

INSTRUCTIONS FOR WRITING RESEARCH PLANS AT LIME

Different departments at Karolinska Institutet have different traditions regarding research plans for doctoral students. Observe that it may not be sufficient to fulfill the requirements of another KI department to fulfill the requirements at LIME. You need to take a closer look at the requirements we specify below.

Please note that LIME is a multidisciplinary department. Therefore, the research plan should be written in a way that is understandable to readers from different fields of research.

1 Central aspects

We would like to highlight that the research plan is merely a plan that most likely will evolve and change over time. The primary focus of the research plan should be principal aspects of the research project rather than individual sub-studies. We therefore urge you to spend time and effort considering and explaining the following:

- **Core concepts**
 - Illuminate and clarify the core concepts related to the phenomenon/ena to be investigated.
- **Gap of knowledge**
 - Stringently describe the gap of knowledge, how it relates to a scarcity in the scientific literature and how the doctoral project will address it.
- **Research aim and central research questions**
 - What is the overall research aim of the doctoral project?
 - Research aims (relating to the knowledge to be acquired) are sometimes confused with healthcare aims (such as improved health or wellbeing for a certain patient group).
 - What central research questions (related to the overall aim) will the research answer?
 - Central research questions show how the research aim is meant to be achieved: “We will accomplish this aim by answering the following research questions...”
- **Methods**
 - An introductory general *Methods* section in the research plan is required. Here it is specified how the research questions are to be answered.
 - It is important to clearly link each of the posed research questions/s to the intended methods.

- Clearly describe the main methods of sampling and recruitment, data collection and data analysis that you plan to use. If applicable, describe theoretical underpinnings that are relevant for your research.
- **Plan for sub-studies**
 - Distinctly describe aims and methods for each sub-study
 - Sub-studies should not be confused with papers. The number of sub-studies is not necessarily equivalent to the number of papers that will be written, since a sub-study may generate more than one paper.
 - It is acceptable not to have decided everything at this point in time. Describe the sub-studies that have been planned so far and clearly state what is yet to be decided. It is recommended that the first one or two sub-studies are specified in some detail so that the admission board can evaluate whether you understand where to start and what may lie ahead.

2 Structure of the research plan

The research plan should be structured as follows, using the headings listed below:

- Title
- Introduction/Background
 - Make your introduction as succinct as possible.
 - Describe the knowledge gap at the end of this section.
- Overall research aim/s and central research questions
- Methods
- Plan for sub-studies
- Significance
- Ethical considerations
- List of key terms and definitions
- References
- Mandatory attachment: Time plan detailing data collection, data analysis, manuscript writing for all sub-studies; courses and other credit-bearing activities. Please, clarify what parts of the research the doctoral student will perform (and what parts of the research that will be done by others and what have already been done).

3 Formatting instructions and other things to consider

- **Length:** 5-7 A4 pages, including tables and figures, but excluding references and time plan.
- **Typeface:** Times New Roman (or other serif font), 12p.
- **Line spacing:** 1.15
- **Page layout:** Margins min 2.5 cm; include page numbers.
- **Tables and figures:** Tables and figures must contain captions and should be numbered and referenced in the text. Please check that figures are readable when printed and photo-copied in black and white.
- **References:** Use a consistent and recognised referencing style. A maximum of 30 references is allowed. All scientific articles must be provided with working hyperlinks so that they can be accessed and verified.
- **Abbreviations:** Introduce abbreviations or acronyms only when they represent widely established terms (such as DNA or IQ). All abbreviations must be listed in alphabetical order.