Regulations for the University of Tübingen Faculty of Medicine's PhD degree program in Experimental Medicine

In accordance with § 38 (4) sentence 1 in connection with § 19 (1) sentence 2 no. 10 LHG (GBI.2005, p.1) of 01 April 2014 (GBI. p. 99), as amended by article 7 of the law dated 21 December 2021 (GBI. 2022, pp. 1, 2), the University of Tübingen Senate, in its session on , passed the following doctoral degree regulations of the Faculty of Medicine at the University of Tübingen for the PhD program in Experimental Medicine.

Approved by the President in accordance with § 38 (4) sentence 1 LHG on 21 July 2022.

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Attachment 1

§ 1 Objectives

- (1) The Experimental Medicine PhD program at the Tübingen Faculty of Medicine provides project-oriented postgraduate training in basic and applied medical research. It is designed to promote highly talented young researchers. The goal of the program is to enable participants to carry out independent scientific work and to provide them with advanced professional qualifications for jobs in research or related areas.
- (2) The PhD program generally lasts 3 years. After successfully completing the program and passing the PhD examination, the graduate receives the academic title "Doctor of Philosophy" (PhD) from the University of Tübingen's Faculty of Medicine.
- (3) One of the PhD program's goals is to improve the scientific training of especially motivated students of medicine and dentistry at the University of Tübingen. Within the framework of a double degree combining the German Staatsexamen (state examination) in medicine/dentistry

and a PhD in Experimental Medicine, these students are both trained as medical and dental clinicians and awarded the academic title PhD.

§ 2 Admission requirements

(1) The PhD program is aimed particularly at students and graduates of medicine and dentistry; graduates of the medicine-related degree programs Molecular Medicine and Medical Technologies as well as graduates of degree programs with comparable curricula such as veterinary medicine; the natural sciences; Master's degree programs in Neural and Behavioral Sciences and in Cellular and Molecular Neurosciences. The PhD board decides on the equivalency of the contents and qualifications of degree programs.

A prerequisite for admission to the PhD program is graduation with above-average grades in one of the following degree programs in Germany:

- a) Medicine or Dentistry (state examination) or
- b) a suitable Master's degree or
- c) a suitable four-year degree from a university.
- (2) Notwithstanding paragraph (1) a., students enrolled in the degree programs for Medicine (state examination) or Dentistry (state examination) at the University of Tübingen and who have successfully passed the first section (M1) of the *ärztliche Prüfung* (state examination in Medicine) or *zahnärztliche Vorprüfung* (intermediate state examination in Dentistry) may be admitted to the PhD program while still completing the above-mentioned first state examination degree. Proof of the successful passing of the second part of the *ärztliche Prüfung* or of the *zahnärztliche Prüfung* (state examination in Dentistry) is a prerequisite for admission to the PhD examination.

Prior to enrollment on the basis of § 2 (2), candidates are first admitted to a qualification phase. Final admission to the PhD program is granted after submission of proof of the completion of at least 18 ECTS out of the total credit points required by the PhD program and submission of a proposal for the planned research work according to § 6 (3). The requirements of the qualification phase should usually be completed within 3 years; an extension may be granted upon application. If the student elects not to continue PhD studies after successfully completing the qualification phase, the credits completed up to that point shall be confirmed in a certificate.

- (3) Degrees in other programs from institutions of higher education outside Germany may be recognized if they are equivalent. Regarding the equivalency of international degrees, the committee will draw upon the Equivalency Agreements approved by the Standing Conference of the Ministers of Education and the German Rectors' Conference as a basis for decision. If there are doubts about equivalency, the relevant authority (Zentralstelle für ausländisches Bildungswesen) may be consulted. If subsequently there are doubts about equivalency, an oral exam may be held to establish whether the candidate is qualified to carry out doctoral studies in the relevant subject. In this examination, the candidate must demonstrate that he/she has knowledge of a standard equivalent to that of final examinations in comparable programs in Germany. The examination is conducted by two persons with the rank of Professor, lecturer or Privatdozent who have been appointed by the head of the PhD board. The exam takes approximately 45 minutes and may be conducted in English, upon application by the candidate. The examination is passed if both examiners grade the examination "passed." If the applicant's performance is given a "fail" grade by at least one examiner, the exam may be attempted one more time.
- (4) Highly qualified holders of a diploma from a university of applied science or cooperative education will be admitted to doctoral studies if screening shows that they are qualified to carry out academic work in the doctoral subject at the same level as university graduates. The same goes for highly-qualified holders of a Bachelor's degree not covered under § 2 (1) c. For admission to the aptitude test the applicant must usually have been among the top 10 percent of his/her graduating year at the institution of higher education or university of cooperative

education he/she was enrolled in at the time of his/her final examination; the applicant must provide documentation of this from the relevant institution. The aptitude test process usually takes place over two or a maximum of three semesters. The PhD board shall decide on the modules to be completed; these shall usually be of up to 30 ECTS credits and in the case of particularly qualified graduates of a Bachelor's degree who are not covered by § 2 (1) c., up to 60 ECTS credits; the board shall be guided by the doctoral supervisor where applicable.

