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**Doctoral Regulations for the Medical Faculties of  
Heidelberg University for the Conferral of the Degree  
of Doctor of Medicine or Dentistry (*Dr. med.* or *Dr.  
med. dent.*)**

of 22 September 2006

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## Section 1 Doctorate

- (1) The Medical Faculties confer the academic degree of Doktor/Doktorin der Medizin (Dr. med. - Doctor of Medicine) or Doktor/Doktorin der Zahnheilkunde (Dr. med. dent. - Doctor of Dentistry) on the basis of work completed during the doctoral programme or as an honorary degree.
- (2) The Medical Faculties are committed to the recommended guiding principles on the promotion of junior researchers issued by the Senate of Heidelberg University and will implement those recommendations appropriately.

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**Section 2 Doctoral components**

- (1) To obtain a doctorate, candidates are required to discover new scientific findings and demonstrate their ability to undertake independent academic research.
- (2) The doctorate is composed of a dissertation and an oral examination.

**Section 3 Decision-making bodies responsible for doctoral matters**

- (1) Unless otherwise specified, doctoral matters are administered by the Doctoral Candidate Admissions Conference (Promotionskonferenz).
- (2) The Doctoral Candidate Admissions Conference is made up of the professors and associate professors belonging to the faculty board, and the chair or deputy chair of the doctoral committee (Promotionsausschuss). The Doctoral Candidate Admissions Conference is chaired by the dean or a representative appointed by him or her.
- (3) The Doctoral Candidate Admissions Conference elects at least one doctoral committee consisting of at least 6 members from among the faculty's professors and associate professors. The term of office is three years; members may be re-elected. Each committee elects from its membership a chair and deputy chair.
- (4) The Doctoral Candidate Admissions Conference assigns tasks as set out under sections 5-11 to the doctoral committee.

**Section 4 Admission requirements for doctoral programmes**

- (1) Candidates who have completed a course of study in accordance with the Approbationsordnung für Ärzte/Ärztinnen (Licensing Regulations for Physicians) or the Prüfungsordnung für Zahnärzte/Zahmärztinnen (Examination rules and regulations for dentists) may be admitted to the doctoral programme if they submit the documents set forth under section 5 subsection 2.
- (2) Notwithstanding subsection 1, applicants may submit their application for admission to the doctoral programme prior to completing their medical or dental degree. Preliminary offers of admission become void if the applicant ultimately fails the final medical or dental examination pursuant to the licensing regulations for physicians or dentists.
- (3) Group dissertations are not permitted.
- (4) If the dissertation project is conducted at an institution whose director is not a member of the faculty, a declaration of consent signed by him or her must be submitted with the application.
- (5) Candidates who completed their studies abroad may be admitted to the doctoral programme if they have passed a foreign medical or dental examination which is on a par with the German examination and training requirements. The dean will

decide upon recognition of equivalence of international degrees after hearing the Central Office for Foreign Education at the Standing Conference of the Ministers of Education and Cultural Affairs (Zentralstelle für ausländisches Bildungswesen der Kultusministerkonferenz in Bonn) or another evaluation body competent to assess equivalence.

- (6) If an international degree is deemed not to meet the equivalence requirement, the dean may upon recommendation by the doctoral committee set down conditions for admission to the doctoral programme (e.g. aptitude tests in certain medical or dental subjects) and admit the applicant into the doctoral programme once he or she passes the aptitude test. The aptitude test may be retaken once.

## Section 5 Enrolment and acceptance as a doctoral candidate

- (1) Applicants must address a request for admission as a doctoral candidate to the chair of the doctoral committee. The doctoral committee decides whether an applicant is to be admitted.
- (2) The following documents must be enclosed with the application for admission to the doctoral programme:
1. Specification of the intended topic for the dissertation together with a brief outline of the dissertation;
  2. Statement by a member of the faculty who holds a habilitation declaring that he or she will act as the academic supervisor;
- (3) Admission can be denied if:
1. The documents are incomplete;
  2. The topic chosen for the dissertation is obviously unsuitable or does not fall within the faculty's remit;
  3. The applicant has failed more than one previous attempt to obtain a doctorate;
  4. Reasons exist which would justify revocation of an academic degree or if an academic degree has been revoked.
- (4) A decision on the application should generally be taken within six weeks during term time. The candidate must be notified in writing if his or her application is turned down with the reasons for this decision. This also applies to applications for acceptance to the doctoral examination (section 8).
- (5) Upon admitting a doctoral candidate, the faculty concerned undertakes to examine a final scientific dissertation with the theme already provided, and to support the doctoral candidate in his or her dissertation work.
- (6) The doctoral candidate must enrol at the university unless he or she is already a member of the university.
- (7) As a rule, the doctoral project should be completed within three years. The maximum enrolment period for doctoral candidates is five years.

