Congress of Endocrinology (ECE), the annual meetings of the European or American Thyroid Association (ETA/ATA) are great opportunities for presenting your data nationally and internationally. The iRTG will support the attendance of MD and PhD students with travel grants. Don't forget to join the socializing events to meet new people from your research field and have some fun, too.

## **9. FELASA B course**

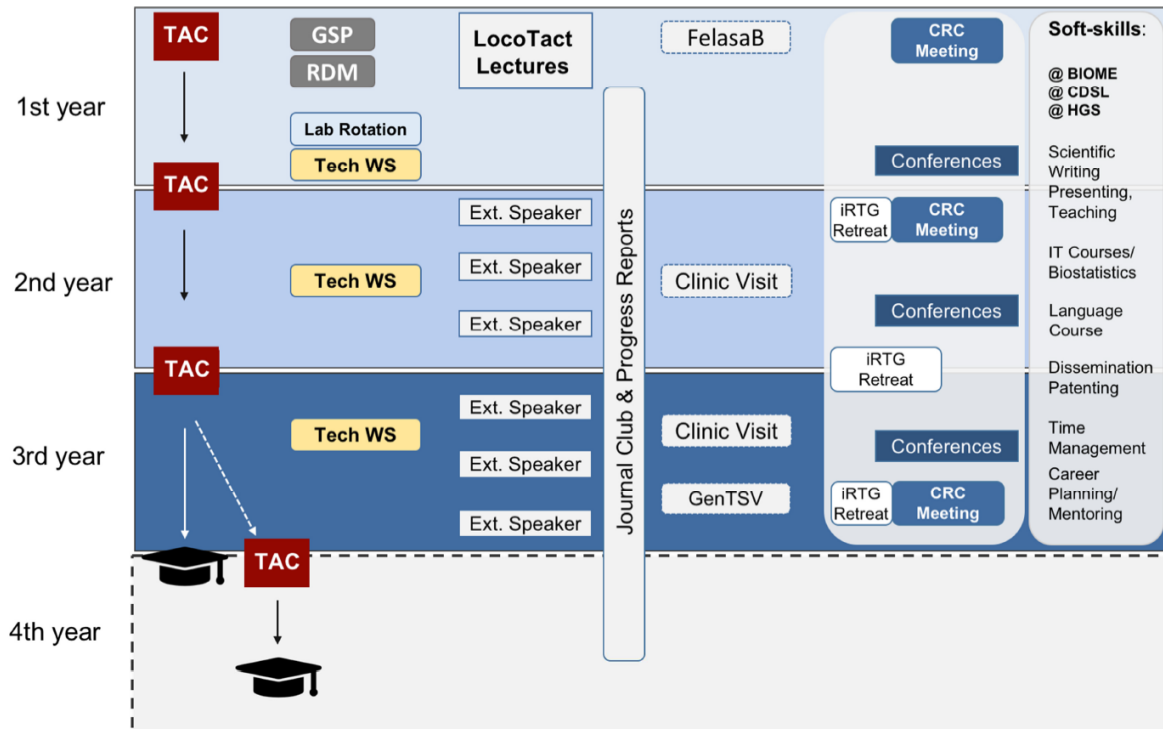
If you plan to perform animal studies in your PhD, you are legally required to absolve a course about working with lab animals (Federation of European Laboratory Animal Science (FELASA), category B). One option to obtain this certificate is to acquire the theoretical background via e-learning (offered in German or English) and to receive practical training (2.5 days) with animals (mouse and rat) at the Berlin mouse clinic (<http://www.labanimal-training.de>). The costs for this class (around 1000 €/person) will be covered by the iRTG.



## **10. Biological safety course**

For further qualification, advanced PhD students and postdocs can participate in courses to obtain the qualification of a project leader according to §15 GenTSV. Certified courses will be organized by iRTG central office and include external instructors. The costs for this qualification will be covered by the iRTG.

To sum it all up, this is how the coming years will look for you:



But don't forget: the variety of workshops, lectures and seminars will not only mean additional work next to your studies. It also means that you can take your education into your own hands and decide what you want and need to learn.

We hope, this guide was useful for you and that you are excited for the things to come!

If you need any assistance during your studies the iRTG coordination team is happy to help.

*We wish you all the best for your studies!*