§ 3 PhD board

- (1) The PhD board is responsible for the planning and implementation of the PhD degree program under these PhD regulations.
- (2) The PhD board consists of the head of the board, a deputy head of the board, and 10 additional members. The head and members of the board are elected by the *Fakultätsrat* (Faculty council) for a period of 4 years and are confirmed in their office by the Dean. Full-time members of the Faculty of Medicine with the rank of professor or Privatdozent are eligible for election; at least one of the professors should be a member of the Faculty of Science. Reelection is permitted. The respective doctoral supervisor may be consulted for advice in individual cases. Additional experts may be consulted if special circumstances arise.
- (3) The PhD board should represent the Faculty's scientific and clinical core areas as comprehensively as possible.
- (4) The PhD board has a quorum if more than half of its members are present.
- (5) The PhD board meets in closed session.
- (6) Decisions are passed with a majority of the votes, unless otherwise agreed. In the case of a tie, the head of the board's vote decides the matter. Voting is usually by a show of hands. If the committee is deciding on the assessment of doctoral theses, the minutes must record not only the result of the vote and where appropriate the processes of opinion formation and voting, but also how many members decided upon the basis of which examiner's report or objections or parts thereof.
- (7) The members of the PhD Board are obliged to maintain confidentiality. This obligation also extends to confidentiality regarding all associated documents.
- (8) PhD board decisions must be communicated in writing to the candidate; decisions negatively affecting the candidate must include instructions on the right to appeal. PhD board members may not abstain on decisions regarding the acceptance of a PhD thesis.
- (9) PhD board members have the right to participate in the oral defense of theses.
- (10) In cases of conflict in individual procedures, the PhD board may consult the faculty's liaison officer.

§ 4 Admission to the PhD program

The decision on selection for the PhD program is made according to the applicants' degree of suitability and motivation for the chosen degree program and the target profession. The selection of the most suitable participants is made by the PhD board on the basis of the applications submitted and on the results of a selection interview as described in § 4 (3).

(1) As a rule, the program begins twice a year. Application deadlines are set by the Dean of the Faculty of Medicine.

- (2) Applications including all required documentation are to be submitted to the PhD's coordination office and addressed to the head of the PhD board. They include:
- a) A completed application form for the PhD program (form provided by the University of Tübingen)
- b) A supervision agreement signed by the applicant and the supervisor (according to § 5)
- c) The working title and a short description of the planned thesis project and details of the financing and scientific supervision of the project
- d) A letter of motivation describing the applicant's reasons for choosing to apply for the PhD program
- e) A university degree certificate showing the final grade. In cases detailed under § 2 (2), an interim transcript showing the grade must be submitted. The final university degree certificate must be presented before the candidate can be admitted to the PhD examination.
- f) A tabular CV
- g) Where applicable, documentation of professional education or training, practical or scientific employment pertinent to the applicant's qualifications for PhD studies
- h) Proof of sufficient English-language proficiency; applicants whose native tongue is not English or who did not attend school/training in an English-speaking environment should provide a certificate showing they have passed one of the following language tests:
- i. Test of English as a foreign language (TOEFL)
- ii. International English Language Testing System (IELTS)
- iii. Cambridge Main Suite of English examinations

Applicants with a German university entrance qualification may provide this proof by a good grade in English in their university entrance qualification (average of at least 10 points)

In addition, candidates from non-German-speaking and non-English-speaking countries must hold an interview in English with the supervisor and possibly other participants prior to submitting their application. The PhD board shall decide on any exceptions.

- i) Documentation of any subject-relevant publications
- j) If required, an ethics statement Consultation with the University of Tübingen Ethics Committee must have taken place prior to the conducting of biomedical research on humans, prior to investigations on extracted human material with personal reference, prior to experiments with genetically modified organisms, prior to research with vital human gametes and living embryonic tissue, as well as prior to epidemiological research with personal data. The University of Tübingen Ethics Committee also decides on the recognition of votes by any ethics committee outside the scope of the Baden-Württemberg Kammergesetz. The statutes for the Ethics Committee at the Faculty of Medicine and at the Tübingen University Hospitals apply in the version valid at the time and published in the University of Tübingen official announcements, the Amtliche Bekanntmachungen. The ethics committee must also be notified of any changes to the research project.
- (3) Based on the written applications, a selection of applicants will be invited to selection interviews. The selection criteria used for this purpose are previous academic performance and university degrees, as well as additional qualifications documented in accordance with (2). The selection interviews are conducted by a member of the PhD board acting as chairperson of the selection board and at least two additional full-time professors, assistant professors, or Privatdozenten appointed by the PhD board. The interview should provide information about the candidate's motivation and special academic qualifications and suitability for the intended research project and about his/her previous academic career, as well as the quality and feasibility of the planned research project.

