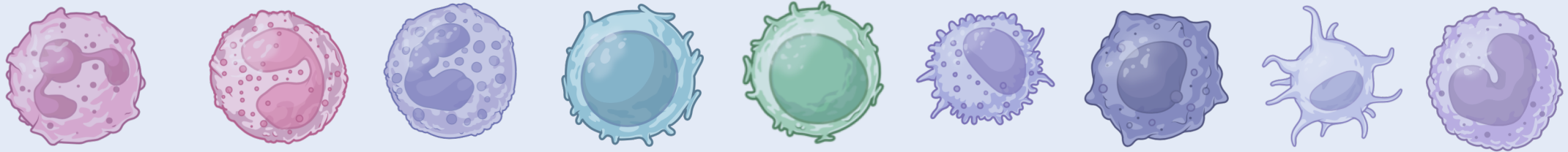


ASISTENȚĂ MEDICALĂ GENERALĂ

Universitatea de Medicină și Farmacie “Victor Babeș” Timișoara



Disciplina de Imunologie. Imunologie și alergologie clinică

Descriere generală



Imunologie. Immunologie și alergologie clinică - disciplină opțională anul III AMG

Număr de cursuri:

1 curs (2h) / săptămână = 2h x 14 săptămâni (28h)

Număr de ore pentru Lucrări Practice:

1h / săptămână sau 2h / 2 săptămâni (14 h)

Cadre didactice:

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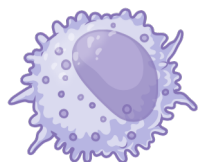
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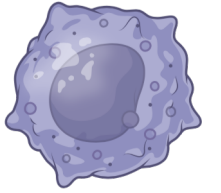
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Obiective generale



1. Să ofere cunoștințe fundamentale referitoare la principiile imunologiei;
2. Să prezinte aplicarea acestor principii în funcționarea sistemului imun în caz de sănătate și boală;
3. Să dezvolte abilitatea de a rezolva probleme ale imunologiei clinice prin accesarea resurselor disponibile (internet, cărți, reviste) și prin comunicarea interpersonală.



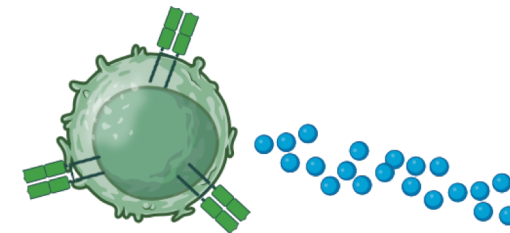
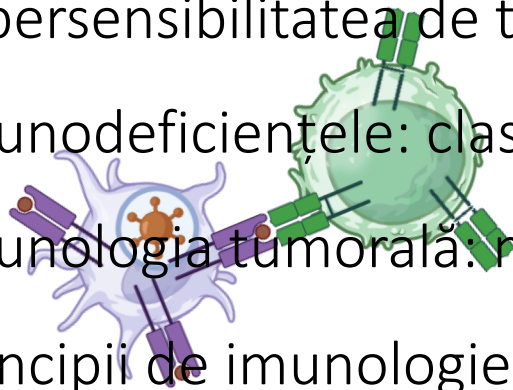


1. Introducere în imunologie: organizarea și funcțiile sistemului imun
2. Imunitatea înnăscută: mecanisme, celule implicate și roluri funcționale
3. Imunitatea adaptativă: caracteristici, tipuri și interacțiuni
4. Antigenele și prezentarea antigenică: rolul moleculelor MHC
5. Limfocitele T: dezvoltare, activare și funcții efectoare
6. Limfocitele B și anticorpii: structură, funcții și răspuns umoral
7. Mecanisme efectoare celulare și umorale în răspunsul imun. Citokinele și reglarea răspunsului imun





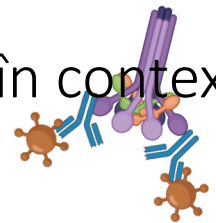
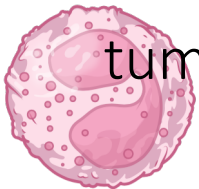
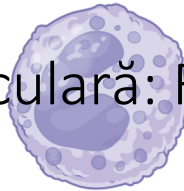
8. Imunologie de transplant: mecanisme imune, principii de tratament
9. Toleranța imunologică și mecanismele autoimunității
10. Hipersensibilitatea de tip I: mecanisme alergice și manifestări clinice
11. Hipersensibilitatea de tip II, III și IV: mecanisme și exemple clinice
12. Imunodeficiențele: clasificare și implicații clinice
13. Imunologia tumorală: mecanisme de recunoaștere și evadare tumorală. Immunoterapia
14. Principii de imunologie clinică: aplicații în diagnostic și terapie



