

## Frequently asked questions concerning “PhD at the faculty of sciences”

### I. General questions on the PhD process

#### I have questions on the general procedures

Please contact the [Graduate Centre \(Graduiertenzentrum\)](#) concerning questions regarding the registration as a postgraduate or on the opening of the refereeing process.

Questions on the selection of referees, examiners, or other subjects related to the thesis review and procedures should be sent to the [chair of the PhD commission](#), who will answer them after consultation with the representative of your department in the [PhD commission](#).

#### When should I register myself?

You should register yourself in [DocDaten](#) at the start of your PhD's research phase, i.e., typically about 3 years before you plan to submit your thesis. After your registration in the system you can fill in the "Antrag auf Zulassung zur Promotion", i.e., you can request to be registered as a postgraduate student. This form needs to be signed by your thesis advisor and needs to be submitted to the [Graduate Centre \(Graduiertenzentrum\)](#) together with the other materials as outlined on the form. You are only registered once you receive a registration letter from the [Office of Doctoral Affairs \(Promotionsbüro\)](#). Please note that the registration process can take quite some time, especially if you have a foreign degree. It is only during the registration that a formal check is done whether your degree allows you to pursue a PhD at the Faculty of Sciences. For this reason, it is in your own interest not to wait too long until you register. Please note that employment as a scientist ("wissenschaftliche Mitarbeiterin"/"wissenschaftlicher Mitarbeiter") does NOT imply that your degree enables you to get a PhD according to the regulations of the Faculty of Sciences.

#### I am employed at FAU as a 'wissenschaftliche Mitarbeiter', my contract states that I am allowed to work on my PhD. Does this mean that I am registered as a postgraduate student?

No, you are not registered as a separate procedure is necessary for this.

Please note that the conditions under which you can be employed as a scientist ("wissenschaftlicher Mitarbeiter") are different than those for the registration as a postgraduate student. This is especially important for degrees obtained abroad and from "Fachhochschulen" (universities of applied sciences), which sometimes allow you to be employed according to TV-L E13. This does not imply that these degrees are eligible for the Dr. rer. nat. The tests whether you are eligible is only done during the registration procedure.

#### What restrictions apply for the selection of examiners for the PhD defense?

When selecting the examiners for the PhD you need to ensure that at least one full time professor of the Faculty of Sciences is a member of the board of examiners, which contains three professors. This is important, i.e., when your advisor is a professor of another faculty as is the case if you are doing a PhD in Molecular Medicine. In addition, only one of the examiners can also be a referee of the dissertation. Normally, this person will be your advisor.

Some departments have additional restrictions in place, in order to ensure the breadth of the defense. As a rule of thumb, examiners should come from more than one chair and research area (e.g., physics: one examiner has to be from experimental physics, one from theoretical physics). When in doubt please contact the representative of your department in the [PhD commission](#).

Note that "Privatdozenten", W1 professors, and "apl." professors have the same rights to be examiners as W2/W3 professors.

### **I am a student of Human Biology at FAU. Can I work on my PhD in the clinics?**

No, this is not possible. The Faculty of Medicine offers a doctorate in Human Biology (Dr. rer. biol. hum.) instead. If your degree is in Molecular Medicine, however, your PhD will be a Dr. rer. nat.

### **I have a degree in science, my advisor is professor in a different faculty at FAU. I want to obtain a Dr. rer. nat. What shall I do?**

FAU's regulations for the doctorate mean that the type of the doctorate depends on your advisor's faculty, since it is the faculties which are responsible for the doctorate, not the University. Advisors who are not members or adjunct members of the Faculty of Sciences are therefore not able to advise students who want to obtain the Dr. rer. nat. The sole exception are professors of other faculties who are active in teaching and research in molecular medicine and who have been accredited as advisors for the Dr. rer. nat.

If you still want to obtain the Dr. rer. nat., then you should name a second advisor from the Faculty of Sciences as part of the registration as a postgraduate student, i.e., 3 years before the planned submission of your dissertation. This way you can ensure that the faculty is able to guide your scientific education in this area. Naming such a second advisor just before submitting the dissertation, or naming a first advisor just before submitting the dissertation, after finishing the major part of your research for the degree, is very strongly discouraged. The culture of the different research areas at FAU is sufficiently different that such a procedure has often led to very significant problems and also to formal objections to the thesis after its review and is therefore strongly discouraged.

In a very small number of cases it is possible that a professor of another faculty is accredited to be advisor for a specific research program. This is limited to single, well justified cases. Earlier advising of Dr. rer. nat. theses do not have any predictive power whether your advisor will be accredited for your research project, since the decision is done on a case by case basis. The proposal that your professor should be external advisor should be submitted by yourself (NOT your advisor) in writing to the chair of the [PhD commission](#). In order to avoid disappointment, we very strongly suggest that the petition to be accredited as advisor for the Dr. rer. nat. is submitted BEFORE you start your research, i.e., more than three years before the planned submission of the thesis.