- (4) The application must be rejected if the requirements of §§ 2 and 4 (2) are not met or missing documents have not been submitted in due time even following a request for them.
- (5) The selection interview is followed by an assessment of the applicant's suitability. If there is no consensus within the selection committee, the different votes are recorded in writing. The selection interview as well as the evaluations of the candidate's suitability are summarized in writing and submitted to the PhD board. This PhD board makes the final decision on the admission; if necessary for the decision-making process, it may schedule an additional selection interview in front of the entire PhD board.
- (6) Candidates are informed of the results of the selection proceedings by the Dean. Admission notices are sent by the Studienkoordination office. The candidate's application for enrollment may be submitted to Student Administration upon presentation of the admission notice. Rejection notices must include information on the right to appeal. If an application is rejected, the candidate may re-apply once.

§ 5 Supervision

(1) The main supervisor must be an assistant professor, professor or university lecturer or Privatdozent of the faculty and is usually the head of the working group in which the candidate's project is to be carried out. Under exceptional circumstances, the Faculty council may, upon recommendation by the doctoral examination committee, assign the task of supervision to other, particularly qualified persons with a doctoral qualification (e.g. leaders of Emmy Noether junior research groups, holders of ERC Starting Grants), who are authorized to supervise the doctoral process at the Faculty of Science. In such cases, a second supervisor from the group of professors must agree to co-supervise the doctorate.

The PhD candidate and the main supervisor conclude a supervision agreement according to the Faculty of Medicine's template.

- (2) For each PhD program, the PhD board appoints a doctoral committee consisting of the main supervisor and two other members who can competently represent the field of the doctoral thesis. At least one member of the doctoral committee must be a professor and as such a full-time faculty member. Furthermore, professors, including those from universities of applied sciences, assistant professors, retired and emeritus professors, *Privatdozenten*, adjunct professor and visiting professors, qualified members of non-university research institutes and non-German universities and, after decision on an individual basis, experienced academic staff with doctoral degrees are eligible for appointment as members of a doctoral committee.
- (3) If the doctoral candidate received his/her degree in a subject that is part of another faculty at the University of Tübingen, one of the three members of the doctoral committee should usually be appointed from that faculty or department. That member shall be recommended by the Dean of the respective faculty.
- (4) The PhD board may delegate the task of appointing the doctoral committee to the head of the PhD board.
- (5) The doctoral candidate shall make regular reports (at least once a year) on the progress of his/her doctoral project to the doctoral committee in a joint meeting. The doctoral committee advises the PhD candidate with regard to the volume and content of the doctoral studies and also with regard to any additional required work, discusses the PhD candidate's research proposal with him/her, submits written comments on the PhD candidate's interim reports (§ 6 (3)) and, together with any additional examiners, forms the examination board for the oral examination (§ 10 (2)).

§ 6 The PhD degree program

- (1) The regular duration of study for the PhD degree is 3 academic years.
- (2) The program includes an experimental or equivalent theoretical research thesis as well as project-related and interdisciplinary coursework (lectures, practicals and seminars) from a curriculum of compulsory and elective courses. The PhD board shall develop a curriculum with mandatory and recommended classes. Courses offered by the Graduate Academy, a graduate school or research training group may also be incorporated in the curriculum.
- (3) At the latest 4 months after admission to the doctoral program, the PhD student shall submit to his/her doctoral committee an extensive proposal for his/her planned research project and an updated timeline for the thesis on the basis of preliminary work and initial results. This deadline may be extended if additional requirements must be fulfilled under § 2 (4) or, if a double degree is being pursued, under § 2 (2). The doctoral committee shall discuss the proposal with the PhD student and if necessary recommend changes. After this step the PhD candidate shall present the work done so far along with a progress report once a year to the doctoral committee.
- (4) In consultation with their doctoral committees, PhD candidates shall develop an individual study program within the framework of the above-mentioned curriculum; this individual program shall be submitted to the PhD Board for approval. The minimum number of ECTS points for all coursework (lectures, seminars and laboratory courses or practicals) during the PhD program is 30, six of which should be completed in the form of laboratory courses or practicals. For PhD candidates in the qualification phase described in § 2 (2), the rules given in the curriculum for this group apply.
- (5) No later than 6 months after admission to the PhD program, the PhD candidate is to discuss the organizational status of the PhD project (formation of the doctoral committee, planning of the individual course curriculum) with the program coordinator.
- (6) Academic success in PhD program classes is monitored via regular module-specific assessment and is confirmed in grades issued by the instructors responsible for the classes. For each successfully completed module, credits are awarded according to the European Credit Transfer System (ECTS). In the case of classes not certified with ECTS points, the PhD Board or its authorized coordinators shall decide on the number of credit points to be awarded corresponding to the amount of work involved in the course. Successful participation in classes is documented with a certificate.
- (7) PhD candidates are encouraged to acquire additional interdisciplinary and professional qualifications during their PhD studies, for example by taking advantage of the activities offered by the Graduate Academy. Such activities can be recognized as classes as defined in paragraph (4) and can count for up to 4 ECTS credit points.

§ 7 Doctoral thesis

- (1) The doctoral thesis is a requirement for the degree. In the thesis, PhD candidates show that they are able to independently work on and solve a defined scientific problem within a set period of time using suitable methods.
- (2) The doctoral thesis must usually be started at the time of admission to the doctoral program. Exceptions may be made when a double degree as defined in § 2 (2) is being pursued and a delayed start to the research work has been applied for by the PhD candidate and his/her supervisor and approved by the PhD Board.
- (3) The time limit for writing a doctoral thesis from the issuing of the topic to submission of

the thesis - is usually three years. If the doctoral period exceeds 5 years, an extension must be requested in writing. Appropriate documentation must be attached. Decisions on the granting of exceptions are made by the PhD Board. Maternity leave as defined in the German Mutterschutzgesetz (Maternity Protection Law) and childcare leave are to be made possible.

