**SYLLABUS**

**NAME OF THE DEPARTMENT / CLINIC PROVIDING THE COURSE:**

Department of Cell Cultures and Genomic Analysis

**COURSE TITLE:** From idea to publication, or how to successfully conduct a scientific research

**COURSE PROFILE:**

**SPECIALITY:**

**LEVEL OF COURSE UNIT:**  III

1. **Course unit title:** From idea to publication, or how to successfully conduct a scientific research
2. **Course unit code:**
3. **Type of course unit:**
4. **Course aims:**

The aim of the course "From idea to publication, or how to successfully conduct a scientific research." is to provide the sudents with the basic information in the field of planning and carrying out in vitro experiments with the use of cell cultures, from the verification of the idea for a scientific research through methodology, possible sources of funding, to obtaining the results and preparing them for scientific publication. During the course, students will learn about the analysis of literature databases, the analysis of scientific publications, the principles of cell culture as the basic tool in in vitro research. In addition, during the classes they will gain knowledge on possible forms of financing research for PhD students, as well as basic skills related to applying for funding. During the course, they will also gain knowledge on the effective planning of scientific research methodology, as well as the preparation of a scientific publication

1. **Form of study:**
2. **Year of study:**
3. **Types of educational activities and number of hours allocated:**

Seminar 5 h

1. **Number of ECTS credits allocated and their structure according to students’ from of learning:**
2. **Names of course unit’s faculty:**dr n. med. Karolina Kowalska

prof. dr hab. n. med. Agnieszka Piastowska- Ciesielska

1. **Prerequisites:**

English at least B2

1. **Learning activities and teaching methods:**

* Lectures, presentation, database search and analysis

1. **Course unit content:**

1. Does this research make sense at all, i.e. verification of the idea and methodology?

2. How to get money for research, ie forms of financing available for PhD students?

3. How to do it successfully, ie the basics of in vitro methods and preparation of a scientific publication.

**Course objectives:**

**Knowledge:**

Acquiring sufficient knowledge to verify the research hypothesis and correctly select the methodology for the planned research. Having the knowledge to prepare and conduct in vitro tests correctly and in accordance with good laboratory practice. Acquiring knowledge about the sources of research funding available to PhD students. Having sufficient knowledge to prepare a scientific publication.

**Skills:**

Acquiring the ability to search for appropriate scientific literature to verify the idea of ​​a scientific research, as well as the ability to correctly select the research methodology. Acquiring the ability to plan and conduct in vitro tests with the use of cell culture and in accordance with the principles of good laboratory practice. Acquiring the ability to critically analyze research results and prepare a scientific publication on their basis. Having the ability to apply for research funding, available to PhD students. Ability to work in a team, taking into account different tasks for individual team members, joint analysis, discussion of results and formulating conclusions..

**Attitudes and transferrable (generic) competencies:**

The ability to self-evaluate and constructively evaluate team members.

1. **Required and recommended learning resources (readings):**

NCBI database and publisher databases (e.g. Web of Science)

1. **Assessment methods and criteria**

Active participation in seminar.

1. **Additional information:**
2. **Statement and signature of the course leader:**

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