

# Lab rotation 3 (IRT3) Guidelines

10 ECTS = 300 hr workload  
Curriculum Committee, April 2010

## Goals

Students learn how to design a research project and write a scientific grant proposal based on preliminary data or analysis from their own pilot study. The goal of the pilot study is to prepare each student for the Master's thesis, and the topic of the project should be in the field of Evolution, Ecology or Systematics. Students find and read relevant literature; write a research plan and discuss this plan with various people; and collect preliminary data and/or do some preliminary analysis. **They give a short (12min, with 8 min for questions) presentation to the group where they conducted the research.** Finally, they write a grant proposal in the format of a big granting agency (e.g. DFG) and use this proposal to apply for money from the EES Program.

## Tips

Students should invest a substantial amount of time on researching and reading the relevant literature. During the IRT3, students should be encouraged to gather and synthesize most of the background literature needed for their Master's theses. The result of this literature search should be clearly evident in the proposal. Time should also be spent on discussion of ideas with the supervisor, colleagues in the lab, and others.

The result of the IRT3 project is a written proposal. It will usually be necessary to do some preliminary work to be able to write a good proposal and convince the jury. The proposal should therefore guide what kind of preliminary work should be done during the IRT3. Students are strongly encouraged to design their own project rather than conduct a project designed by their supervisor.

## Grant proposal writing

As part of the grant writing course (Skills 3), students write a grant proposal, following the guidelines of big funding agencies. In addition to writing a proposal of their research, they learn how to design a time plan and budget. They also receive an overview of the most important grant agencies in Germany and Europe.

## Grant Proposal Rules

### Budget

The EES program can contribute up to 4000 EUR / year in total, distributed according to merit to students in the cohort. The core of each project should be funded by the supervising laboratory. Thus, it should first be discussed with the supervisor if the proposed research plan is financially feasible. Funds from the EES program can be requested for optional research that would not be covered by the supervising lab, for optional equipment that would facilitate the proposed research (e.g. computer software) and/or for travel to other labs or museums or to collect material. The idea is that the EES money should primarily benefit the student, not the hosting lab. Keep in mind that separate EES travel grants are available specifically for travel to scientific meetings. Be sure to justify your budget both in the proposal and during your talk.

Proposal deadline: **February 10th** of a given calendar year. The proposal should be sent by email (as one PDF document) to the EES coordinator, who will then forward it to the three members of the Grant Proposal Committee.

### **Proposal evaluation and grading**

The proposals will be evaluated and graded by the EES Grant Proposal Committee. The grade will be decided based on the written grant proposal and the presentation at the IRT3 conference. The decision to fund a proposal with EES money will depend on the quality of the overall proposal. It is very important to clearly justify the request for funds, both in the proposal and during the talk.

**Important:** The proposal has to be accompanied by a **letter of support from the supervisor** of the IRT3 project. In this letter the supervisor has to confirm that the project is doable without any funding from EES. He/she also has to comment on the grant proposal:

- Can the project be finished within the required period of the Master's thesis?
- How would the grant money improve the Master's project?
- Other comments.

### **IRT3 conference**

Students present their proposals to the three members of the IRT3 Grant Proposal Committee. The IRT3 conference will be public, and the students' supervisors should make a strong effort to attend. The students will organize and moderate the conference themselves, and each talk will be 12 minutes, with an additional 8 minutes for questions. Students from the 1<sup>st</sup> semester are required to attend this conference.

## **Proposal**

The proposal should be no longer than a maximum of 10 A4 pages (excluding references and CV) with 1.5 line spacing. Roughly half of the proposal should be devoted to the research plan, time table, and budget.

The proposal should contain the following information:

### **General information**

Applicant

First name, last name, institution, department and research group, email address

Supervisor (and collaborators, if applicable)

First name, last name, institution, department and research group, email address

Title (max 15 words)

Summary (max 200 words)

### **Scientific background**

Background literature summary and up-to-date synthesis of relevant research. Cite the work of other scientists in your field and integrate ideas into the proposed topic of your research.

### **Preliminary work**

Give a summary of your preliminary work on that topic (if applicable)

**Research plan**

Mention the objectives and goals, the methods of investigation, the available data, the data to be collected. Provide details of all planned experiments (e.g. the experimental design, duration, statistics). Where the research will be conducted? Is there any assistance needed from outside your own group/institute?

**Time table**

All steps and the mile stones should be included here. When will data be collected, analyses performed, thesis written up?

**Requested funds**

All the costs should be listed here. Make clear which items/expenses will be covered by the lab vs. which items/expenses are being requested from EES.

Consumables

Travel

Other costs (if applicable)

**References****CV of the applicant****Deadlines 2011/12**

24.10.11	Decision on where to do the IRT3 – turn in course approval form listing other courses as well as IRT3 info
10.01.12	1 <sup>st</sup> draft of proposal is due to supervisor
24.01.12	Supervisor submits evaluation of draft
10.02.12	Final draft of IRT3 proposal is due Students submit proposal to the EES coordinator, who will forward it to members of the IRT3 Grant Proposal Committee
05.03.12	Present work at IRT3 conference