- (4) The topic, project definition, and scope of the thesis must be delimited in such a way that the thesis can be completed within the time limit according to (3).
- (5) The candidate must demonstrate his/her ability to independently perform scientific work via a written work submitted in manuscript form (thesis). The candidate must present his/her own research results in the thesis in the appropriate form and scope. The doctoral thesis must be written in English. Scientific progress must be recognizable, and the most important results of the work should be published or accepted for publication in the form of one or more original articles in high-ranking, English-language scientific journals. The PhD Board may set up additional criteria for the form and scope of a thesis.
- (6) Upon application to the members of the PhD board, independently authored publications and manuscripts accepted for publication may be included in the thesis in this case, the PhD candidate must be the first author of the publication(s) in question. In all cases, there must be a coherent overall concept suitable to the topic. This overall concept should be made clear in an introductory section, in the scientific discussion, and in a summary concluding section. If parts of the doctoral thesis are the result of collaboration, the doctoral candidate must have composed his/her contributions independently and on his/her own authority. His/her individual work must be clearly demarcated, and his/her contributions must be in accordance with the requirements of content and scope set out in paragraph (1). The doctoral candidate must outline the framework of collaborative work, giving the names of any co-contributors and their share of the overall project as well as the significance of their contributions for the collaborative work, and include a corresponding declaration of consent by the co-contributors.
- (7) The doctoral thesis represents independent work and as such is to be done by the doctoral candidate alone. However, the same object of scientific study may be examined by more than one student if each student explores a different aspect of the topic.
- (8) If 5 years of thesis-writing time have been exceeded, the doctoral committee will decide whether a further extension is necessary for the completion of the thesis. The candidate must submit a justified request for an extension, on the basis of which the doctoral committee decides on the duration of any extension, in consultation with the candidate. The thesis receives the grade "fail" and the right to be examined is lost if the thesis is not submitted within the allotted time, unless the failure to meet the deadline was beyond the control of the doctoral candidate. If the candidate loses the right to be examined, the PhD board issues a written decision, giving reasons and including information on the right to appeal. The PhD board informs Student Administration of the candidate's loss of the right to be examined. The legal consequences result from § 9 (9).

§ 8 Admission to the doctoral examination process

The application for admission to the doctoral qualification process may be submitted to the PhD board within the deadline set out in § 7 (3) and § 7 (8), as soon as the doctoral committee establishes that the practical scientific work has been completed. The following documents must be submitted to the Coordination Office with the application for admission. The time of submission must be recorded.

- (1) Three printed copies of the doctoral thesis
- (2) Proof of regular and successful participation in the agreed compulsory and elective modules (at least 30 ECTS)

- (3) In the case of students of medicine or dentistry as defined in § 2 (2) who are pursuing a double degree program, proof that they have passed the medical/dental examination
- (4) The thesis in electronic form in a common file format (e.g. PDF)
- (5) Approval for submission of the thesis, signed by all members of the doctoral committee
- (6) A declaration signed by the supervisor and the doctoral candidate stating that the results of the plagiarism check carried out are unproblematic
- (7) A curriculum vitae showing the candidate's professional and academic development
- (8) A dated and signed declaration of the candidate's own contribution, bound into the thesis
- (9) The signed application form, in which the following declarations are made:
- a. A declaration on any previous abandoned or completed doctoral qualification processes or relevant examination processes in which the candidate has participated
- b. A declaration on whether the doctoral thesis submitted has already been published in part or in its entirety and whether it has ever been submitted in part or in its entirety as a doctoral thesis or any other piece of assessed work, and if so, when and where, in which subject and with what result.
- c. A declaration that the University's principles and recommendations for the safeguarding of good scientific practice have been observed; where applicable, the corresponding opinion of the ethics committee and a declaration that the work conforms to regulations on genetic engineering and animal experimentation
- d. A declaration containing the following:
 - "I hereby declare that the thesis I submit for my doctorate with the title: is my own independent work, that I used only the sources and resources cited and have clearly indicated all content adopted either word-for-word or in substance. I solemnly swear that this information is true and that I have not concealed any relevant information. I am aware that making a false declaration is punishable by a fine or by a prison term of up to three years."
- e. A declaration by the doctoral candidate that his/her admission to the current doctoral qualification process was not the result of a commercial transaction. The doctoral candidate must specifically declare that he/she has not engaged any organization which accepts payment to seek supervisors to produce doctoral theses or which carries out in part or in its entirety the assessed work which it is incumbent upon the applicant to carry out. Furthermore, the doctoral candidate confirms that he/she is aware of the legal consequences of using a commercial thesis writing agency and the legal consequences of making untrue or misleading statements in this declaration (under § 17, exclusion from acceptance as a doctoral candidate and exclusion from admission to the doctoral qualification process, an end to the doctoral qualification process and annulment due to fraud of the degree if already held).

