

Faculty of Medicine in Rijeka

**Curriculum
2023/2024**

For course

**Receptorski mehanizmi u patogenezi upale i septičkog
šoka**

Study program:	Medicina (R) (elective) University integrated undergraduate and graduate study
Department:	Department of Physiology, Immunology and Pathophysiology
Course coordinator:	prof. dr. sc. Muhvić Damir, dr. med.
Year of study:	2
ECTS:	1.5
Incentive ECTS:	0 (0.00%)
Foreign language:	No

Course information:

Kolegij __Receptorski mehanizmi u patogenezi upale i septičkog šoka_____je izborni predmet na _2__ godini Integriranog preddiplomskog i diplomskog sveučilišnog studija Medicina koji se održava u ljetnom__semestru, a sastoji se od _4__ sati predavanja, _17_ sati seminara i _4_ sati vježbi, ukupno 25__ sati (1,5 **ECTS**).

Nastavni plan je slijedeći:

8.5. 2025. 10.00-13.00 P1

15.5. 2025. 10.00-13.00 V1

22.05. 2025 10.00-13.00 S1

29.05.2025. 10.00-13.00 S2

0506.2025. 10.00.13.00 S3

12.06. 2025 10.00-13.00 S4

Cilj kolegija je _shvatiti mehanizme upale i septičkog šoka te upoznati receptore koji to posreduju._____

List of assigned reading:

1. Muhvić D. et al, The involvement of CD14 in the activation of human monocytes by peptidoglycan monomers, Mediators of inflammation, vol 10, 155-162, 2001.
2. Tak P.P. & Firestein G.S.,NF-kB:a key role in inflammatory diseases, J Clin Invest, vol 107, 7-11, 2001.
3. Heumann D. and Glauser M, Pathogenesis of sepsis, Scientific American,Science&Medicine 1994, 28-37.
4. Glauser MP, Pathophysiologic basis of sepsis:Considerations for future strategies of intervention, Critical Care Medicine 2000;28:S4-S8.
5. Weideman B. et al., Soluble peptidoglycan-induced monokine production can be blocked by anti-CD14 monoclonal antibodies and by lipid A partial structures, Infection &Immunity, vol 62, 4709-4715, 1994.
6. Takeda K & Akira S, Toll-like receptors in innate immunity, International Immunology 17(1):1-14, 2005.
- 7.B.Weidemann et al.Specific binding of soluble peptidoglycan and muranyldipeptide to CD14 on human monocytes,Infection &Immunity, Mart 1997.
- 8.Parrillo JE,Pathogenetic mechanisms of septic shock,The new england journal of medicine,vol. 328, No20,1993
- 9.AG Tsitou et al ,Septic shock;current pathogenetic concepts from clinical perspective,Med SciMonit,2005;11(3);RA76-85
- 10.R.Dziarsky,Review:Recognition of bacterial peptidoglycan by the innate immune system,Cell.Mol.Life Sci.60 (2003) 1793-1804

List of optional reading:

1. Patofiziologija udžbenik, Medicinska naklada, Zagreb 2018, osmo izdanje; 16. Poglavlje Upala, str.553-587.

Curriculum:

Lectures list (with titles and explanation):

P1 Upala

Mehanizmi upale

Seminars list (with titles and explanation):

S1 Muramil dipeptid

Muramil dipeptid i CD14 molekula

Receptorski mehanizmi u patogenezi upale i septičkog šoka

Kolegij uključuje mehanizme nastanka upale i septičkog šoka.

S2 Solubilni peptidoglikan i CD14 molekula

SPG i CD14 molekula

S3 Septički šok

Mehanizmi septičkog šoka

S4 Peptidoglikan i njegovi receptori

Peptidoglikan i njegovi receptori

Practicals list (with titles and explanation):

V1 Peptidoglikanski monomer (PGM)

Peptidoglikanski monomer

Student obligations:

Studenti su dužni pohađati sve oblike nastave!

Exam (exam taking, description of the written/oral/practical part of the exam, point distribution, grading criteria):

Studenti koji su pohađali 70% nastave mogu izaći na završni ispit.

Other notes (related to the course) important for students:

Kolegij se održava od 24.04 do 16.06. 2023.

COURSE HOURS 2023/2024

Receptorski mehanizmi u patogenezi upale i septičkog šoka

Lectures (Place and time or group)	Practicals (Place and time or group)	Seminars (Place and time or group)
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List of lectures, seminars and practicals:

LECTURES (TOPIC)	Number of hours	Location
P1 Upala	4	

PRACTICALS (TOPIC)	Number of hours	Location
V1 Peptidoglikanski monomer (PGM)	4	

SEMINARS (TOPIC)	Number of hours	Location
S1 Muramil dipeptid	4	
Receptorski mehanizmi u patogenezi upale i septičkog šoka	25	
S2 Solubilni peptidoglikan i CD14 molekula	4	
S3 Septički šok	4	
S4 Peptidoglikan i njegovi receptori	5	

EXAM DATES (final exam):