## **II. General questions on the dissertation**

### **Are there regulations on how to cite other people's work, similar to the Faculty of Medicine?**

No, the citation culture is very much dependent on the individual subject, such that contrary to medicine it is not possible to formulate general rules. You should follow the common rules in your research subject, similar to what is done in the standard scientific journals in your subject. In any case, please follow the [common conventions of good scientific practice](#).

### **Can I quote in verbatim sentences or paragraphs from my publications in my thesis?**

In most sciences the publication of research results in the (refereed) literature during the research phase of the PhD is considered more important than their publication in a dissertation. The reason is that, compared to other disciplines, theses are still seen as individual publications, but their importance is second to the publication of journal articles. A thesis is therefore much more seen as part of an examination, rather than an individual piece of work (although in some subjects represented in the Faculty of Sciences this might be different!). For this reason, it often happens that a thesis repeats paragraphs out of articles published by the PhD candidate. This is in general not a problem, if the source of the paragraph is clearly stated. We recommend to put short quotes into "...". For longer quotes, a possible way is to clearly state in the respective chapter of the dissertation that parts of the chapter have already been published and are therefore partly taken in verbatim from the publications.

Theses also often paraphrase the own publications, e.g., when several publications exist about an experiment and these are then summarized in one or more chapters of the thesis. Similar rules apply in this case.

The most important thing is, as the rule of thumb, that all readers of the dissertation can clearly and without any doubts understand the origins of the different parts of the thesis and that there is a very clear separation of the results obtained by the PhD candidate from those obtained from others (including co-authors!). Everything else constitutes plagiarism. Note that the culture in different fields is very different. Your advisor should be able to help.

### **III. What are the rules for cotutuelle PhDs?**

The procedures related to cotutuelle doctorates, i.e., joint doctorates given out by two universities. The procedures are regulated by the "Rahmenpromotionsordnung" and by contracts between the different partner universities. As a rule of thumb the PhD procedure is done according to the regulations of one of the two universities, and the other university has a right to say in important matters. For example, the advisors of both universities have to be members of the boards of examiners. It is important that both universities have to agree on the acceptance of the thesis BEFORE the formal defense.

This implies, for example, that the thesis has to be reviewed even if the other university does not require reviews, since otherwise the [PhD commission](#) of the Faculty of Sciences cannot accept the thesis. When in doubt, talk to the [chair of the PhD commission](#). In addition, the [commission](#) and the [Office of Doctoral Affairs \(Promotionsbüro\)](#) need to be informed about the progression of the cotutuelle thesis, starting at a time that is much earlier than the submission of the thesis.

### **IV. Cumulative Dissertations**

#### **How many publications are required for a cumulative dissertation?**

The answer to this question depends on the specific circumstances and the regulations of your department and is defined in the regulatory statutes of the departments. As a rule of thumb 4-5 publications are required (although there is a difference whether we consider a short notice of two pages length or a review paper with 100 pages). You have to be either first author or main author, or have contributed very significantly to the publication. Cumulative dissertations encompassing less than two publications are not possible, even if you have two publications that are not single author publications, the commission advises against submitting them through a cumulative dissertation.

#### **Am I right in assuming that the cumulative dissertation is not coupled to the impact factor of the journal? All journals I have published in are appropriate scientific journals?**

The publications entering a cumulative dissertation have to be accepted in refereed journals. The impact factor of the journal is not important but the review of the publication has to conform to international norms. As an example: In some areas of science conference publications are intensively reviewed and are fully equivalent to publications in scientific journals, in some other areas there is a "referee light" process, while yet other fields do not have any review for conference publications. Depending on the individual reviewing process such a publication can therefore be part of the cumulative dissertation or not. When in doubt it is the job of the supervisors and reviewers to judge whether the article should have been included or not. The supervisors/reviewers should use very high standard here, which means that when in doubt, such publication should not be part of the cumulative dissertation.

Impact factors are unimportant since for the evaluation of the quality of the thesis it is important to evaluate the work and publications of the PhD candidate. As the impact factor is dominated by the

quality of other articles which appeared in the same journal, and not by the work of the PhD candidate, the impact factor is irrelevant for the assessment of the quality of the work of the PhD candidate.

### **What about articles with coauthors which have nothing to do with my dissertation?**

Since these publications cannot be connected with the subject of your thesis, they cannot enter the cumulative dissertation and therefore they do not form part of the examination and thus are irrelevant for the grade awarded to the PhD thesis.

Note that this does not mean that it is not possible to include research in different subject areas into a dissertation.

### **Should the summary of the published works and the subject of the cumulative thesis be written in German or English?**

The dissertation should be published in German or in English. This is true for all theses, including cumulative ones. Within a given thesis you should use a consistent language, although theses published in English also need an extended summary in German. Try to get an overview of how things are done in your area by reading other theses that are similar to yours in order to get a feeling for what is meant.

### **For publications written in coauthorship it is required to show unambiguously which parts of the publication originated with the PhD candidate. Does this also apply for publications where I am the first author? In what form and language should this be done?**

The basic principle of cumulative dissertations is that the examiners and other readers can unambiguously understand what your contributions were for all publications included in the thesis. This is independent of whether you are the first, second, or Nth author of the publication. This means that in your dissertation you need to describe explicitly and understandably for others what parts of the published articles were done by yourself, and what parts were done by others (in other words: who has done the analysis? who interpreted the data? who wrote the text? etc.). If this is not an integral part of the dissertation, you can describe this, e.g., in a preamble to the publication or in the general text of the thesis.