§ 7 Decision on admission

(1) The Dean usually makes a decision on admission within two weeks of the application being submitted. In case of doubt, he/she will call upon the PhD board to make a decision.

- (2) Admission will be denied if:
- a. the requirements set out in §§ 2 and 4 have not been met;
- b. the application is incomplete and the documents required under § 8 were not submitted on time;
- c. the doctoral thesis submitted clearly does not meet the requirements set out in § 7;
- d. the doctoral thesis submitted has already been successfully or unsuccessfully submitted in a doctoral qualification process in the doctoral subject or similar subject or at another faculty or at another institution of higher education in Germany or abroad;
- e. the candidate has failed a repeat process or
- f. if the candidate has already unsuccessfully completed more than one doctoral qualification process in the doctoral subject or in a comparable subject at this or another university;
- g. the candidate has successfully completed a habilitation in the subjects in which he/she seeks to complete a doctorate.
- h. the candidate meets conditions which would justify the withdrawal of his/her doctorate,
- (3) Admission may be deemed to be admission to repeat the process if at most one doctoral qualification process or comparable procedure in the doctoral subject has ended unsuccessfully. A new doctoral thesis must be submitted.
- (4) The decision on the application will be communicated in writing to the candidate without delay in cases of rejection, it will include reasons and information on the right to appeal.

§ 10 Review of doctoral thesis

- (1) The Dean or the head of the PhD board appoints two reviewers for the evaluation of the thesis, who must be professors, assistant professors, university lecturers, Privatdozenten or adjunct professors. The first reviewer is usually the professor, assistant professor, lecturer or Privatdozent who acted as supervisor for the thesis. In exceptional cases, a third professor, assistant professor, lecturer or Privatdozent may be consulted as a reviewer. The second reviewer may be a member of the doctoral committee. In exceptional cases, a third reviewer may be consulted.
- (2) If possible, the reviewers should submit their reports to the Dean's Office within two months of receiving the thesis. If a review has not been completed within this period of time, the head of the PhD board may appoint another reviewer.
- (3) The reviewers recommend whether to accept or reject a doctoral thesis or to send it back for revision (§ 11). The reviewer's reports must contain:
 - a critical appraisal of the content,
 - a well-reasoned recommendation for acceptance or rejection of the doctoral thesis,
 - if the thesis is recommended for acceptance, a suggested grade from the following:

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excellent (summa cum laude) = 0
very good (magna cum laude) = 1
good (cum laude) = 2
sufficient (rite) = 3
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The grade of "excellent" = 0 may be rounded down by 0.3 of a grade. The grade of "very good"

- = 1 may be rounded up or down by 0.3 of a grade. The grade of "good" = 2 may be rounded up or down by 0.3 of a grade. The grade "satisfactory" = 3 can be graded up by 0.3 points with a plus sign.
- (4) If a rejection of the thesis is recommended, the grade is: insufficient.

§ 11 Suspension of doctoral qualification process for revision of doctoral thesis

If a reviewer finds weaknesses in the thesis without rejecting it altogether, the PhD board may return the thesis for one round of revisions within a set deadline. The doctoral examination process is suspended until the thesis is resubmitted. If the thesis is resubmitted, the thesis in its reworked form then becomes the subject of the process, even if the recommendation for a reworking was not met or was only partially met. If the candidate does not comply with the time limit, the process will be continued with the thesis in the form which has been submitted, unless the candidate is not at fault for the time limit being exceeded.

§ 11 Grading of the doctoral thesis

- (1) If all of the reviewers give the thesis at least the grade of "rite", the thesis counts as accepted.
- (2) If all of the reviewers give the thesis the same grade, and no objection is raised or debate requested (as per (7)), it receives that grade. If the reviewers submit different grades, an average grade is calculated as the mean. If this average is not a whole number, only the first decimal place is taken into account; all further decimal places are deleted with no rounding. In calculating the average, the number is to be rounded to the closest full grade. If the result is exactly between two grades, it shall be rounded to the better grade. If the reviewers' assessments diverge by more than a whole grade, the PhD board will appoint a further thesis reviewer.
- (3) If one reviewer recommends the rejection of the thesis, the PhD board will appoint an additional reviewer. If the evaluation of this reviewer is also negative, the thesis is considered rejected and is made available for inspection with this proposed evaluation. In the other case, the PhD board decides whether further reviews are to be obtained or whether the review process has been completed. Subsequently, the PhD board decides first by majority vote on the acceptance of the thesis. The decision on the grade is brought about when each member of the doctoral examination committee votes for a grade in accordance with § 10(3). The arithmetic mean of the votes cast is calculated as described in (2).
- (4) The grade "summa cum laude" is awarded when particularly high evaluation criteria are met. The grade "summa cum laude" is only to be awarded if, in addition to a thesis with the grade of excellent, the PhD student has also published results from the thesis as first author in an international, English-language, peer-reviewed journal that is highly ranked for the particular field of investigation. The PhD board may also set additional prerequisites for the awarding of the grade "summa cum laude."