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**Section 6 Academic guidance for doctoral students**

- (1) Any professor or associate professor belonging to the Medical Faculty Heidelberg or the Medical Faculty Mannheim can supervise doctoral candidates. The university rector may upon the proposal of the faculty also assign the right to supervise doctoral candidates to qualified research associates (e.g. junior research group leaders). The recommended guiding principles on the promotion of junior researchers issued by the Senate of Heidelberg University on 20.09.05 must be observed.
- (2) The candidate and his or her supervisor conclude an agreement stating the dissertation topic, the duration of the doctorate, and most notably a dissertation schedule, which will generally span a maximum of three years. The progress of the dissertation project shall be evaluated regularly. The agreement also contains a binding declaration by the supervisor that he or she will provide continuous supervision of the dissertation project. This may include the nomination of a successor or substitute supervisor where applicable. The supervisor is to keep the doctoral record until the doctoral degree procedure is concluded; the doctoral candidate receives a copy. Staff members holding a doctorate may act as co-supervisors; in this case, their names must be indicated and mentioned in the dissertation.
- (3) The faculty board can set down guidelines for doctoral degree procedures, stipulating inter alia the involvement of candidates in interdisciplinary research training groups or international doctoral programmes or obligating candidates to realise workshops where the candidates of a given subject or subject group present their doctoral projects.
- (4) Upon request by the doctoral candidate, the doctoral committee will endeavour to find a professor or associate professor belonging to the faculty to supervise the doctoral candidate.
- (5) For dissertations that are not prepared in a scientific or clinical institution within the faculty under the immediate supervision of a member of the faculty pursuant to subsection 1, but in an institution that is not part of the respective medical faculty, the management of said institution must agree to the work being submitted as a dissertation.
- (6) If the doctoral candidate works in a scientific or clinical institution of the faculty, the management of said institution must agree to the candidate's use of the institution's facilities. Consent may only be withheld for compelling reasons.

**Section 7 Dissertation**

- (1) The dissertation must be of an adequate scientific standard and demonstrate the doctoral candidate's ability to undertake independent academic work in the doctoral subject.
- (2) As a rule, the dissertation is to be written in German, English or French. The doctoral committee may upon written request allow candidates to submit dissertations written in another language if language skills among the faculty's

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professors and associate professors allow for the dissertation to be evaluated in this language.

- (3) Prior publication of the dissertation, both in part or in full, is admissible.

## **Section 8 Acceptance for examination**

- (1) On completion of the dissertation, the doctoral candidate addresses a written request to the doctoral committee applying for acceptance to take the doctoral examination.

The following documents must be enclosed with the application:

1. Copies of the dissertation in the quantity requested by the competent dean's office;
2. The medical or dental examination certificate or an application as set forth under section 4 subsection 2;
3. A curriculum vitae;
4. Publications by the candidate that are derived from the dissertation or manuscripts that were accepted for publication, if any;
5. Where applicable, a statement by the supervisor declaring his or her consent to the submission of the dissertation. If the dissertation was prepared in an institution outside of the faculty, the acting supervisor from said institution must declare his or her consent;
6. An affidavit stating that the candidate has not previously applied for admission to a medical or dental doctoral programme elsewhere or failed an attempt to obtain a doctorate;
7. An affidavit stating that the candidate is the sole author of the submitted dissertation and that he or she has not made use of any sources or resources apart from those indicated;
8. Where applicable, a statement by the candidate declaring that he or she observed the guidelines stipulated under applicable animal welfare legislation (approved application for animal testing) or, in the case of clinical trials, that he or she obtained prior approval by the ethics committee. The candidate must present a copy of the approval;
9. An abstract of the dissertation in German and/or English in the quantity stipulated by the competent dean's office;

Section 5 subsection 2 applies mutatis mutandis.