It is impossible to state in more detail what exactly has to be said here since this depends too much of the individual publication and, in the end, this description is also part of the overall work that is to be done to get the PhD.

### **Can the description of my contribution to a publication also be fulfilled by the 'author contribution' section that is required by some journals?**

A separate description is not necessary if the author contribution really describes in detail what individual authors did. However, in most cases such sections are too short or authors are lumped together ("A, B, and C were responsible for the sample analysis"). Goal of your description is to enable your readers to understand without any doubts what your individual contributions were. This is also for your protection, a dissertation should be your **independent** scientific work. Publications with multiple authors do not constitute independent work, therefore you have to describe your own contributions.

### **The creatorship of individual parts is to be confirmed in writing by the candidate and the coauthors. In what form and language should this be done?**

For all publications which enter a cumulative dissertation you need a written confirmation from all coauthors, what share of the publication was done by you. The coauthors also need to confirm that they agree that the publication becomes part of a cumulative dissertation. One consequence of this requirement is that the threshold for other PhD candidates to use the same article in their cumulative dissertations becomes much higher. This means that you need confirmation from all coauthors that

they are in agreement with your usage of the publication in your thesis and that they agree to the publication.

Typically, you will write a statement that your claims are correct and you will submit this statement to the [Office of Doctoral Affairs \(Promotionsbüro\)](#) when submitting your thesis. In addition, you should write a similar statement for each individual publication (in English or German) and have it signed **by all coauthors**. Email is not sufficient.

A typical text could be:

“I am a coauthor on the publication XXXXX (bibliographical information, including title, journal, volume, pages) and I agree to the use of this publication in the PhD thesis of XXXX. I have seen his/her description of his/her contributions to this publication and confirm that this description is correct.”

Coauthors pursuing a habilitation need to be aware that it will become much harder for them to use the publication as part of the habilitation thesis.

All really means "all". The regulation that all authors have to confirm the inclusion is part of FAU's General Doctoral Regulations. A statement, e.g., of the speaker of a collaboration is explicitly not enough. The reason is that by including the publication in your thesis you claim significant parts of this publication as your own work. The requirement is so high also to protect yourself, since otherwise somebody else could claim what you did as their own work in their theses.

This implies that cumulative dissertations in subject areas which are characterized by collaboration publications with a large number of authors are virtually guaranteed to lead to problems. For these areas we therefore explicitly dissuade you from pursuing a cumulative thesis.

### **What about copyright?**

You have to make sure that you are allowed to include the publications which are part of the cumulative thesis as part of your dissertation. For many publishing companies you sign over your copyright to the publishing company. In such cases you need a license from the publishing house that allows you to print the article in the cumulative thesis. How you obtain this license depends on the journal.

When in doubt you should contact the [University Library](#).

Note that it is your responsibility to ensure that the license allows the free circulation of the dissertation. The [PhD commission](#) is responsible for the scientific aspects of the PhD, the [Office of Doctoral Affairs \(Promotionsbüro\)](#) for the administrative one. None of these institutions can make legally binding statements concerning licenses or copyrights.

### **Am I allowed to modify the look of the publications to my own design, without changing the contents?**

This is formally not a problem. However, you need to be careful with the copyright and licensing regulations. In other words: if the license agreement with the publishing company states that you are only allowed to use the format of the article as defined by the journal, you are not allowed to deviate from this agreement.

In general, the character of cumulative dissertations is such that the publications should be recognizable as publications, so we discourage you from reformatting the publications.

### **Do submitted publications, which have not yet been accepted, count for the publication count for cumulative dissertations?**

No. The reason is that only by having the publication accepted in a review process it can be ensured that the high quality standards required for a cumulative dissertation can be met. By definition, not yet accepted manuscripts do not yet have this high quality. FAU's regulations clearly define a

cumulative dissertation as the combination of accepted or appeared publications and a summary which places these publications in the scientific context. However, departments can define that such manuscripts can be appendices for cumulative dissertations.

## **V. What happens after the PhD?**

### **I want to apply for a PhD prize and need the reviews of the thesis**

Please contact directly the reviewers and ask them to send the review to you or the committee for a prize. Even though you have the right to read the reviews in the [Office of Doctoral Affairs \(Promotionsbüro\)](#), the office is not allowed by law to send you or others the reviews. Please note that many prizes do not allow you to apply for the prize anyway, but you need to be recommended by somebody.

### **I want to apply for a position with Centre national de la recherche scientifique (CNRS) in France and need the review of my PhD thesis**

See above. France does not grade theses, but it is common to hide an assessment of the quality of the thesis and defense in the minutes of the PhD examination (which are different from the review of the thesis!). Since the procedures for assessing PhDs are very much country dependent, CNRS does not require the submission of the minutes for people with non-French PhDs, and according to our French contacts this is also not necessary.