Tematica Lucrărilor practice de Imunologie



1. Anticorpai monoclonali: principii, metode de obținere, utilizare în practica medicală
2. Citometrie de flux: principii, metoda de lucru, utilizare practică
3. Alergiile medicamentoase
4. Alergiile alimentare: metode de diagnostic molecular
5. Testele de histocompatibilitate și utilitatea clinică în transplantul de organe și țesuturi
6. Teste imunoenzimatic utilizate în diagnosticul afecțiunilor imune: ELISA, ELISpot, Westernblot
7. Teste de imunologie moleculară: RT-PCR, qRT-PCR și NGS. Utilizarea acestora în context tumoral



Evaluarea finală

Conformă cu standardele Universității de Medicină și Farmacie "Victor Babeș" Timișoara pentru anul universitar 2026-2027.



Examenul teoretic – întrebări tip grilă – **50% din nota finală**

Examenul practic – se susține în sesiunea ordinară – **50% din nota finală**

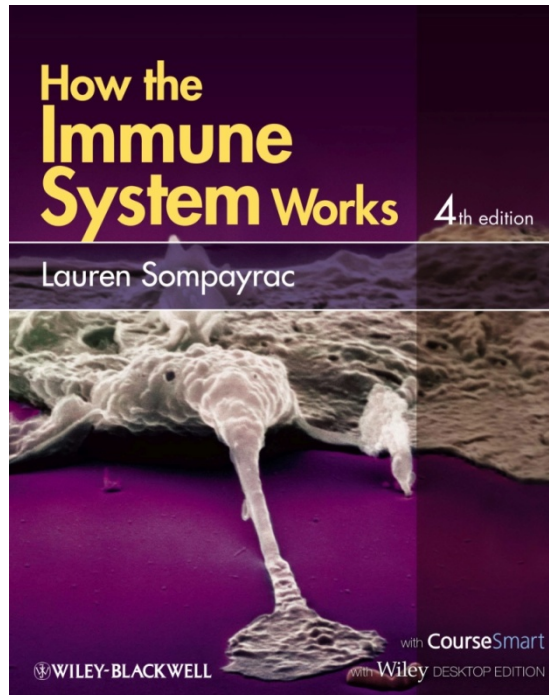
- întrebări tip grilă, subiecte redacționale scurte, buletine de interpretare – 80%

- activitatea pe parcursul semestrului – 20%



Bibliografie

- Cursul în format electronic (pdf), care se găsește pe platforma Moodle, actualizat anual
- Imunologie. Veronica Lazăr, Carmen Chifiriuc, Alina Holban, Doina Bulai, Duncan Stewart-Tull. Editura Universității din București, 2021, ISBN: 978-606-16-1308-3
- Imunologie ilustrată. Lippincott. Ed. ALL, 2023



