Course content; Immunology (BIOR16), Autumn 2015

Literature:

- Basic Immunology; Abbas, A, Lichtman, AH & Pillai, S, 4th ed., Elsevier/ Saunders, 2014

Lectures:

		Corresponds to Abbas chapters
1.	Introduction to the immune system (BW)	1
2.	Overview of the immune cell/organs (LR)	1, 2
3.	Ag-Ab interactions & Immunoassay (BW)	- (sep. book chapter)
4.	Innate immunity (BW, LR)	2
5.	Antibody-mediated immunity (BW)	7, 8
6.	B-cells: Differentiation & activation (BW)	4, 7, 8
8.	T-cells: Recognition and MHC (HW)	3, 4
9.	T-cells: Differentiation, activation and effectors (SL)	4, 5, 6
10.	T-cells: Tolerance & autoimmunity (SL)	6, 9
11.	Hypersensitivity (BW)	11
12.	Infection immunity (LR)	6, 8
13.	Evolution of immunity (LR)	- (sep. book chapter, paper)
14.	Mucosal immunology (BW)	1

Laboratory practicals (*obligatory*):

1. Immunoprecipitation & immunoblotting (ES)
3. Immunoassay; ELISA of rabbit IgG after immunization (PS)
4. Characterisation of human blood cells; Haemagglutination, Leukocyte counting (ES)
5. Isolation of antibodies (BW)
6. Analysis of lymphoid cells and organs; Immunocytochemistry and flow cytometry (SL)

Seminars (*obligatory*):

A. Group studies (case study discussions by 6-8 students)
1. B-cell function; corresponds to chapters 1-7, 13 (BW, HW)
2. T-cell function; corresponds to chapters 8-12 (LR, BW)
3. Immune defence & diseases; corresponds to chapters 14-21 (LR, HW)

B. Presentation of the literature tasks (group works by 3-4 students)
1. Reports of group 1-3 (BW, LR, HW)
2. Reports of group 4-6 (BW, LR, HW)

C. Lab. summary (PS, ES, SL, BW)

Study visit:

Lund Life Science Incubator, Medicon Village, Lund (SL)