- (2) The doctoral committee takes decisions as to acceptance to the doctoral examination.
- (3) Acceptance must be denied if:

1. The requirements for acceptance to the doctoral examination are not met;
  2. The documents listed in subsection 1 are incomplete;
  3. The dissertation does not fall within the academic remit of medicine or bears no relevance to medicine;
  4. Circumstances apply which according to state law would prohibit the conferral of a doctorate or justify the revocation of an academic degree;
  5. The candidate already holds a doctorate in the respective discipline (medicine or dentistry);
  6. The candidate holds a doctorate in the respective discipline (medicine or dentistry) acquired abroad, entitling him or her to use the title of Doctor in Germany;
  7. The candidate failed more than one previous attempt to obtain a doctorate;
- (4) The candidate must be notified in writing if his or her application is turned down with the reasons for this decision.

### Section 9 Dissertation evaluation

- (1) The dissertation is to be evaluated in writing by at least two evaluators from among the professors and associate professors belonging to the competent faculty. As a rule, the supervisor will act as the primary evaluator. This also applies if he or she is no longer a member of the faculty. The doctoral committee can appoint further evaluators; evaluators from other faculties may be appointed for dissertations dealing with adjoining subject areas.
- (2) The evaluators should generally be appointed within two months of submission of the dissertation; the appointment shall occur no later than at the next doctoral committee held after this period.
- (3) The evaluators assess the research objective and execution, and the scientific statements of the dissertation and suggest to the doctoral committee whether the dissertation should be accepted or rejected. If the dissertation is accepted, they mark it according to the system set out in section 10 subsection 1. They can recommend conditions to be set down for the final version of the dissertation.

### Section 10 Assessment and acceptance of the dissertation

- (1) Taking into account the written evaluations, the doctoral committee rules on the acceptance and marking of the dissertation. The doctoral committee can also request external reports and set down conditions for corrections to be made to the dissertation. The doctoral committee submits the dissertation to the Doctoral Candidate Admissions Conference for acceptance. In the period between the invitation and the passing of a resolution, dissertations are available for inspection by the members of the Doctoral Candidate Admissions Conference at the dean's office. The faculty marking criteria for evaluation of the written doctoral component are annexed to these doctoral regulations.  
The following distinctions are awarded:

- For outstanding achievement: summa cum laude



- For excellent achievement: magna cum laude
- For good achievement: cum laude
- For adequate performance: rite

Intermediate marks are not awarded.

- (2) For dissertations to be marked "summa cum laude", the doctoral committee will obtain two additional external evaluations.
- (3) If the dissertation is rejected by the Doctoral Candidate Admissions Conference, the candidate may submit a new dissertation after requesting a doctoral retake. Approval for submission of a new dissertation is granted once. Rejections must be communicated to the candidate in writing along with instructions for appeal.

### Section 11 Oral component of the doctorate

- (1) If the dissertation is accepted, the chair of the doctoral committee appoints the examination committee from among the professors and associate professors belonging to the faculty.
- (2) The examining committee consists of three members. The supervisor is generally a member of the examining committee; he or she may remain on the committee even if he or she is no longer a member of the faculty.
- (3) As a rule, the oral examination lasts approximately one hour and deals with the subject of the dissertation and two other medical or dental subjects. Particular emphasis shall be placed on the subject of the candidate's dissertation. The examination as a whole is marked as "pass" or "no pass". If the candidate passes the oral examination, the overall grade awarded for the doctorate equals the mark of the dissertation.
- (4) If the candidate does not pass the oral examination, he or she can retake the exam within six months. Retakes are granted only once. If the candidate fails the exam for the second time, he or she fails the doctoral programme as a whole, and the doctoral degree procedure is terminated.
- (5) The medical or dental examination pursuant to the licensing regulations for doctors or dentists will generally be recognised as the oral examination if it was not taken more than 3 years prior to the commencement of the doctoral degree procedure. On the basis of the documents submitted by the candidate, the chair decides as to whether the candidate may be exempted from the oral examination requirement.

