Instruction for Master's Thesis

Please note that we highly recommend registering no later than <u>3 months</u> after your last examination!

Important: All research methods and tools used must be described in sufficient detail. It is also required to explicitly acknowledge contributions of others to the thesis or data included therein (e.g., technical support, other involved researchers, core facilities). The use of artificial intelligence (AI) tools such as generative models for text and image creation (e.g. ChatGPT) must be clearly disclosed in the thesis. This includes specifying what the tool was used for and to what extent. We strongly recommend discussing the use of such tools with your supervisor in advance. As the author of the thesis, you take full responsibility for the entire thesis and must ensure that it complies with the principles of good scientific practice (e.g., avoidance of plagiarism).

Formatting

DIN A4
Single-sided printing
1.5 line spacing
Font style: Arial
Font size: 12 pt
Margins at least 2cm

Mandatory! Please include a **PDF version** of your thesis on CD to <u>every</u> copy of your thesis. Please add/glue it on the very last inner page of the copy. Please additionally send the PDF to neurosciences@uni-bonn.de.

The text part of the thesis may be no longer than <u>80 written pages,</u> including references. An appendix does not have to be included in the 80 pages.
The thesis should be bound. We recommend glue-binding.
The title page (sample below) has to be printed on the cover and on the first page. The second page lists the first and second referees (see example below), including their respective professional addresses.

The pages have to be numbered with Arabic numbers from the first page of the index onward. The page header contains the title of the respective main chapter on the left and the page number on the right side, and is separated from the text with a line below.

The chapters (divisions) and subdivisions should be signed with Arabic numerals according to ISO 2145 (see http://en.wikipedia.org/wiki/ISO_2145) up to the fourth division. Further divisions are introduced by paragraphs, which may include subheadings and usually consist of several sentences. Tables must be numbered from 1 onward (no references to the chapter, i.e., Table 8 rather than Table 6.2), together with the title *above* the table, the legend may be below the table. Figures, also numbered from 1 onward (Fig.1 …), are entitled *below*. Tables

and figures must be referred to in the text, but their legends have to be instructive enough to be understood alone (self-explanatory).

The thesis has to be structured as follows:

1   Index
2   List of Abbreviations
3   Introduction
4   Aims of the project
5   Material and Methods
6   Results
7   Discussion
8   Summary
9   References
10   Acknowledgements
11   Appendix (if absolutely necessary)

Introduction
The scientific background and the objectives of the project are described. In the last paragraph, the aims of the work should be summarized briefly (half a page; the aims can also be presented as a separate paragraph).

Aims of the project
The aims of the project should be given here.

Material and Methods
This part contains a list of chemicals, etc., including the companies they were purchased from. Also, important instruments, devices etc. should be listed (but not, e.g., each pipette!). The given Equations should be numbered. The experiments have to be described clearly and in detail enough that another person could reproduce them; however, standard methods should be referenced and can be briefly described. Give a paragraph on Data analysis including statistical tests employed to check the significance of differences/changes.

Results
Experimental results are described using figures and tables. The figures/tables must be mentioned in the text. Results must not be discussed in this section. To show whether any difference or changes in the data are significant, appropriate statistics have to be applied. Figures and Tables should be understandable from the legend without the main text; everything in the figures must be readable.

Discussion
In this part, the successful experiments should be described in the context of the scientific background, including advantages, limitations and efficiency of the methods as compared to the literature. For experiments that did not work, a possible explanation should be given, as well as suggestions of how to change/improve the experimental design (error-cause analysis). Further steps to be taken in successive studies should be proposed.

Summary

The main results and conclusions of this work should be summarized shortly.

References

References should be cited **in the text** as follows: "The procedure used has been described elsewhere (Green, 1978);"or "Our observations are in agreement with those of Brown and Black (1979) and of White et al. (1980);"or with multiple references, in chronological order: "Earlier reports (Brown and Black, 1979, 1981; White et al., 1980; Smith, 1982, 1984).... "
In the list of references (to be typed 1.5-spaced), papers should be given in alphabetical order according to the surname of the first author. In two-author papers with the same first author, the order is alphabetical by the second author's name. In three-or-more-author papers with the same first author, the order is chronological. The name of the author(s) should be followed by the date in parentheses, the full title of the paper as it appeared in the original together with the source of the reference, the volume number, and the first and last pages. Do not number or bullet the references.

Hamill OP, Marty A, Neher E, Sakmann B, Sigworth F (1981) Improved patch-clamp techniques for high-resolution current recordings from cells and cell free membrane patches. Pflugers Arch 391:85-100.

Hodgkin AL, Huxley AF (1952a) The components of membrane conductance in the giant axon of Loligo. J Physiol (Lond) 116:473-496.

Affirmation

Finally, an affirmation including place, date and signature must be given: see sample below.

The 3 copies of your Master's thesis have to be handed in at the coordination office. This should be done in person, you can be represented by another person. Please arrange a submission appointment with the coordinator.

Thesis Title - Thesis Title - Thesis Title - Thesis Title - Thesis Title
Thesis Title - Thesis Title - Thesis Title - Thesis Title

Thesis
submitted in partial fulfilment of the requirements for the degree

Master of Science

Master's program in Neurosciences
Faculty of Medicine and
Faculty of Mathematics and Natural Sciences
Rheinische Friedrich-Wilhelms University of Bonn

Presented by
Name
from *City (of birth), Country*

Bonn, *month year*

This work has been performed at the *INSTITUTE*
In the team of *ADVISER*

1. Referee*: Name*
Institute /Department

2. Referee*: Name*
Institute /Department

Affirmation for the Master's Thesis

I herewith declare that I have independently written this thesis.
Only the sources cited have been used in this work. Parts that are direct quotes or paraphrases are identified as such.

Bonn , (date)_____ _____
(signature*)*