

PhD degree programme in molecular medicine with associated Master's degree

The graduate schools at Natural Sciences (NS) and Health (HE) have agreed on a joint PhD degree programme in molecular medicine, where PhD students are enrolled at either NS or HE, and follow the same assessment procedure, leading to the award of a PhD degree in molecular medicine.

Admission to the PhD programme in Molecular medicine

The PhD student must have an educational background in health science or natural science.

The PhD student is enrolled in an ordinary PhD programme, based on a Master's degree, or in an integrated PhD programme, based on a Bachelor's degree. For students from NS, the integrated PhD programme may follow a 3+5, or a 4+4 model.

The project must in theoretical background and experimental design apply to the field of molecular medicine. The steering committee must assess the project and thereby ensure that it has a real molecular medicine content, and that the demands are complied with regarding the composition and responsibilities of the supervisors. This recommendation regarding the project is made on the basis of a one-page project summary in connection with the application process at NS and HE. The project description/PhD plan must be thoroughly prepared and relevant in a molecular medicine context. It should also describe the individual responsibilities of the supervisors in the project. In order to be assessed by the steering committee, the application must be marked 'molecular medicine PhD project'.

Supervision

The PhD student's main supervisor must be employed at the faculty where the student is enrolled. In addition, at least one co-supervisor must be employed at the other faculty.

Content of the PhD degree programme

Courses must be taken amounting to 30 ECTS credits. Courses both in Denmark and abroad must be at PhD level and/or be relevant for the PhD project. Approval of other courses/activities, relevant for the PhD project, can be applied for with the chairperson of the relevant PhD programme. To facilitate the molecular medical and interdisciplinary aspect of the PhD programme, joint courses amounting to 5 ECTS credits at NS (e.g. Kjeldgaard Lectures) and 2 ECTS credits at HE (e.g. annual meetings and/or seminars in molecular medicine), are obligatory for the enrolled PhD students.

It should be noted that the graduate school, holding the course allocates ECTS credits in accordance with current guidelines and that an agreement has been made between Aarhus University (AU), the University of Copenhagen (KU) and the University of Southern Denmark (SDU) regarding approval of each other's ECTS credits without conversion (as well as internally at AU).

In addition, PhD students must comply with the Ministerial Order on PhD Education regarding teaching/ dissemination and mobility.

Joint transition between part A and part B

A joint framework is important for the transition between part A and part B for students enrolled in the 3+5 or 4+4 model.

The part A examination / qualifying exam for 3+5 and 4+4 takes place after the sixth year, which provides PhD students with a Master's degree if they do not go further with a PhD. The part A examination / qualifying exam also acts as a halfway evaluation, and is graded passed/ failed. If the student does not pass the part A examination, it is possible to rephrase it as a Master's thesis and complete a Master's examination with marks.

Students enrolled at the PhD programme at NS, who have entered the PhD study on the bases of a Master's degree (5+3), follow the same rules for their qualifying exam.

Practical details in connection with part A examination

- Six weeks prior to the examination, registration is submitted with details about participation in courses and what course activities are planned.
- A report of max. 30 pages regarding progress in the project is submitted three weeks prior to the oral examination. The report must include:
 - o Brief introduction to the field of research
 - o Aim of the project
 - o Detailed account of the methodologies, results and conclusions reached at the time of the halfway examination.
 - o Plan for the remainder of the project.
 - o The report can include excerpts from published/ approved articles/ manuscripts, but can only fill max. 30 pages.
- A max. two-hour oral examination is held, and must include:
 - o A 30–45-minute presentation by the PhD student about the most important elements in the report.
 - o A discussion of the report and presentation including the wider thematic framework.
 - o A discussion of plans for completion of project and studies (course, teaching/ communication, mobility, career plan).

The report must serve to document the future of the project at the time of examination. The report does not therefore aim to appear as a small dissertation, mini-thesis or similar.

If the PhD student has published or submitted a draft of an article, parts of this material can be used in connection with the report. If the PhD student has not published or submitted a draft of an article, the report must be regarded as an opportunity to make a start on the work involved in writing an article and/or parts of the PhD dissertation. It should be noted that research material included in connection with the part A examination can subsequently be used in the dissertation, including published articles.

The assessment committee consists of:

- The main supervisor
- Co-supervisor from the other faculty
- One external examiner (expert in relevant academic areas and member of the body of external examiners (censor list), approved for the relevant master studies).
- One internal examiner from the PhD program representing Molecular medicine. This is a requirement for students either enrolled at NS or earning a Master's degree at the same examination (a 4+4 or 3+5 model).

The assessment committee's task is:

- To assess whether the student has passed or failed the examination. To write a brief statement (one page) in which:
 - o The report is described and assessed
 - o The oral presentation is assessed, including the discussion and plan for completion of the project.
 - o A general assessment is made.

If the PhD student fails the examination, the following takes place:

As a general rule, the PhD student is offered a three months' period to get back on track if he or she does not follow the PhD plan. This is a legal requirement according to the PhD Order section 10, subsection 2.

A negative outcome of a qualifying examination concurs to not following the PhD plan, and the PhD student can therefore once, within a period of two weeks after receiving the statement from the examination, apply for a re-examination. A revised progress report must be submitted at least three weeks before the re-examination, which must be held no later than three months after receipt of the application for re-examination.

If the PhD student does not apply for re-examination, the enrolment as a PhD student is cancelled by the end of the month in which the examination was held.

Re-examination postpones any cancellation of the PhD enrolment, but does not extend the total time of study

Termination of PhD study before the part A (qualifying) exam.

A PhD student who decides to terminate the PhD studies before sitting the qualifying examination can still be enrolled as a Master's student unless he or she has been expelled from the university. The PhD student is still entitled to supervision for the Master's thesis and to obtain a Master's degree. On request, the Graduate school may issue documentation in both Danish and English with regard to those elements of the PhD program that have been completed

Output – what can a PhD in molecular medicine be used for, and what distinguishes the degree from other PhD programmes?

Focus on molecular mechanisms in relation to human physiology, disease pathogenesis and treatment and diagnosis of diseases.

Finances and human resources (HR)

Finances and HR regarding PhD students are located at the faculty, where the PhD student is enrolled. This includes salaries, fellowships, maternity or parental leave, and illness. The PhD student has rights and obligations in relation to enrolment.

There is no special pool of fellowship grants for students taking a PhD in molecular medicine. They must apply to the respective graduate schools during the general rounds of application on an equal terms with other PhD students. There is no strategic priority, and approval of a PhD project by the steering committee for the PhD programme in molecular medicine does therefore not guarantee acceptance by the PhD school, neither does rejection reduce the chances of acceptance at the respective PhD school.

Efforts are made to achieve a balance in the total expenditure between NS and HE. It is proposed that the vice-deans for talent development at NS and HE assess the financial balance in consultation with the steering committee.

GP and programme affiliation

Students taking a PhD in Molecular medicine are enrolled in the Molecular Biology and Genetics programme at NS, or in one of the three major GP programmes; ClinFO, Biomedicine, or Public Health at HE.

Other

Submission of a dissertation, composition of assessment committees, preparation for public oral defences, and awarding a PhD degree comply with the University Act and the PhD Executive Order, as well as the guidelines at NS and HE at the time in question.

Return to a Master's degree programme

If students in part A does not wish to continue to part B, they have the option of completing a Master's degree and writing a Master's thesis with marks. The Master's thesis is written, submitted and defended in accordance with the current guidelines in the academic regulations for the Master's degree.