If "summa cum laude" is recommended and the two evaluations result in an average evaluation of less than or equal to 0.5, the number of reviewers is to be expanded to three by the Dean. An additional evaluation must be obtained from an external reviewer appointed by the PhD board, who must not have been a member of the doctoral committee. If there is no agreement, the PhD board shall suggest the grade.

(5) Once the final evaluations are available, the Dean will without delay inform all members of the PhD board and all full-time university teachers working at the Faculty (§ 44 (1) no. 1 LHG). This communication must include the title of the doctoral thesis and the name of the

author, the name of the thesis reviewers and the grades they propose, as well as the start and end dates of the period in which the thesis will be made available for inspection (Auslagefrist).

- (6) The doctoral thesis, along with the examiners' reports, will be made available in the Dean's Office. The thesis inspection period is two weeks.
- (7) Within the inspection period, members of the PhD board with voting rights and all full-time members of the Faculty's academic staff (§ 44 (1) no.1 LHG) are entitled to make an objection, in writing, to the reviewers' appraisals or to request a formal discussion. Furthermore, they are entitled to propose that the thesis be sent back for revision; in such case, the matter proceeds in accordance with § 11.
- (8) If there are any objections under (7), the doctoral candidate is entitled to inspect the reviewers' reports, the objections and statements; he/she is also entitled to make a statement of his/her own. He/she may request that his/her statement is communicated to members of the doctoral examination committee prior to their deliberations.
- (9) If the thesis is given a final rejection, the candidate loses all further right to a doctoral examination in the PhD program. The rejected thesis remains on file with the reviewers' reports. The PhD board informs Student Administration. In accordance with § 32 (5) sentence 3 LHG, upon losing the right to be examined, the candidate's admission to the program also expires. In line with § 62 (2) no. 3 LHG, this results in automatic termination of enrollment. The candidate will be de-registered as a student.
- (10) The reviewers' reports and any written objections and a statement by the candidate go on file at the Faculty.

§ 13 Defense, grading of thesis defense

- (1) The doctoral thesis is a piece of assessed work. It consists of a 30-minute oral presentation of the thesis by the PhD candidate in front of the examination committee followed by a discussion of topics and methods in connection with the candidate's thesis and covering fundamental issues in the subject area; the discussion shall not last longer than 60 minutes. The defense shall take place within six weeks of the end of the inspection period.
- (2) The examination committee is appointed by the PhD Board and consists of four examiners, generally including the primary supervisor, the other two members of the doctoral committee and one further examiner. Professors, assistant professors and Privatdozenten as well as suitably qualified members of non-university research institutes and universities abroad are eligible for appointment. At least one member of the examination board should belong to a different faculty. Members of the PhD board have the right to participate in the thesis defense.
- (3) The examination board described in paragraph 2 grades the examination as follows:

excellent (summa cum laude)	=	0	
very good (magna cum laude)		=	1
good (cum laude)		=	2
sufficient (rite)		=	3

The grade of "excellent" may be rounded down by 0.3 of a grade. The grade of "very good" = 1 may be rounded up or down by 0.3 of a grade. The grade of "good" = 2 may be rounded up or down by 0.3 of a grade. The grade "satisfactory" = 3 can be graded up by 0.3 points with a plus sign.

(4) If the oral defense is not passed, it may be repeated once only, at the latest six months after the first attempt. If the second attempt is also judged insufficient, the oral defense is failed

with no option to repeat. The Dean issues notification of this, giving reasons and information on the right to appeal.

- (5) After the defense the PhD board determines the final grade for the examination. Following consultation, each examiner awards one of the grades listed under para. (3) or the grade 4 (insufficient). If the examiners' grades differ, the arithmetic mean is calculated from the grades submitted; after the decimal point, only the first place is taken into account.
- (6) If the grade of "insufficient" is given twice, the candidate has failed the exam.

§ 14 Overall grade

(1) Following the successful completion of the oral defense, the head of the committee determines the overall grade. It is calculated using the double-weighted grade for the doctoral thesis (arithmetic mean of the individual grades) and the single-weighted grade for the oral defense (arithmetic mean of the individual grades). The overall grade is defined as follows:

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with an average up to 0.5: summa cum laude (excellent), with an average from 0.6 to 1.5: magna cum laude (very good), with an average from 1.6 to 2.5: cum laude (good), with an average from 2.6 to 3.5: rite (adequate).
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The PhD candidate will be informed of the overall grade by the head of the board.

- (2) The overall grade of "summa cum laude" (excellent) is only awarded if
 - the arithmetic mean of the at least three proposed evaluations of the thesis is 0.5 or better
 - the evaluation of the oral defense results a grade of 0.5 or better, whereby none of the individual oral grades may be worse than "magna cum laude" (1.3).
- (3) Upon application, the doctoral candidate receives a certificate including the overall grade with which the examination process was successfully completed. This notification must also indicate that it does not confer the right to hold the title of doctor.

