DEPARTMENT OF MOLECULAR MEDICINE AND SURGERY

K1F3222, Psychiatric Genetics, 1.5 credits (hec)

Psykiatrisk genetik, 1,5 högskolepoäng

Third-cycle level / Forskarnivå

Approval

This syllabus was approved by the The Committee for Doctoral Education on 2023-12-01, and is valid from spring semester 2024.

Responsible department

Department of Molecular Medicine and Surgery, Faculty of Medicine

Prerequisite courses, or equivalent

No prerequisite courses, or equivalent, demanded for this course.

Purpose & Intended learning outcomes

Purpose

The purpose of the course is that the participants acquire basic knowledge in genetic epidemiology, molecular genetics and epigenetics, as well as to provide an overview of the current knowledge of genetics and epigenetics in psychiatric illness including also the study tools, and aspects of ethics and law.

Intended learning outcomes

After completing the course, the participants should be able to explain basic genetic and epigenetic concepts and mechanisms, and to some extent be able to describe genetic and epigenetic research methodology and give examples of current understanding about genetic and epigenetic influences on psychiatric health, and briefly explain the legislation on biobanks.

Course content

The course provides an introduction to the field of genetics and epigenetics including molecular genetics, genetic epidemiology, molecular epigenetics and the use of nerve cells generated from skin cells. An overview of current knowledge in psychiatric genetics is provided for several of the

major diagnostic groups. Visit a laboratory for large-scale sequencing is also included.

Forms of teaching and learning

The course is given as a full-time course for one week. Lectures, film, exercises and demonstrations are included.

Language of instruction

The course is given in English

Grading scale

Pass (G) /Fail (U)

Compulsory components & forms of assessment

Compulsory components

Participation in the teaching, as well as in the examination assignment. Any absence of compulsory parts must be compensated by reading and summarizing overview articles in addition to regular course literature. This should be aligned with the course management. Observe that it is not possible to compensate for more than 50% of the teaching.

Forms of assessment

Examination assignment carried out in groups. Presentation for other course participants as well as active contribution to the discussions. Each participant is examined individually.

Course literature

Distributed material in the form of research original works and overview articles in the area.
Other teaching aids (not necessary): Psychiatric Genetics: A Primer for Clinical and Basic Scientists 1st Edition
by Thomas Schulze (Editor), Francis McMahon (Editor), 2018. Oxford University Press.