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The Anytime, Anywhere Textbook, ix	
LECTURE 1 An Overview, 1	This book is neither a comprehensive text nor an exam-review tool. It is an overview of the immune system designed to give anyone who is learning immunology a feel for how the system all fits together.
LECTURE 2 The Innate Immune System, 13	The innate immune system is a "hard-wired" defense that has evolved over millions of years to recognize pathogens that commonly infect humans. It provides a rapid and powerful defense against "everyday" invaders.
LECTURE 3 B Cells and Antibodies, 24	B cells and the antibodies they produce are part of the adaptive immune system. This defense evolves during our own lifetime to protect us against invaders that we, personally, have never encountered before.
LECTURE 4 The Magic of Antigen Presentation, 38	T cells, another weapon of the adaptive immune system, only recognize invaders which are "properly presented" by specialized antigen presenting cells. This feature keeps these important cells focused on the particular attackers which they are able to defend against.
LECTURE 5 T Cell Activation, 52	Before they can spring into action, T cells must be activated. This requirement helps ensure that only useful weapons will be mobilized.
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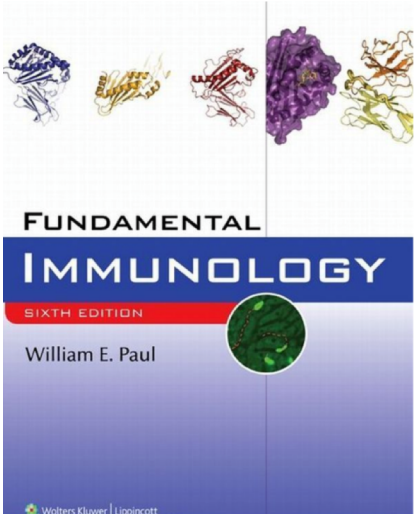
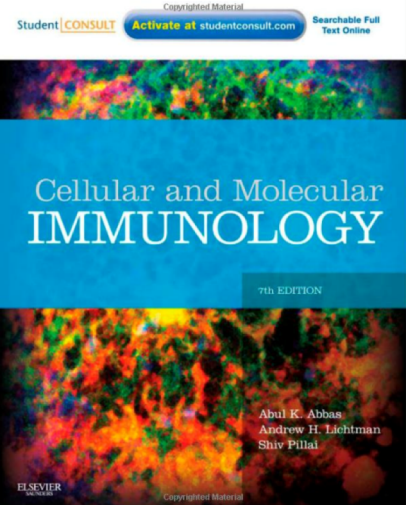
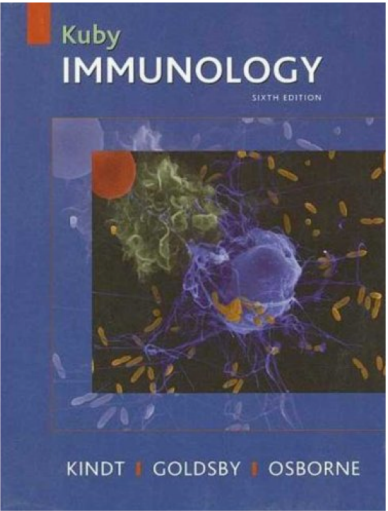
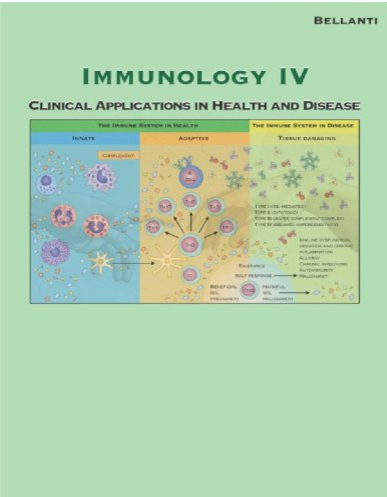
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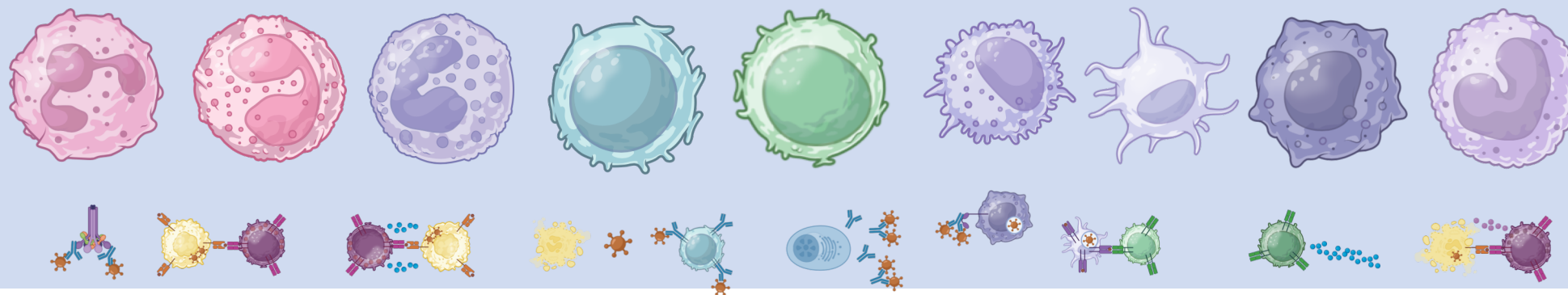
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