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Technische Universität Dresden
Center for Molecular and Cellular Bioengineering

**Study Regulation
for the consecutive Master's program
Regenerative Biology and Medicine**

of 07 September 2018

Pursuant to Article 34 par. 1 sent. 1 of the Law on Institutions of Higher Education in the Free State of Saxony (Sächsisches Hochschulfreiheitsgesetz - SächsHSFG) of January 15, 2013 (Saxon law gazette p. 3), amended by article 24 of the law of December 18, 2013 (Saxon law gazette pp. 970, 1086), the Technische Universität Dresden enacts the study regulations below as statutes.

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Appendix 1: Module descriptions

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§ 1 Scope

Based on the Saxon Law on Institutions of Higher Education and the examination regulations, these study regulations govern the aims, content, structure and organization of the consecutive Master's program Regenerative Biology and Medicine at the Technische Universität Dresden.

§ 2 Aims of the program

(1) The Master's course of study Regenerative Biology and Medicine offers an interdisciplinary education in the fields of stem cell research, regenerative biology, tissue engineering and clinically focused human biology and pathology with the aim of preparing the students for a career in research or in regulatory aspects in the development of regenerative therapy approaches. The students know scientific basics of stem cell biology and model organisms for regeneration as well as current methods of genome analysis of stem cells and model organisms, tissue engineering, current and potential applications for clinical diseases and regulatory aspects in the development of regenerative therapies. Additionally, students know the fundamental methods of scientific working, especially oral and written presentation such as writing of a paper or a scientific article, the writing of a research proposal and the organization and conduction of a clinical trial.

(2) Based on their ability to work in science, the students are able to connect elementary knowledge of molecular cell and developmental biology with the work with stem cell cultures, regeneration models as well as human physiology and pathology. They are able to apply concepts and techniques of stem cell biology and animal physiology to new research projects in regenerative biology and medicine. Overall, the students have the competence to work independently, problem-oriented, interdisciplinary and responsibly in science and to display the results in a logical manner. The students have manifold employment opportunities in research and development, especially in the fields of cell biology, developmental biology, stem cell biology and medicine.

§ 3 Admission requirements

(1) Providing proof of the eligibility (qualification) for the Master's program Regenerative Biology and Medicine is mandatory for the admission to the program.

(2) To be qualified and, thus eligible for admission to the Master's program Regenerative Biology and Medicine pursuant to par. 1, a candidate must

1. present evidence of a first university degree or degree of a state or state-approved

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- university of cooperative education in biology or medicine or of same professional orientation,
2. prove their proficiency in English of level B2 of the Common European Framework of Reference for Languages. The proof can be made by presenting an internationally recognized test (preferably IELTS: 6.5 or TOEFL 580 points) or a language certificate of the TU Dresden (B2 with at least a grade of 2.0 or C1). Exempt from this are applicants whose native language is English.
 3. present evidence of their special qualification for the Master's program Regenerative Biology and Medicine. This is done in the aptitude test accord. to the *Eignungsfeststellungsordnung*.

§ 4

Start and duration of the program

- (1) The program generally starts in the winter semester.
- (2) The standard period of study is four semesters and includes attendance of the courses as well as self-study, practicals under supervision and the Master's examination.

§ 5

Types of courses

- (1) The structure of the program is modular. The content of the individual modules is conveyed, consolidated and treated in-depth in lectures, exercises, seminars and practicals.
- (2) In lectures, the students are introduced to the topics specified in the module descriptions. In the exercises, students apply the theory that they learned in the lectures to exemplary sub-topics. Seminars enable the students to get informed about a chosen area based on literature or other material, to present and discuss their work in the group or to present it in writing. Practicals are intended for the application of the teaching contents and for gaining practical abilities in potential professional fields.

§ 6

Structure and organization of the program

- (1) The structure of the program is modular. Semester 1-3 are dedicated to coursework. The fourth semester is reserved for the writing of the Master's thesis and the defense.
- (2) The program comprises nine compulsory modules, of which three are designed as modules with compulsory optional content to allow for an individual priority setting by the students.
- (3) The contents and qualification aims, the types of courses, the necessary requirements,

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workload and duration of the modules are specified in the module descriptions (appendix 1).

(4) The courses are taught in English.

(5) The appropriate distribution of the modules over semester 1-3 ensuring the timely completion of the program in the standard period of study, as well as type and scope of the courses and number and suggested standard date of the course requirements and exams are specified in the study schedule (appendix 2).

(6) Upon proposal by the study committee, the Scientific Board of the BIOTEC may update the study schedule. The modified study schedule is valid for all students who were informed at the start of the study program. The examination committee decides on exceptions to sentence 2.

§ 7

Contents of the program

(1) The Master's program Regenerative Biology and Medicine is research-oriented.

(2) The Master's program Regenerative Biology and Medicine offers an interdisciplinary education in the fields of stem cell research, regenerative biology, tissue engineering and clinically focused human biology and pathology. The program emphasizes the scientific basics of stem cell biology and model organisms for regeneration as well as current methods of genome analysis of stem cells and model organisms, tissue engineering, current and potential applications for clinical diseases and regulatory aspects in the development of regenerative therapies. Fundamental methods of scientific work are also part of the program.

§ 8

Credit Points

(1) The successful progression of the studies as well as the workload for the students is documented by the award of ECTS credit points. One credit point is equivalent to a workload of 30 hours. The workload per academic year is typically 60 credit points, i.e. 30 per semester. The total workload for the whole program is 120 credit points and includes the types of courses, course requirements and exams as well as the Master's thesis and the defense as specified by the module descriptions.

2) The module descriptions (appendix 1) specify how many credit points are awarded for each module. The credits are obtained when the module examination is passed. § 26 of the examination regulations remains unaffected.

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§ 9

Study counselling

(1) The general study counselling on study opportunities, enrolment procedures and general student affairs is provided by the Student Advisory Service of the Technische Universität Dresden. Continuous study counselling is provided by the university teachers who are active in the program and the BIOTEC student and examination office. This is to support students especially in matters of study planning.

(2) Students who have not taken any examinations until the 3rd semester must take part in a study counselling session.

§ 10

Modification of module descriptions

(1) In order to ensure an optimal adaptation to changed conditions, the module descriptions can be modified in a simplified procedure except for the points "module name", "contents and qualification aims", "type of course", "requirements for the award of credits" and "credits and grades".

(2) Upon proposal of the study committee, the Scientific Board of BIOTEC thus formally resolves upon changes in the module descriptions. The changes shall be published in accordance with the relevant provisions for publications.

§ 11

Entry into force, publication and transitional rules

(1) These study regulations enter into force on October 1 2018 and are published in the Official Publications (*Amtliche Bekanntmachungen*) of the Technische Universität Dresden.

(2) With exception of the number 3 of the *Änderungssatzung*, they are applicable to the students enrolled in the Master's program Regenerative Biology and Medicine from winter semester 2018/2019.

(3) Article 1, numbers 2 and 3 are applicable to the students enrolled in the Master's program Regenerative Biology and Medicine from winter semester 2019/2020.

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Based on the decision of the Scientific Council of the CMCB of August 15 2018 and the approval of the Rectorate on August 15 2018.

Dresden 07.09.2018

Der Rektor
der Technischen Universität Dresden

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