

How to write a proposal

Research questions?

Novel? Unique? Relevant?

The Hypothesis!

The scientific approach?

Suited? Feasible? Practicable?

Meet requirements of funding agency?

How to write a proposal

Find appropriate funding organisation?

theme

applied - basic research

amount of money needed

cooperators

(ERC, DFG, BMBF, DAAD)

Carefully read and follow the instructions of the funding organisation for the submission of proposals!

Here: max. 10 pages (12point, 1.5 line pacing) incl.
front page and reference list!

How to write a proposal

1. Title: Keep it short and general

Experimental host-parasite coevolution in a changing environment

2. Abstract: Concise, but understandable also for non-specialists

3. Introduction:

The big question: *Evolution of sex or host-parasite coevolution*

General background: What is known and importantly what is not known

From coevolution in general to host-parasite coevolution to the environmental effect

 **What an exiting area!**

Specific background:

Previous work on the organism or on the treatment effect

Relevance for other systems

Why is your system specially suited

How to write a proposal

3. Introduction:

General aim: The central idea of the project

Novel and feasible

The current project will use an experimental coevolution approach to study how increasing temperatures influence virulence evolution in the long-term.

Specific aim: Identify 1-3 specific questions

We will measure the short-term effect of a temperature increase on virulence.

We will use a QTL-mapping approach to analyse the molecular genetic basis of the temperature dependent host defence evolution.

Formulate your hypothesis and expectation

How to write a proposal

4. Methods:

The study organism: Describe the system (don't repeat what has been described in introduction)

The experiment: How to answer your questions

- Design of your experiments
- Treatments
- Replicates per treatment
- When you are sampling or manipulating your experimental organisms
- Control treatments

Methods/Protocols: Explain the methods in an understandable manner, without too detailed descriptions

Time schedule: Work plan, time needed, work allocation

Material list: What and how much material do you need and how much does it cost
What type of machinery do you need and where is it available (Barbara/Hilde)

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5. Expected Results:

- Brief description of the expected results

General remarks:

- Comprehensible by non-expert
- Be ambitious but avoid excessive claims



Convince your reader that your research is interesting and relevant and that you are able to achieve your goals!

Pay attention to readability/understandability of the proposal!

Time schedule

1. week:

Monday: Read project description and listen to project description

Wednesday 13:30: **Choose your own project**

Wednesday afternoon: Start writing proposal

2. week:

Wednesday 11:15 **Defend proposal** (max. 10 slides per group)

Wednesday : Improve proposal and **hand in improved proposal** (10 pages max)

Thursday: Start practical work

3. week:

Do your experiments

4. week:

Finish experiments, start analysis

Write report (results and discussion)

Thursday 13:30: **Present your results**

Friday 17:00: **Hand in report**