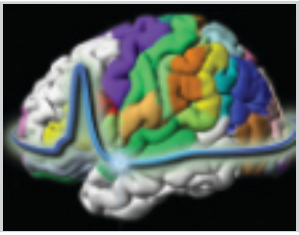
Master programme

Translational Neuroscience

Medical Faculty –Heinrich–Heine University Düsseldorf

Guidelines to project sketch for your Master's Thesis (MT)



General

The **Module Project Proposal (PP2)** serves as a preparatory exercise for your Master's thesis. You perform an 8–week placement in a working group on an experimental project of your choice. After completion, a written concept (**project sketch**) for your Master's thesis has to be drawn (**max. 10 pages**). Your Master's thesis will be a 6–month experimental work based on the module PP2. The main purpose of the project proposal is to stress your ability to deliberate a scientific topic and to design a research project. You should be able to formulate a scientific question, present scientific approaches to solve a problem, interpret, discuss and communicate scientific results in written form and gain experience in writing a scientific proposal.

This guide aims to assist you in writing your project sketch. Please provide a logical outline for your project and use the framework listed in the **blue** box.

Title (proposed topic)

Please define a short and significant title which is clearly formulated and unambiguous. A suitable title should summarize the key ideas and clearly reflect the focus of your proposal. Make it **a single sentence** if possible.

Abstract (introduction & prior work)

Give a short introduction to your project. Establish a context for your research and explain why it is important. Please paint a picture of your proposal in the readers' mind. You should list here as well the main relevant work by others or results you have achieved in your previous work investigations (e.g. during PP2 module). The abstract should be **no more than 500 words**.

Aim

Please state here the main research question you want to address. The aim should give the needed background informa– tion and establish a frame of reference to the rest of your project sketch. Do not go into details on aspects that are further clarified later on.

Hypotheses

This section should include working hypotheses which are theoretical statements that are provisionally accepted as a basis for further research in the hope that a tenable theory and empirical evidence will be produced in your research. Your hypotheses are therefore to be constructed as a statement of expectations, which can be linked to the exploratory research and empirical investigations. Please write down the **principal hypotheses** (approx.1–3) that you would like to defend/verify/falsify in your thesis. You should be able to formulate hypotheses even for theoretical topics.

Methods of investigation/implementation

Explain the methods and techniques which you plan to use for your project. These methods may vary from one project to another with respect to field work, lab experiments, modeling techniques, interdisciplinary collaboration, data acquisition, the infrastructure needed, software used, etc. Please be explicit and state exactly how the chosen methods will fulfill your project objectives in dealing with the needs or problems on which your proposal is focused. In addition, this section should clearly indicate how the methods used allow the outcomes of your project to be valuable to others beyond your project.

References (literature preview)

Add a list of basic and important literature which you are aware of at this stage of your project and which are most closely related to your work. You have to list all papers and publications you have cited in this project sketch. Specify **at least 5–10 relevant references**. Please use established scientific citation practice.

Work schedule (timetable & highlights)

Please provide a monthly work and timetable during your Master's thesis. Consider that the project has to be completed within a given time. Thus the results of your project must be achievable within this timeframe. State a realistic timetable and highlight the project objectives and the goals you are aiming for.

Framework to be followed in your project sketch

1. **Title** (proposed topic)
2. **Abstract** (introduction & prior work)
3. **Aim**
4. **Hypotheses**
5. **Methods of investigation/implementation**
6. **References** (literature preview)

separate work schedule (timetable & highlights)