



Stockholms
universitet

Institutionen för molekylär biovetenskap,
Wenner-Grens institut

Beslutad av IS 2016-06-15

Writing a Research Proposal, 3 credits

Obligatory course for PhD students at MBW

Obligatory for PhD students registered after 1st June 2016

Aims:

- 1) train in scientific writing
- 2) train in defining the rationale and strategy of a research project,
- 3) learn the importance of model systems and experimental approaches,
- 4) gain theoretical knowledge and conceptual understanding of the doctoral project
- 5) gain theoretical knowledge in the broad area of molecular biosciences.

In relation to the examination goals defined by *Högskoleförordningen* and included in the *General study programme for PhD studies in Molecular Bioscience*, this course will help the student to obtain:

- increased knowledge of the student's broad area of research
- increased capacity to identify and formulate scientific questions in a critical, independent, creative and scientifically accurate manner,
- increased capacity to plan a research project,
- increased capacity to produce a scientific text,
- increased capacity to identify the need of knowledge in a specific area of research,
- increased capacity to make independent ethical assessments related to a specific area of research.

If the research proposal describes the doctoral project of the student, or part of it, the course will also contribute to:

- increased deep knowledge of the student's specific area of research,
- increased knowledge of the methodology that is used in the student's specific area of research,
- increased insight into the possibilities and limitations of the student's specific area of research and its impact in society.

Realization:

- The student shall write a research proposal following the instructions specified below.
- The research proposal will fall within the broad area of Molecular Biosciences and will normally describe the doctoral research of the student, or part of it. The focus of the proposal will be decided by the PhD student together with the main supervisor. In any

case, the choice of topic should have educational value within the frame of the student's PhD education.

- The research proposal shall be discussed with the supervisor and eventually approved by the supervisor.
- Once completed, the research proposal shall be sent to the IPS follow-up committee.
- The writing of the research proposal will normally take place during the initial 3 months of doctoral studies at MBW, and must be completed within 12 months after registration.

Examination:

The research proposal shall be briefly discussed in the first ISP follow-up meeting.

The ISP follow-up committee will act as examination committee and decide whether the research proposal is passed or not according to the criteria listed below.

For registration of credits (3 credits, equivalent to 2 weeks of full-time studies), the student shall use the form "*Registration of credits for PhD students*".

Criteria for "passed":

- The research proposal should present a research area and clearly define a scientific question(s) within the area.
- The research proposal should clearly convey the novelty and originality of the proposed research also from a broad molecular bioscience perspective.
- The research proposal should include a feasible and well motivated work plan that explains how the scientific question(s) is going to be analyzed.
- The student should show sufficient knowledge of the research area: the facts presented in the research proposal should be correct, the choice of model system should be well motivated, the methodology should be applied in a coherent manner, and the significance of the study should be logically motivated.
- The text should flow logically and should have a clear structure that facilitates the reading.
- The research proposal should provide adequate reference to scientific literature.
- The references should be referred to and listed using a consistent format.
- The English should be good enough to convey the contents of the proposal without ambiguities.

Important note:

The research proposal is not a binding document. A research proposal is usually the starting point for a research project and often needs to be revised and updated, and sometimes even totally redefined.

Instructions for the writing of the research proposal:

Length: 2000-4000 words

Disposition:

Title of the project

Summary

One paragraph of approximately 200 words, without references, that summarizes the background, aims of the study, methodological approach and expected results and/or importance of the proposed study.

Introduction/Background:

The introduction should provide a survey of the field of research and should frame the topic of the study. The introduction should provide sufficient information to understand the research proposal and to justify the importance of the study. The introduction should include references to publications that are central to the project.

Aims/Objectives:

Provide a few sentences stating the objectives of the study. What are the questions (or question) that you intend to answer?

If the introduction is well written, the aims of the study will flow as a natural continuation to the introduction.

Work plan:

This section should describe what you intend to do and how you intend to do it, including model systems, experimental approaches and methodology.

Significance of the study:

This section should explain the importance of the proposed study. What are the expected results? Why are these results important for the specific research area and for the research field in a broader perspective?

References:

List the references cited in the text. Choose a style and use it consistently throughout the research proposal.

Alternatively, and in consultation with the supervisor, the student may choose to format the research proposal according to instructions provided by a specific research funding agency. In any case, the extension of the research proposal should be at least 2000 words and the research proposal should include information about scientific background, goals, methodology and significance (presented according to the format required by the funding agency). If this option is chosen, the specific instructions will constitute the basis for examination and shall be sent to the ISP follow-up committee together with the research proposal.