### Section 12 Publication of the dissertation

The dissertation must be published once the doctoral degree procedure is concluded. To this end, the candidate must as a rule submit to the faculty a minimum of 8, but no more than 15 deposit copies of his or her dissertation.

Dissertations can be published:

- a) as a bound book or photocopy

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- b) in a journal or as self-contained publication distributed by the publishing trade if proof of a minimum print-run of 150 copies can be provided, or
  - c) as a digital version (online process) whose data format and carrier are to be approved by the university library; by submitting a digital copy, the candidate transfers to the university library and the German National Library (DNB) in Frankfurt/Leipzig the right to publish it in data networks.

If the dissertation is published in accordance with c), an abstract of the dissertation must also be made available on a digital data carrier for publication by the faculty. A fee may be charged for publications by the faculty.

### **Section 13 Conferral of the degree of Doctor of Medicine or Dentistry**

- (1) If the candidate has passed the medical or dental examination conducted in accordance with the licensing regulations for physicians or the examination rules and regulations for dentists, or if the candidate meets the requirements set out under section 4 subsections 5 and 6, and has submitted the deposit copies, the doctoral degree is conferred on him or her by doctoral certificate, which will be handed or delivered to the candidate. The doctoral certificate records the title of the dissertation, the overall mark and the subject of the doctorate, and states the date of successful conclusion of the doctoral degree procedure as the date of degree award. It is signed by the dean of the competent faculty.
- (2) The right to use the title of "Doctor" is acquired only upon receipt of the doctoral certificate.
- (3) Holders of a doctorate conferred by the Medical Faculty Heidelberg or the Medical Faculty Mannheim of Heidelberg University may on the occasion of the 50th anniversary of the issue date of the doctoral certificate request an anniversary certificate. Anniversary certificates are subject to a fee.

### **Section 14 Conferral of the honorary degree of Doctor of Medicine or Dentistry (h.c.)**

- (1) Acting with the approval of the senate, the faculty may award the degree of Honorary Doctor of Medicine/Dentistry (Dr. med. h. c./Dr. med. dent. h. c.) in recognition of outstanding academic achievements within or at the borders of medicine or dentistry.
- (2) The conferral of an honorary doctorate requires a proposal by at least two professors or associate professors. The professors and associate professors on the Faculty Council decide on the proposal with a three-quarter majority vote of members who are entitled to vote. In preparation of its decision, the faculty board appoints two rapporteurs from its membership.
- (3) The degree of Dr. med. h.c. or Dr. med. dent. h.c. is conferred by the handing over of an honorary certificate signed by the dean in which the honouree's academic achievements are to be highlighted.

### **Section 15 Revocation of admission; nullification of doctoral results**



- (1) If, prior to the execution of the doctoral certificate, it emerges that the candidate met the conditions of admission through deception, or essential conditions of admission were mistakenly taken to have been satisfied, the doctoral committee may revoke the admission of a doctoral candidate or admission to the examination procedure. The same applies if facts become known that would justify the withdrawal of a doctoral degree under state law.
- (2) If, before the doctoral certificate is issued, it emerges that the candidate used deception in order to meet one of the requirements for the doctorate, the doctoral committee may nullify either this particular achievement or all prior achievements. In severe cases the committee may revoke admission to the examination procedure.
- (3) Decisions pursuant to subsections 1 and 2 are taken by the Doctoral Candidate Admissions Conference. The candidate concerned must be heard before a decision is taken. The decision must be substantiated and served to him or her with instructions for appeal.

## Section 16 Revocation of doctoral degree

- (1) Revocation of doctoral degrees is governed by state law. If state law does not specify otherwise, the Doctoral Candidate Admissions Conference is the competent body to administer revocation of doctoral degrees.
- (2) The candidate concerned must be heard before a decision is reached. The decision must be substantiated and served to him or her with instructions for appeal.
- (3) Subsections 1 and 2 apply mutatis mutandis to the revocation of honorary doctorates.

