## **COMPILING A RESEARCH PLAN**

The recommended length of the research plan is 5 pages excluding the references. The research plan is made under the guidance of the supervisor(s) and her/his acceptance is required. The writing of a research plan is not a formality, but a high quality plan is a fundamental and necessary part of the scientific postgraduate studies aiming at the doctoral degree. The research plan should cover the thesis project altogether. Instructions regarding the different parts of the research plan are listed below.

- **1. Literature review** (i.e. background of the research, key problems in the current knowledge of the research field in question)
  - Literature review should be clear and thorough enough
  - Literature review should link the thesis project to the current problem issues of the research area
  - Literature review is not only a list of earlier studies, but a synthesis and interpretation of the current knowledge
- **2.** Research objectives and hypothesis (i.e. what you are going to study and why, the individualized aims of the subprojects)
  - Description of objectives should be well-focused
  - Objectives should be defined clearly
  - The sub-projects should be linked together
  - Whenever possible, aim at clear hypotheses
- **3.** Research implementation (i.e. the general description of methods, the general features of the experiments, experimental animals, the scale of the patient data, statistical analyses, expected problems and alternative solutions)
  - The chosen methods should be reasoned
  - The description of the methods should be precise
  - The description of the methods should include the principles behind them, not only technical details
  - The patient data and size should be described with sufficient details
  - A description of statistical analysis should be included (for your information some instructions to help you)
  - The ethical principles of the research should be explained. The ethical issues relevant to the implementation of the study in question must be reflected in the plan and it <u>must</u> contain a detailed clarification of the required permissions, statements and announcements <u>instructions</u> These can be for example:
    - ✓ research permit granted by the organisation/institution in question
    - ✓ statement of the ethics committee
    - ✓ permissions from responsible regulatory authorities
    - ✓ permission to perform studies with experimental animals NB! The use of experimental animals should be described and justified in sufficient detail
- **4. Significance of the research** (a description of anticipated results and/or achievements, the new knowledge this study may produce, medical and scientific significance)
  - The relevance of the anticipated results should be discussed
  - The researcher should evaluate the impacts of the research on the development of diagnostics, treatment or healthcare systems

- **5.** *Time schedule* (i.e. the current state of the project, future plans, an estimation when the dissertation will be ready)
  - A clear and realistic description of the current state of the thesis project
  - Precise description of the further studies
  - A realistic timetable to complete the thesis study
- **6.** The name and members of your research group (name the relevant members of your work group and describe their roles briefly)

## 7. Nature of co-operation

- If known that the dissertation will be comprised of the joint publications of several authors, the role of the doctoral candidate should be described
- The role of the doctoral candidate should be described with particular precision, if the same publication will be used as a part of more than one doctoral thesis,
- A description of the supervisors' role
- **8.** Financing plan (incl. personal funding for the doctoral candidate and a short report of the total funding of the research group)
- **9.** References (key literature of the field)
  - The reference list should be inclusive and versatile