

Cell Biology Module

1st year MD 2025/2026

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Lectures

1. Cell organization and dynamics (90 min). Lecturer: Prof. Anna Jankowska, Ph.D.
2. Principles of membrane transport (90 min). Lecturer: Prof. Anna Jankowska, Ph.D.

Seminars

1. Cell cycle and cell death regulation – weapons against human diseases (90min). Teacher: Maria Wołuń-Cholewa, Ph.D.
2. Cell signaling (90 min). Teacher: Prof. Anna Jankowska, Ph.D.

Practicals

1. Cell culture: Isolation and fractionation of cells and primary culture. Maintenance of the culture cell lines. Three-dimensional culture systems, organs' culture (135 min). Teacher: Wiktoria Urban, MSc.
2. Antigen-antibody reaction and its clinical application: The functional properties and structure of antibodies. Immunological methods: immunohistochemistry, ELISA, cytometry. Over-the-counter tests (135 min). Teacher: Aleksandra Śliwa, Ph.D.

Recommended textbooks:

- B. Alberts, D. Bray, A. Johnson, J. Lewis, M. Raff, K. Roberts, P. Walter: ESSENTIAL CELL BIOLOGY.
- AN INTRODUCTION TO THE MOLECULAR BIOLOGY OF THE CELL; Garland Publishing, Inc., London & New York 2009.

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