

Topics in Immunology

for students of the second year of medicine ED, academic year 2023/2024

Lectures 10 * 2h

1. Introduction to immunology
Joanna Harażna, prof. UWM; PhD
2. Innate and adaptive responses. Identification and presentation of the antigen
Joanna Harażna, prof. UWM; PhD
3. Humoral and cellular response
Joanna Harażna, prof. UWM; PhD
4. Immune tolerance and autoimmune reactions
Joanna Harażna, prof. UWM; PhD
5. Hypersensitivity
Natalia Zdanowska MD, PhD
6. Infection immunology - . Innate and adaptive immune deficiencies
Joanna Harażna, prof. UWM; PhD
7. Nutrition and immunity. Immunology of metabolic disorders
Natalia Zdanowska MD, PhD
8. Oncoimmunology
Dawid Sigorski MD, PhD
9. Reproductive immunology
Natalia Zdanowska MD, PhD
10. Transplant immunology
Norbert Kwella MD Transplantologist

Seminars: 5 * 2h

Leaders: Natalia Zdanowska, MD, PhD, Joanna Czerwińska PhD

1. Serological diagnosis of infection, basic methods, sensitivity and specificity
2. Basic diagnostic methods: complement fixation test, hemagglutination test, ELISA, Western blot, IIF, PCR
3. Post-transfusion reactions, hematological disorders
4. Diagnostics of autoimmune diseases
5. Modern methods of allergy diagnostics

Classes 7 * 4h + 2 * 1h (2 tests)

1. Leader: Joanna Czerwińska, PhD
 1. Diagnosis of *Borrelia burgdorferi* infection by Elisa and Western blot methods
2. Leader: Natalia Zdanowska MD, PhD
 2. Allergology diagnosis: prick tests and patch tests
3. and 5-7. Leader: Joanna Harażna, prof. UWM; PhD
4. Leader: Urszula Mazur, M.S.
 3. Non-specific (innate) immunity: complement system and barriers
 4. Specific (adaptive) immunity: Antigen-antibody reaction
 5. Acute and chronic inflammation
 - 6 Hypersensitivity, autoimmunity and deficiency in the defense system
 7. Immune compatibility of tissue and blood, diseases in the hematopoietic system

Test 1 (Colloquium 1): classes:

Test 2 (Colloquium 2): classes and seminars:

The following applies to pretest during the classes:

The detailed scope will be provided no later than one week before the classes

- Abbas, Andrew Lichtman, Shiv Pillai. Basic Immunology

- Abbas, Andrew Lichtman, Shiv Pillai. Cellular and Molecular Immunology