



**Karolinska Institutet**  
**Department of Molecular Medicine**  
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Research Plan Design  
Application for the Establishment of research education  
position.

## **Recommendation for the research plan design**

The research plan shall correspond to 4 years full-time research education beginning at the start date defined at admission. It shall be written in Swedish or English. If the plan is written in Swedish, an English project title is required. The length of the research plan should not exceed 5-6 pages (A4).

Some degree of freedom exists in the design of the research plan, but the following headings shall be included:

### **Background**

Short description of the background explaining why the project should be implemented, including the current state of knowledge and knowledge gaps.

### **Aim of the project**

What are the goals / objectives of the proposed studies?

### **Studies**

The project is divided into several smaller studies (usually 3-5) that should be described under “Study 1”, “Study 2” etc. Hypothesis, material and methodology (including study design), and statistical analysis should be described for each study (preferably with the following sub-headings).

- **Aim**  
Aim of the study.
- **Research questions / Hypotheses**  
The questions that form the basis for the study and the hypotheses tested.
- **Method**  
Describe the materials and methods, including study design. From the description it should also be stated where patients and / or volunteers are recruited, how and where surveys / studies / experiments are carried out, possible collaborations etc. For clinical and epidemiological studies the plan should include a description of exposure, outcome and confounding.
- **Statistical analysis**  
The statistical methods/models to be used in the project should be described. Similarly, the basis for study sample size should be described. When appropriate and applicable, power calculations should be included.

- Ethical permits  
Under each study the diaries number (Dnr) and the date of research ethical approval for the studies included in the project should be stated. If ethical permit does not exist or are judged unnecessary, a justification/explanation is needed.

*To add for the research plan presented at the ISP seminar after admission.*

- The role of the doctoral student  
The role of the student should be described for each study. Which parts of the study will be performed by the student, and what will be done in collaborations?

### **Relevance of the project**

The importance of the project and potential implementation of findings.

### **References**

The research plan should include references, particularly regarding the background and methodology.