BIMA60 Professional Development 6

1.5 higher education credits  First cycle

General Information

Main field
Biomedicine

Subject
Professional development

Type of course and its location in the education system
The course is mandatory in the Bachelor of Medical Science programme in Biomedicine and is taught in terms 5–6.

Language of instruction
English

Learning Outcomes

Knowledge and understanding
On completion of the course, students shall be able to
- describe how academic research is usually funded
- describe the process by which applications for academic research funding are usually assessed through peer review
- describe how to plan and write an application for research funding.

Skills and abilities
On completion of the course, students shall be able to
- propose a scientific question, based on underlying knowledge
- identify, and immerse themselves in, background data, with the point of departure in the above question, and provide references in a format that is acceptable in biomedical science
- propose a series of experiments (or investigations) that address the issue using scientific criteria
- suggest possible alternative outcomes of the proposed investigation
- write a project plan in a format usually used when applying for a small or medium-sized grant.

Judgment and approach
On completion of the course, students shall be able to
- reflect on the proposed investigation and its findings, in terms of scientific and social benefit.
Course Content
The funding of research and the peer review process is presented via lectures. Students are also given a template to use when writing a project plan, similar to that usually used for a small to medium-sized grant application. An application is thereafter written by each student on an individual basis.

Subjects examined
A pass on the course is worth 1.5 credits and requires a pass in the written project plan and a pass in answers to a question on the funding system of biomedical research and the peer review process.

Instruction and Examination
Teaching begins on this course roughly half-way through BIMA51 (meaning, at the end of the autumn term), with which it then runs parallel. Instructions and examples of how to write clearly and in an easily understood fashion for the purpose are provided in lectures. After this, students write a project plan which is handed in after about 5–8 weeks. Students are given comments on possible improvements. Students choose the subject of the project plan themselves. They can propose entirely new research, or research that has already been done. If previous research is proposed, the project plan must still be written in a future-oriented perspective, as though the research had not yet been done. The project plan must contain the following parts, common in applications: Specific Aim, Background, Experimental Strategies and Methods, Importance and References.

Examination consists of the writing of a project plan as above, possibly improved after having been read and commented on by an instructor. The project plan is written by the student individually. Under the Importance section, the student will reflect on the scientific and social benefit of the proposed research. Students are also asked a question about the funding system of biomedical research and the peer review process. Two occasions for examination will be scheduled soon after the course. Re-examination will be planned by individual agreement.

Grades
The grades awarded are Pass or Fail.

Admission Requirements
To be eligible for the course students must have completed Professional development 5.

Literature
Study materials will be distributed at the lectures.
Further Information

The course is integrated with BIMA51 (Molecular Medicine) which usually, but not necessarily, provides a basis for the written project plans.