

MEDICAL STUDY IN ENGLISH**SUBJECT: IMMUNOLOGY****Head of the department:** Associate professor Ivan Ćavar, MD, Ph.D.**Teachers:** Professor Drago Batinić, MD, Ph.D.; Associate professor Ivan Ćavar, MD, Ph.D.; Associate professor Vesna Lukinović-Škudar, MD, Ph.D.; Katarina Cvitković, MD, Ph.D.; Jelena Sulić, MD**IMPLEMENTATION PLAN FOR THE ACADEMIC YEAR 2022-2023**

| Day | Time | Group | Theme (Chapter) | Lecturer |
|-----------------------------|-------------|--------------|---|-----------------|
| MON 22. 5. | 14.00-15.30 | All | (L) Innate and acquired immunity, types of acquired immunity, characteristics of acquired immune responses (Chapter 1) | Drago Batinić |
| | 15.45-17.15 | All | (L) Immune system cells and tissues, review of immune responses to microorganisms (Chapter 1) | Ivan Ćavar |
| | 17.30-19.00 | All | (L) Basic characteristics and specificity of innate immune responses, cellular receptors for microorganisms and damaged cells (Chapter 2) | Ivan Ćavar |
| TUE 23. 5. | 14.00-15.30 | All | (L) Components, reactions and role of innate immunity in stimulating acquired immune responses (Chapter 2) | Ivan Ćavar |
| | 15.45-17.15 | All | (S) Antigens recognized by T lymphocytes, the way how APC collect protein antigens, structure and function of HLA/MHC molecules (Chapter 3) | Jelena Sulić |
| | 17.30-19.00 | All | (L) Processing and presentation of protein antigens, other roles of APS and recognition of antigens by B lymphocytes (Chapter 3) | Jelena Sulić |
| WDS 24. 5. | 14.00-15.30 | All | (L) Cytokines and chemokines (Chapters 2 and 5) | Ivan Ćavar |
| | 15.45-17.15 | All | (S) Antigenic lymphocyte receptors; Antibodies and T lymphocyte receptors (Chapter 4) | Jelena Sulić |
| | 17.30-19.00 | All | (L) Development of immune repertoire; Lymphocyte development, emergence of diverse antigen receptors, maturation and selection of T and B lymphocytes (Chapter 4) | Jelena Sulić |
| THU 25. 5. | 14.00-15.30 | All | (L) Phases of T lymphocyte response, antigen recognition and costimulation, biochemical pathways of T lymphocyte activation (Chapter 5) | Jelena Sulić |
| | 15.45-17.15 | All | (S) Functional responses of T lymphocytes to antigen and costimulation and their migration in cellular immunity responses (Chapter 5) | Jelena Sulić |
| | 17.30-19.00 | All | (L) Complement system (Chapter 2 and 8) | Jelena Sulić |
| FRI 26. 5. | 14.00-15.30 | All | (P) Executive mechanisms of T lymphocyte-mediated immunity (Chapter 6) | Ivan Ćavar |
| | 15.45-17.15 | All | (E) ELISA and immunofluorescence - computer simulation | Jelena Sulić |

| Day | Time | Group | Theme (Chapter) | Lecturer |
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| MON 29. 5. | 13.30-14.00 | All | Repeat Test (for extra points on the test) | Vesna Lukinović-Škudar |
| | 14.00-15.30 | All | (S) Phases and types of humoral immune responses, stimulation of lymphocytes B by antigen (Chapter 7) | |
| | 15.45-17.15 | All | (S) Roles of helper T lymphocytes and antibodies in humoral immune responses (Chapter 7) | |
| | 17.30-19.00 | All | (L) The executive mechanisms of humoral immunity (Chapter 8) | |
| TUE 30. 5. | 14.00-15.30 | All | (S) Immunological tolerance: significance and mechanisms; Central and peripheral tolerance mediated by T lymphocytes (Chapter 9) | Vesna Lukinović-Škudar |
| | 15.45-17.15 | All | (L) Tolerance mediated by lymphocytes B; Tolerance of commensal microorganisms and fetal antigens; Autoimmunity (Chapter 9) | |
| WDS 31. 5. | 14.00-15.30 | All | (S) Immune responses to tumors (Chapter 10) | Vesna Lukinović-Škudar |
| | 15.45-17.15 | All | (L) Immune responses to transplants (Chapter 10) | |
| THU 1. 6. | 14.00-15.30 | All | (S) Types of hypersensitivity reactions; Early hypersensitivity (Chapter 11) | Vesna Lukinović-Škudar |
| | 15.45-17.15 | All | (L) Diseases caused by antibodies, immunocomplexes and T lymphocytes (Chapter 11) | |
| FRI 2. 6. | 13.30-14.00 | All | Repeat Test (for extra points on the test) | Ivan Čavar Jelena Sulić Jelena Sulić |
| | 14.00-15.30 | All | (E) Flow cytometry - computer simulation | |
| | 15.45-17.15 | All | (L) Congenital and acquired immunodeficiencies | |

L=Lecture, S=Seminar, E=Exercise

LITERATURE: Abul K. Abbas, Andrew H. Lichtman, Shiv Pillai. Basic immunology: functions and disorders of the immune system. 6th Edition, Elsevier, 2020. ISBN: 978-0-323-54943-1

Exams:

1st term = FRIDAY, 9. 6. 2023., 9.00 h

Summer terms: Wednesday 5. 7. 2023., 12.00 h; Wednesday 19. 7. 2023., 12.00 h

Autumn terms: Wednesday 13. 9. 2023., 12 h; Wednesday 27. 9. 2023., 12 h