

International Graduate School in Molecular Medicine Ulm International PhD Programme in Molecular Medicine



**Guidelines for Drawing Up Dissertations for Gaining the
Academic Degree**

Doctor of Philosophy (PhD)

or

Doctor rerum naturalium (Dr. rer. nat.)

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These guidelines are meant to serve as an aid to orientation for drawing up the dissertation within the framework of the „International PhD Programme in Molecular Medicine“. Following them should help to avoid time-consuming, form-related revisions.

1. Form-related criteria

The dissertation must be written in English. It must be submitted in the A4 format, printed only on one side of the page and bound together. For the page margins: left margin: 3 cm, right margin: 2.5 cm. The spaces between the lines should be 1.5 and the type size not less than 12 (exception: in figures and tables and their captions not < 8).

2. Structure

2.1. Title page

The following information should appear on the title page:

- Institution in which the dissertation was drawn up and the current head of this institution
- Title of the dissertation
- Dissertation wording: Dissertation submitted in partial fulfillment of the requirements for the degree of „Doctor of Philosophy“ (PhD) of the Medical Faculty of Ulm University
- or
- Dissertation submitted in partial fulfillment of the requirements for the degree of „Doctor rerum naturalium“ (Dr. rer. nat.) of the International Graduate School in Molecular Medicine Ulm
- Author's name
- Place of birth
- Year

2.2. Second page

The second page should contain the following information:

1. Current dean / chairman of the Graduate School

2. Thesis Advisory Committee:

- First supervisor:
- Second supervisor:
- Third supervisor:

3. External reviewer:

4. Day doctorate awarded:

(For (1) and (3), do not enter any names – these are entered later after the end of the entire doctoral procedure)

2.3. Table of contents

The table of contents should be as short as possible and include two (maximum three) levels of division/subdivision. A more extensive subdivision is possible in the text. The table of contents should not be more than 2 pages long.

2.4. List of abbreviations

Here all abbreviations used in the dissertation, also in the figures and tables, (except the trivial well-known ones) should be listed alphabetically, written in full and explained.

2.5. Introduction

Briefly worded introduction to the topic and precise formulation of the question/problem at the end of the introduction. The length of the introduction must be in an appropriate relation to that of the entire dissertation (discussion, results).

2.6. Materials and methods

Here all relevant methods must be described in such a way that the reader can reproduce the experiments. Published methods without further development should only be cited; newly developed methods must be described in detail.

For experimental animal studies, the approval of the relevant authority must exist.

2.7. Results

Presentation of one's own study results in the form of tables, figures and written explanations. There should be no discussion in the presentation of the results unless this is related to the individual points of the experimental procedure and will not be considered again during the subsequent discussion (section 2.8.).

2.8. Discussion

The discussion must not be a repeated listing of the results. Rather it contains the discussion of one's own results and their comparison with data from the literature. The discussion should be subdivided into individual points with reference to the question/problem, methodology and results on the topic. Only in exceptional cases (if necessary for understanding) should figures and tables be contained in this section. At the end of the discussion, a conclusion should be drawn from the dissertation.

2.9. Summary

The summary of the entire dissertation is involved here, that is to say a summary of the question/problem, materials and methods, results, discussion and conclusion [obligatory]. The summary contains no references, figures and tables and must not exceed the length of 2 pages. The abbreviations used in the summary must be explained here.

3. List of references

3.1. Form-related criteria

When drawing up the list of references, attention must definitely be paid to standardization. Only references that also appear in the text can be cited. All references (including one's own articles) must be complete, i.e. with author and all coauthors, year of publication, title of the article (in original language), title of the journal, volume as well as first and last page number of the article (see below).

The list of references must always be numbered and ordered alphabetically according to the first authors; here the surname is the first criterion. With identical last names, the initials of the first and middle names are used for determining the order. With identical family and first/middle names, the year of publication in chronological order is the next criterion. If the year of publication is also identical, the last name of the second author is considered. If this is also identical, a small letter is added to the year for purposes of making a distinction [e.g. 1981 a; 1981 b].

All coauthors must be given in full. No issue numbers, only volume and year of publication are given.

3.2. Examples for references

1. Journals

- Müller H: Wie zitiere ich richtig? Münch Med Wochenschr 86: 1121-1124 (1982)
- Müller H, Meier R, Schulze X: Möglichkeiten zur Proliferation von Dissertationen. J Comp Neurol 55: 11-55 (1990)

2. Books

When citing books, the following must be given: author(s), year of publication, title of the contribution, first and last page of the contribution (not the entire book), name(s) of the editor(s), title of the book, possibly number of the volume and/or edition of the book, name of the publisher (without initials or "-Verlag") and the publisher locations (maximum 3 locations).

- Example: monographs:

Wiesengrund X, Zeppelin M: Die Anatomie der gemeinen Hausfliege. Springer, Berlin Heidelberg New York, pp. 21-40 (1990)

- Example: contributions in handbooks, textbooks and collected editions: Textbooks and handbooks must not be cited as the entire book with the first and last page number, rather only the part serving as a direct reference (page, section, chapter) giving the corresponding first and last page numbers.

