

**Schedule of seminars and lectures on  
INTRODUCTION TO CLINICAL IMMUNOLOGY  
for the Students of English Dentistry Division,  
Medical University of Warsaw**

**2nd year, winter semester 2024/2025**

**Teachers/lecturers:**

- Prof. Dominika Nowis, MD, PhD, Laboratory of Experimental Medicine, Medical University of Warsaw, 5 Nielubowicza Street, Warsaw, e-mail: [dominika.nowis@wum.edu.pl](mailto:dominika.nowis@wum.edu.pl)
- Prof. Jakub Golab, MD, PhD, Department of Immunology, Medical University of Warsaw, 5 Nielubowicza Street, Warsaw, e-mail: [jakub.golab@wum.edu.pl](mailto:jakub.golab@wum.edu.pl)

**October 7th, 2024**

**Room 4.6 UCD (University Center of Dentistry), 6 Binieckiego Street**

Lecture 1 (10:00 – 10:45) - Introduction to immunology. Organization of the immune system.

Lecture 2 (10:45 – 11:30) - Therapeutic and diagnostic applications of monoclonal antibodies

**October 14th, 2024**

**Room 4.6 UCD (University Center of Dentistry), 6 Binieckiego Street**

Seminar 1 (10:00 – 11:30) Basic definitions. The role of the immune system. Structure of lymphoid organs. Innate and adaptive immunity - basic differences, elements and role. Vaccines.

Reading: Kenneth M. Murphy, Casey Weaver, Leslie J. Berg. Janeway's Immunobiology (Tenth Edition), W. W. Norton & Company, 2022 – **Chapters: 1 and 16 (16-1 to 16-13)**

**October 21st, 2024**

**Room 4.6 UCD (University Center of Dentistry), 6 Binieckiego Street**

Seminar 2 (10:00 – 11:30) Structure and sources of diversity of antibodies and T cell receptors (TCRs). Application of monoclonal antibodies and their derivatives.

Reading: Kenneth M. Murphy, Casey Weaver, Leslie J. Berg. Janeway's Immunobiology (Tenth Edition), W. W. Norton & Company, 2022 – **Chapters: 4, 5, and 8 (8-1 to 8-6 and 8-11 to 8-20)**

**October 28th, 2024**

**Room 4.6 UCD (University Center of Dentistry), 6 Binieckiego Street**

Seminar 3 (10:00 – 11:30) Major histocompatibility complex. Presentation of antigens to T lymphocytes. Development of the immune response.

Reading: Kenneth M. Murphy, Casey Weaver, Leslie J. Berg. Janeway's Immunobiology (Tenth Edition), W. W. Norton & Company, 2022 – **Chapters: 6, 9, and 10**

**November 4th, 2024**

**Microsoft Teams**

Lecture 3 (10:00 – 10:45) – Anti-infectious immunity - part 1.

Lecture 4 (10:45 – 11:30) - Anti-infectious immunity - part 2.

**November 18th, 2024**

**Room 4.6 UCD (University Center of Dentistry), 6 Binieckiego Street**

Seminar 4 (10:00 – 11:30) Function of the complement system. Interferons. Functions of macrophages and granulocytes. Natural and antibody-dependent cell-mediated cytotoxicity. Mechanisms of lymphocyte cytotoxicity. Mechanisms of immunity in mucous membranes, with special emphasis on the oral cavity. Anti-infective immunity.

Reading: Kenneth M. Murphy, Casey Weaver, Leslie J. Berg. Janeway's Immunobiology (Tenth Edition), W. W. Norton & Company, 2022 – **Chapters: 2, 3, 11, and 12**

**November 25th, 2024**

**Microsoft Teams**

Lecture 5 (10:00 – 10:45) – Transplantation immunology.

Lecture 6 (10:45 – 11:30) - Secondary immunodeficiencies, HIV infection.

**December 2nd, 2024**

**Room 4.6 UCD (University Center of Dentistry), 6 Binieckiego Street**

Seminar 5 (10:00 – 11:30) Transplantation immunology. Mechanisms of allograft rejection. Basic characteristics of organ transplants. Dental problems in transplantology. Primary and secondary immunodeficiencies with dental aspects. Diagnostics of immunodeficiencies.

Reading: Kenneth M. Murphy, Casey Weaver, Leslie J. Berg. Janeway's Immunobiology (Tenth Edition), W. W. Norton & Company, 2022 – **Chapters: 13 and 15 (15-19 to 15-26)**

**December 9th, 2024**

**Microsoft Teams**

Lecture 7 (10:00 – 10:45) - Immune tolerance and autoimmune diseases.

Lecture 8 (10:45 – 11:30) - Hypersensitivity and allergic diseases.

**December 16th, 2024**

**Room 4.6 UCD (University Center of Dentistry), 6 Binieckiego Street**

Seminar 6 (10:00 – 11:30) Hypersensitivity and allergies. Types of hypersensitivity with special emphasis on type I hypersensitivity. Allergen immunotherapy. Immune tolerance and self-tolerance. Natural protective mechanisms against autoimmunity. Selected

mechanisms promoting autoimmunity. Autoimmune and autoinflammatory diseases with special emphasis on their cutaneous and mucosal manifestations.

Reading: Kenneth M. Murphy, Casey Weaver, Leslie J. Berg. Janeway's Immunobiology (Tenth Edition), W. W. Norton & Company, 2022 – **Chapters: 8 (8-7, 8-8, 8-21 to 8-29), 14 and 15 (15-1 to 15-18)**

**January 13th, 2025**

**Room 4.6 UCD (University Center of Dentistry), 6 Binieckiego Street**

Seminar 7 (10:00 – 11:30) - Immunology of cancer. Tumor immune evasion. Anti-tumor immunity. Immunotherapy of cancer.

Reading: Kenneth M. Murphy, Casey Weaver, Leslie J. Berg. Janeway's Immunobiology (Tenth Edition), W. W. Norton & Company, 2022 – **Chapter 16 (16-14 to 16-20)**

**January 20th, 2025**

**Microsoft Teams**

Lecture 9 (10:00 – 10:45) - Immunology and immunotherapy of cancer.

Lecture 10 (10:45 – 11:30) - Mucosal immunity

**January 21st, 2025 (Tuesday!!!!)**

**Room 4.3 UCD (University Center of Dentistry), 6 Binieckiego Street**

Seminar 8 (8:00 – 9:30) – Colloquium

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