## Section 17 Entry into force, transitory provisions

- (1) These doctoral regulations come into force on the first day of the month following publication in the Rector's Bulletin. They simultaneously supersede the Doctoral Regulations for the Medical Faculties of the University of Heidelberg for the Conferral of the degree of Doctor of Medicine or Dentistry (Dr. med. or Dr. med. dent.) of 8 December 2004 (Rector's Bulletin dated 20/12/04).
- (2) Candidates who took up a doctoral programme prior to these doctoral regulations becoming effective may upon request continue the doctorate according to the doctoral regulations under subsection 1, provided that these provisions are not in conflict with the Act on Higher Education of the Land of Baden-Württemberg (LHG).

## Appendix 1

### Basic principles of the Medical Faculties of Heidelberg University for safeguarding good scientific practice

This text responds to the recommendations of the German Research Foundation (DFG) and the Hochschulrektorenkonferenz (HRK) on this matter.

#### 1. Basic principles of good scientific practice

Anyone involved in science (and this includes doctoral students) is obliged to honour the basic principles of good scientific practice and demonstrate these in their own conduct. These basic principles must be conveyed to students and the rising generation of scientists. Professors bear a particular responsibility in this. According to the recommendations of the DFG ("Self-monitoring in science" commission, January 1998), the following general principles apply to good scientific practice:

- Compliance with the rules of scientific work;
- Documentation of the results of work, including secured storage of primary data;
- Rigorous self-criticism in terms of work results and conclusions drawn from these;
- Honesty with respect to the significance of contributions of third parties to own work;
- Responsible supervision of rising generation of scientists;
- Unconfined coordination of contributions of all members of a working group by the leader;
- Publication of work results and publicising of all conditions required to understand these.

#### 2. Violations against the rules of good scientific practice:

The following are deemed to be a violation against the rules of good scientific practice and possibly scientific fraud or abetting scientific fraud:

- Invention, falsification or suppression of data;
- Plagiarism;
- Surreptitious authorship in publications;
- Omission of rightful authorships;
- No or insufficient scientific discussion within the working group;
- Inadequate supervision of doctoral students;
- Loss or insufficient documentation of original data;
- Lack of instruction of those involved in research on the rules of good scientific practice;
- Defamatory statements in respect of good scientific practice;
- Breach of confidence as assessor or supervisor.

#### 3. Responsibility for implementation of the rules of good scientific practice:

Every scientist is responsible for his/her own conduct in the context of scientific work. Anyone heading a working group bears responsibility for ensuring that the foundations for good scientific practice are present within the group he or she is heading and that the rules are observed. This requires active communication within the working group, but in particular the disclosure of scientific data as part of the constant discussions within the group. It is therefore the task of leaders of scientific

working groups to ensure that all members of the group are aware of their rights and duties in respect of good scientific practice. They must put in place the framework for proceeding according to these rules. Particular emphasis must be placed on ensuring that the hypotheses, theories and above all the scientific data prepared by the individual members of the group are discussed openly and examined critically. Managing a scientific working group requires presence and an overview. Where these cannot be assured to the requisite extent, managerial tasks must be delegated.

#### **4. Supervision of doctoral students**

Before the actual work begins, the supervisor draws up a written outline of the aims and methodology of the planned project together with the doctoral student in question. The outline contains the written notice that the doctoral student has been instructed by the supervisor on the rules of good scientific practice. If conflicts arise between the parties during the course of the work, the dean or the chair of the Doctoral Committee can be called in as an arbitrator.

#### **5. Obligatory documentation requirement**

Primary data as a basis for publications remain accessible within the working group in which they were created for ten years on durable and backed-up data carriers. The respective scientist is responsible for this. He/she bears the obligation to produce supporting documents to ensure due logging of all proceedings. All the detailed steps of every experiment and every numerical calculation must be logged so that if necessary a person with the requisite knowledge can repeat the experiment or follow the basic principles behind the calculation. The reproducibility of a scientific experiment is its main test. Reports and workbooks must have a hard cover and the pages must be numbered all the way through; no pages may be removed. They must be kept in a safe place. The disappearance of originals from a laboratory is a violation against the basic rules of due scientific care and constitutes prime grounds for suspicion of dishonest behaviour or gross negligence.