Müller A, Meier B, Schmid C: über das Abfassen von Dissertationen an der Universität Ulm. In: Bauer D, Schulz E (Eds.) Die Dissertationen, Vol. 1, 7th Edition, Universitätsverlag Ulm, pp. 100-110 (1990)

3. Citations of unpublished findings of others and personal communications These can be included in the list of references as follows:

- Huber R, Schmid S: (1991 personal communication)
- Huber R, Schmid S: (publication in preparation)
- Huber R: (unpublished findings)

4. Citations of one's own unpublished findings

Abel A, Schumacher R: Derzeitiger Stand der Behandlung des Mammakarzinoms. Dtsch Med Wochenschr (accepted for publication) –in these cases, evidence of the acceptance must be furnished.

The statement "In press" is not permitted; if the article is not yet accepted for publication, the reference without the name of the journal is as follows: (publication in preparation).

5. Dissertations

Should be clearly identified as such with giving the faculty, place and year. e.g. Lorenz DW: Immunologische Diagnostik bei Kindern. Med. Dissertation, University of Bonn (1976)

6. Habilitation

These are treated like dissertations
e.g. Mahlbacher U: Immunologische Untersuchungen bei AIDS-Kranken. Med. Habilitation Thesis, University of Hamburg (1988)

3.3. Reference citations in the text

Texts quoted word for word should be clearly indicated by quotation marks as a quotation giving the source and the exact page number.

Citation via numbers

The numbers of the list of references are given in the text written in Arabic numerals in brackets: e.g. [1,34,173]

Citation via giving author names

The authors are cited in the text with the year as follows; for more than 2 authors the abbreviation "et al." is used: e.g. (Adam 1975) or (Adam and Müller 1980) or (Adam et al. 1987).

4. Appendix

In exceptional cases, it is possible to include a tabular appendix after the list of references; it should only contain documentation material, raw data or similar raw material (e.g. computer programmes, questionnaires, study protocols, detailed tables with all individual values, mathematical tables etc.).

5. Statutory declaration

At the end of the dissertation, statutory declarations (signed) in accordance with the following sample must be included:

Declaration:

I hereby declare that I wrote the present dissertation with the topic:

independently and used no other aids than those cited. In each individual case, I have clearly identified the source of the passages that are taken word for word or paraphrased from other works.

I also hereby declare that I have carried out my scientific work according to the principles of good scientific practice in accordance with the current „Satzung der Universität Ulm zur Sicherung guter wissenschaftlicher Praxis“ [Rules of the University of Ulm for Assuring Good Scientific Practice].

Ulm, (date)
(Signature)

6. Cumulative dissertations

The submission of a cumulative dissertation is only possible provided that at least three connected original articles (cumulative dissertation) with a significant individual contribution from the PhD candidate have been published in recognised peer review journals, or accepted for publication. The PhD student must also have written two of the articles as main author.

The PhD student must provide a detailed introduction with the submitted articles in which the articles are comprehensively placed in a scientific context. In addition, a résumé of the articles must be handed in, in which the scientific contribution to the field of research is highlighted.

A cumulative dissertation is only possible with the agreement and approval of the supervisor. It should indicate the doctoral student's ability for independent scientific research and a proper understanding of the results of the thesis. In as far as sections of the dissertation have been published in co-authorship with other scientists, the individual contribution of the doctoral candidate must be clearly dissociable and measurable in all articles. The PhD student must also provide a declaration written by himself on his contribution to the dissertation, which is then to be confirmed in writing by the thesis supervisor.

The PhD committee sets directives for the completion of a cumulative dissertation.

7. Figures and tables

Figures and tables must be understandable in and of themselves. In the captions

- All abbreviations, symbols and colors must be explained
- The type of data must be defined
- If applicable, sources must be given
- If applicable, scale must be given

Figures and tables should be integrated in the text. Normally they are in the results section of the dissertation; only in exceptional cases are they in the other sections, but never in the summary. Presenting the same data in both figures and tables is not permitted.

There is no difference between diagrams, photos and graphs (all are regarded as figures). All figures are consecutively numbered (throughout the entire dissertation). The number, name of the figure and the caption are placed under the figure.

All tables are consecutively numbered (throughout the entire dissertation). The number, name of the table and the caption are placed above the table.

8. Submission of the dissertation

Please submit your list of publications to the coordination office of the Graduate School at least one week before the submission of the dissertation. The office will check if your publications are sufficient for the thesis submission.

The following documents must be submitted to the coordination office when you submit your thesis. All documents must be submitted as originals or officially certified copies.

1. Admission application
2. 7 copies of the dissertation
3. 1 soft copy of the dissertation (in PDF)
4. Certificates (higher education entrance qualification, all academic examinations)
5. Signed and dated curriculum vitae
6. At least one original article as first author or co-author (co-authorship is only accepted in exceptional cases upon decision of the PhD committee)
7. Evidence from the Student Affairs Office of the grades of the intermediate examinations
8. Proof of enrolment (semester certificates of the last two semesters)
9. A current police good-conduct certificate
10. List of visited lectures / List of activities from the third year