§ 15 Publication of doctoral thesis

- (1) The doctoral candidate is obliged to publish his/her doctoral thesis within two years of the day on which he/she defended the thesis. The doctoral candidate may apply to the head of the committee to extend this time limit, giving reasons.
- (2) The publication of the doctoral thesis is usually met by delivering an electronic version in line with the data format and data storage medium requirements of the University of Tübingen Library. In addition, 2 printed copies must be delivered. The doctoral candidate must ensure that the electronic version corresponds to the printed copies.

The doctoral candidate surrenders to the University of Tübingen the non-exclusive right within the framework of the University Library's statutory duties to produce and distribute further copies of the doctoral thesis. He/she also surrenders the non-exclusive right to make the thesis available in data networks; the University of Tübingen must inform the doctoral candidate in writing beforehand that conceding this right may prohibit or impede publication of the thesis elsewhere at a later date.

In special cases, a different form of publication may be permitted. This is to be decided by the PhD board.

(3) Before going to print, the doctoral candidate must submit a written declaration to the

Dean's Office, stating whether and to what extent the printed version differs from the version submitted along with the application for admission. If the two versions differ, the first reviewer must approve the changes; in his/her absence, the other supervisor or the head of the committee will do so; the changes must be approved if the differences are not substantial. The doctoral candidate may appeal negative decisions before the PhD board.

(4) The deposit copies under (2) must be provided with a special title page, which as a rule has the following wording:

Name of hospital / institute (status at the time of oral defense)

Name of department (and section, if applicable) (status at the time of oral defense)

" ... Title of thesis ..."

Thesis for attaining the PhD in Experimental Medicine

of the University of Tübingen Faculty of Medicine
Presented by:
Family name, given name(s)
-Year of doctorate-

Print on the back of the title page:

Dean
1st reviewer
2nd reviewer
(if applicable: 3rd reviewer)
Date of oral defense.

The title page must be submitted for approval to the director of the university institution where the thesis was prepared before the thesis is printed.

(5) If the candidate does not comply with the obligation to publish or does not provide the required number of archive copies within the set deadline, the PhD board may declare the loss of all rights that the candidate acquired as a result of the examination.

§ 16 Conferral of the title of Doctor of Philosophy (PhD)

- (1) After the PhD program has been successfully completed and the required archive copies of the thesis have been submitted, the University of Tübingen Faculty of Medicine confers the academic degree "Doctor of Philosophy" (PhD) on the doctoral candidate.
- (2) A certificate of conferral is issued in English. It contains the title and the grade of the doctorate and is dated on the day of submission of the deposit copies. The certificate is signed by the President and the Dean and bears the seal of the University.
- (3) The conferral carries with it the right to use the academic title PhD.

§ 17 Invalidity of doctoral qualification process and revocation of doctoral degree

- (1) Irrespective of § 4 (3), admission to the doctoral process may be refused if information provided in the required documentation turns out to be untrue and liable to mislead the PhD board regarding the facts, particularly the applicant's qualifications, the required academic qualifications or doctoral qualification processes begun but not completed at other universities.
- (2) If the candidate attempts to influence the result of his/her assessed work using deception

or resources which are not permitted, the relevant work will be rejected with a grade of "insufficient" (4.0). This is to be decided by the doctoral examination committee. In grave cases of attempted deception in the oral defense, any repetition of the exam (§ 13 (4)) may be ruled out.

(3) If it becomes clear after notification of the assessment of doctoral work that the candidate has used deception to produce this work, that significant requirements for the doctorate were erroneously believed to have been met, or that other statutory violations exist, the relevant decisions may be canceled according to the provisions of the applicable state law, § 48 Landesverwaltungsverfahrensgesetz. If the doctoral degree certificate has already been issued, it will in this case be recalled. The doctoral degree may also be withdrawn on the basis of relevant legal provisions.

§ 18 Inspection of examination files

- (1) Up to one year after completion of the examination procedure, the doctoral candidate will be granted access to the examiners' reports relating to the thesis and to the examination records, upon application.
- (2) The application is to be submitted to the head of the PhD board, who shall set the time and place for access to the records.

§ 19 Special provisions for doctoral studies jointly supervised with a university outside Germany

- (1) The doctoral qualification process may be carried out with supervision performed jointly with a university outside Germany, if an agreement has been made with that university and approved by the PhD board. These doctoral degree regulations apply unless otherwise stated below.
- (2) The doctoral candidate is to be supervised by one academic teacher from each university involved. The supervisor from the university outside Germany is appointed second reviewer in the Tübingen doctoral qualification process; in his/her absence, another member suggested by the non-German university is appointed. In the agreement referred to in (1), it must be ensured that the Tübingen supervisor of the thesis or, alternatively, another member of the Tübingen Faculty of Medicine Tübingen participates in the doctoral examination process of the university abroad.
- (3) If an equivalent oral defense takes place at the non-German university with the collaboration of the Tübingen supervisor or an alternatively-appointed member of the University of Tübingen, that oral defense may replace the oral examination otherwise required by these doctoral degree regulations. In such cases, no overall grade is calculated. Details are to be regulated in an agreement with the relevant university outside Germany.
- (4) If an oral examination is carried out according to the provisions of these regulations, professors of the university abroad may be appointed as examiners. Details are to be regulated in the abovementioned agreement.
- (5) The doctoral degree and the relevant degree from the non-German university may be conferred by both universities. If two separate degree certificates are issued conferring the degrees, they must include a note to the effect that the doctorate was obtained under the joint supervision of two universities. In all cases it must be noted that the successful completer of the doctoral qualification process has the right to hold the title either in the German form or in the form of the other country in which the degree was issued, and that the names of both supervising universities may be added in parentheses.