If a scientist moves to a different institution, the original data as a rule remains in the place where it was collated. In special individual agreements between the "old institution" and the "new institution" in which the scientist will work, different provisions for storing the original data can be made. The arrangements agreed for storing the reports must be logged on the original data carrier and be signed by the persons involved.

#### **6. Publications, authorship**

Authors of scientific publications are jointly responsible for their content. So-called "honorary authorship" is precluded.

In publications which are particularly setting out new scientific results, the results must be described in full and comprehensibly. Own and third-party preparatory work must be shown fully and correctly (quotes). Results already published at an earlier date must be clearly shown and be reproduced in the scope required in order to understand the context.

Only those people who have actively contributed materially to the conception of the studies or experiments, the preparation, analysis and interpretation of the data and the formulation of the manuscript, and who have consented to the joint publication, i.e. bear a joint responsibility for the same, should be named as authors of an original

scientific publication. The extent of the contribution of doctoral students to a publication should also be credited, with acknowledgement of their first authorship where applicable.

## Appendix 2

### Recommendations for assessing dissertations

The following criteria should essentially be taken into account by the referee (supervisor) and, as far as possible, the co-referee as well when assessing a dissertation:

1. The aptitude of the doctoral student for scientific work and critical analysis, including his or her ability to independently develop solutions to predefined problems using knowledge obtained through studying literature and methodological principles conveyed by the supervisor.
2. The suitability of the methods applied for obtaining and critically reviewing data and information and interpreting them.
3. The level of personal commitment and activity with which the task set was tackled, the logical planning of work and structuring of the task as a whole, and whether work was completed on time.
4. Editorial aspects of the dissertation: length and proportioning of the dissertation, setting out of the basics, the research subject, the methodology applied for research, the results (including tables and diagrams) and the bibliography, style and phraseology.

In addition to the general criteria, the following recommendations are given for grading(\*):

#### **3 = Rite:**

- a) Observational studies (e.g. "retrospective studies" without any major new perspectives, basic case scenarios, case histories of more unusual cases.
- b) Experimental, largely comprehensible work under instruction using established methods.
- c) Theoretical work of a basic, largely referential nature.

#### **2 = Cum laude:**

- a) Independent observational studies with clear question as a starting point for obtaining new scientific knowledge.
- b) Experimental work involving various established complex methods with independent completion of the experiments, planning of work and structuring of the task as a whole by the doctoral student.
- c) Theoretical work which for the scientific problem set shows a significant degree

of initiative on the part of the doctoral student in the development of scientific solutions.

**1 = Magna cum laude:**

- a) Ambitious observational studies which have resulted in new scientific knowledge (generally the acceptance of a publication in a peer-reviewed scientific journal) and have largely been planned and completed independently by the doctoral student.
- b) Experimental, methodologically complex work which has resulted in new scientific knowledge (generally the acceptance of a publication in a peer-reviewed scientific journal), including new methods or methods modified by the doctoral student, largely planned and completed independently by the doctoral student.
- c) Theoretical work which, based on comprehensive processing of literature and critical analysis of existing data and opinions, has resulted in new scientific findings or opinion (generally the acceptance of a publication in a peer-reviewed scientific journal) independently developed and convincingly reasoned by the doctoral student.

**Summa cum laude:**

- a) Work which has resulted in major scientific findings (publication in peer-reviewed scientific journals with the doctoral student as first author) with new, original research or observational methods which go beyond 1a) and have been independently developed and implemented by the doctoral student.
- b) Experimental work with major new scientific findings (publication in recognised scientific journals with the doctoral student as first author) which was acquired on the basis of an independently devised test plan using independently developed research methods and shows a high degree of originality.
- c) Theoretical work which has resulted in major new scientific findings (publication in recognised scientific journals or book series with the doctoral student as first author). These were made possible by a new, innovative approach and a complex theoretical model, both of which were independently developed and convincingly demonstrated by the doctoral student.

\*In terms of these recommendations, a study is experimental if the influencing factors to be studied are controlled by the researcher him- or herself or on the basis of a process he or she has specified, such as in-vitro experiments, animal tests and randomized clinical trials. Studies where the influencing factors are only established (observed), as in the case of controlled case studies or cohort studies for example, are pooled under observational studies here. Theoretical denotes work where the doctoral student has not collected his or her own data.

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