

Faculty of Medicine in Rijeka

**Curriculum
2021/2022**

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

05.06.2025. 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- κ B: 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 muramyl dipeptide to CD14 on human monocytes, Infection & Immunity, March 1997.
8. Parrillo JE, Pathogenetic mechanisms of septic shock, The new England journal of medicine, vol. 328, No 20, 1993
9. AG Tsitou et al, Septic shock; current pathogenetic concepts from clinical perspective, Med Sci Monit, 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

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 2021/2022

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	
S2 Solubilni peptidoglikan i CD14 molekula	4	
S3 Septički šok	4	
S4 Peptidoglikan i njegovi receptori	5	

EXAM DATES (final exam):