(6) Each of the universities issues a separate certificate detailing its assessment of the doctoral work.

§ 20 Effective date

(1) These regulations come into effect on the date of their publication in the University of Tübingen's official bulletin, the Amtliche Bekanntmachungen. Candidates who have already been admitted to the PhD program in accordance with § 4 at the time of the entry into force of these regulations have the right, after submitting a corresponding written application to the Dean of the Faculty of Medicine, to conduct the studies and the PhD examination in accordance with the previous regulations.

Tübingen,

Professor Dr. Bernd Engler President

Attachment 1

University of Tübingen Faculty of Medicine's principles to ensure good scientific practice

This text is based on the recommendations of the German Research Foundation (DFG) and the German Rectors' Conference, HRK.

1. The principles of good scientific practice

Those working in science (including doctoral candidates) are obliged to uphold the principles of good scientific practice and to demonstrate them by their own example. These principles must be communicated to students and young academics. University teachers bear particular responsibility for this. According to the recommendations of the DFG (Selbstkontrolle in der Wissenschaft committee, January 1998), the following general principles apply to good scientific practice:

- observance of the rules of scientific work;
- documentation of the results of work, including secure storage of primary data;
- consistent self-criticism with regard to the results of work and conclusions drawn therefrom:
- honesty with regard to the significance for one's own work of contributions by third parties;
- responsible supervision of early-career scientists;
- unlimited coordination of the contributions of all those active in a working group by the head:
- publication of the results of the work and announcement of all conditions necessary for their follow-up.

2. Violations of the principles of good scientific practice

The following are considered to be violations of the rules of good scientific practice and, in some circumstances, scientific fraud or incitement to scientific fraud:

- Invention, falsification, or suppression of data;
- Plagiarism;
- Simulated authorship in publications;
- Exclusion of legitimate authorship;
- lack of or insufficient scientific discussion within the working group;
- insufficient supervision of doctoral students;
- loss or insufficient documentation of original data;
- lack of instruction of those involved in the research regarding the rules of good scientific practice;
- defamation of good scientific practice;
- breach of trust as a reviewer or supervisor.

3. Responsibility to implement the rules of good scientific practice

Every academic is responsible for his or her own conduct within the framework of scientific work. Whoever leads a working group is responsible for ensuring that the conditions for good scientific practice are met within the group he or she leads and that the rules are observed. This requires lively communication within the working group - in particular the disclosure of scientific data in the context of ongoing discussion within the group.

Therefore, it is the task of leaders of scientific working groups to ensure that all members of the group are aware of their rights and obligations in terms of good scientific practice. They have to create the framework conditions for proceeding according to these rules. In particular, it is important that the hypotheses, theories and, above all, scientific data developed by the individual members of the group are openly discussed and critically examined. The leadership

of a scientific working group requires presence and overview. Where these are lacking, leadership tasks must be delegated.

4. Supervision of doctoral candidates

The supervisor prepares a written outline of the objectives and implementation of the planned project with the respective doctoral candidate before the actual work begins. The outline contains the written indication that the doctoral candidate has been made aware of the rules of good scientific practice by the supervisor. If conflict situations arise between the parties involved during the course of the work, the dean or the head of the doctoral examination committee may be called in as a mediator.

5. Documentation requirements

Primary data as the basis for publications remain accessible on durable and secure carriers in the working group in which they were created for ten years. The respective scientist is responsible for this. He or she is responsible for providing evidence of proper recording. Each experiment as well as each numerical calculation must be recorded in all details in such a way that, if necessary, an expert can repeat the experiment or reconstruct the calculation basis. The reproducibility of a scientific experiment is its primary test. Protocol or workbooks must contain a hard cover and numbered pages; no pages may be removed. They must be stored securely. The loss of originals from a laboratory violates basic rules of scientific care and primarily justifies suspicion of dishonest or grossly negligent conduct.

If a scientist changes institutions, the original data will remain at the institution where they were collected. In special individual agreements between the "old institution" and the "new institution" at which the scientist will work, the storage of the original data may be regulated differently. The agreement on the whereabouts of the protocols must be recorded on the original data carrier and signed by the persons involved.

6. Publication, authorship

Authors of scientific publications are jointly responsible for their content. There can be no "honorary authorship".

In publications in which, in particular, new scientific results are presented, the results must be described completely and comprehensibly. A researcher's own and external preliminary work must be completely and correctly proven (citations).

Previously published results are to be repeated in a clearly identified form and to the extent necessary for understanding the context.

Only those authors of an original scientific publication should be listed who have contributed significantly to the conception of the studies or experiments, to the preparation, analysis and interpretation of the data, and to the formulation of the manuscript itself, and who have agreed to the joint publication, i.e. who are responsible for it. The extent of the contribution of doctoral candidates to a publication may also be reflected by their first authorship.