SM00080  Clinical immunology with a focus on the germinal centre reaction, 3 credits
Klinisk immunologi med fokus på germinalcentrum-reaktionen, 3 högskolepoäng

Third-cycle level / Forskarnivå

Confirmation
This syllabus was confirmed by the Council for PhD Education at Sahlgrenska Academy on 2018-12-12, and was last revised on 2019-03-25. The revised course syllabus is valid from Autumn semester 2019.

Responsible Department
Institute of Medicine, Sahlgrenska Academy

Entry requirements
Admitted to postgraduate education.
To be eligible the equivalent of 5 higher education credits or more in cell biology and/or immunology or equivalent at the first cycle level is a requirement.

Learning outcomes
After completing the course the student is expected to be able to:

Knowledge and understanding
- describe and explain in detail the different players of the adaptive immune response and its role in vaccination
- explain how the germinal centre response works and describe its role in autoimmune diseases and lymphomas
- describe how primary immunodeficiencies can affect the germinal centre reaction, and thereby play a role in the development of autoimmune diseases and lymphomas
- demonstrate insight in treatment strategies of autoimmune diseases and lymphomas with focus on targeting the germinal centre response, and explain how biological therapy drugs work
**Competence and skills**

- use computer-based literature searches to find relevant information in order to compile, analyse, discuss, and present a report orally and in writing using a scientifically correct language in the field of the germinal centre reaction and its clinical implications

**Judgement and approach**

- demonstrate skills in critical thinking and show understanding of an evidence based scientific approach
- identify, formulate and discuss social and ethical aspects in relationship to research and development in the field of immunology.

**Course content**

- The adaptive immune response - what cells are involved?
- Immunological memory and vaccination
- The germinal centre (GC) reaction and the different processes taking place during the response
- What happens with the germinal centre reaction in primary immunodeficiency?
- The germinal centre as a risk for autoimmunity
- Primary immunodeficiency and how this can affect the GC and lead to autoimmune diseases or lymphomas
- Different treatment strategies to target the GC reaction in lymphomas and autoimmune diseases.

**Types of instruction**

Lectures, group work and laboratory work.

**Language of instruction**

The course is given in English.

**Grades**

The grade Pass (G) or Fail (U) is given in this course.

**Types of assessment**

The course is assessed by a written examination and on the achievements of the individual in depth literature exam project. In order to pass, an active participation in the lecture, problem-based exercises and group discussions, with at least 80% attendance, is required.

A doctoral student who has failed a test twice has the right to change examiners, if it is possible. A written application should be sent to the Institute.

**Course evaluation**

A written course evaluation will be performed directly after the course according to the praxis

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set by Sahlgrenska Academy. The evaluation is anonymous and involves lectures, practicals and problem-based exercises. The results of the evaluation will be communicated to the students and will function as a guide for the further development of the course.

Other information


The syllabus was confirmed by the Council for Postgraduate Education on 08-03-2016 and was last revised on 26-02-2019 to be valid from autumn semester 2019 (reg.nr.: GU 2019/697). It was entered into FUBAS on 25-03-2019.