

Program of pregradual education, Study year 2020/2021

Molecular pathophysiology, 3rd study year

Molecular pathophysiology, 4th study year

Study program: General medicine ; Study period: 6. Semester

Category of the subject: elective ; Range of courses: 14 h/ semester; Study form: **Lectures**

Venue: Department of Pathophysiology, 8th floor, 2nd section;

Form of graduation: exam; Credits: 2

Terms are preliminary and based on the current students registered in elective course.

Registered students have to visit the department to fix any further requirements.

	Date	Time	Lecture	Lecturer
1.	12. 3.2021 Friday	14:30 – 16:00 2 hours	Molecular endocrinology – Cellular signaling 1	Doc. MUDr. R. Beňačka, CSc..
2.	26. 3.2021 Friday	14:30 – 16:45 3 hours	Cellular signaling 2, Cell cycle, Cell stress	Doc. MUDr. R. Beňačka, CSc.
3.	09.4. 2021 Friday	14:30 – 16:00 2 hours	Oxidative damage of cells and tissues; redox homeostasis	MVDr. E. Lovásová, PhD
4.	23. 4. 2021 Friday	14:30 – 16:45 3 hours	Molecular basis of acute, chronic inflammation & healing	Doc. MUDr. R. Beňačka, CSc.
5.	07. 5.2021 Friday	14:30 – 16:00 2 hours	Molecular genetics, epigenetics	Doc. MUDr. O. Rácz, CSc.
6.	21. 5. 2021 Friday	14:30 – 16:45 3 hours	Molecular carcinogenesis Credit seminar	Doc. MUDr. R. Beňačka, CSc.

- Presented as tutorial lectures with discussion to given topics
- Attendance of students in the lectures is required for the credit

Recommended resources for individual study and provided by teachers :

1. Materials from the presentations; lectures/handouts
2. Basic of cell signaling. http://www.wiley-vch.de/books/sample/3527313974_c01.pdf, 20.2.2016
3. Cell signaling: <http://www.physiology.sdu.edu.cn/Medical%20Books/cell%20signal%20biology/module%20%20cell%20signaling%20pathways.pdf>
4. Reactive oxygen species. https://en.wikipedia.org/wiki/Reactive_oxygen_species
5. Oxidative stress. https://en.wikipedia.org/wiki/Oxidative_stress
6. Kumar, V. Abbas, A.K., Aster, J.C. Fausto, N.: Robbins & Cotran Pathologic Basis of Disease. Online Access, 8th Ed, Saunders, 1464 p., (ISBN-10: 1416031219)
7. Stryer, D.S., Rubin, E., Saffitz, J, E., Schille, A.L. (Ed.): Rubin's Pathology: clinicopathologic foundations of medicine. LWW, 7th Ed., 1464 p., (ISBN-10: 1605479683)

Other interesting resources used in the education:

8. Runge, M. S., Patterson, C. (Ed.): Principles of molecular medicine. 2.ed., Humana Press, New Jersey, 2006, 1304 s., ISBN-10: 1588292029 (chosen chapters)
9. Lang, F. (Ed.): Encyclopedia of Molecular Mechanisms of Disease. Springer, Berlin, 2009, 766 s. (ISBN-10: 3540671366)

Košice, 21.2. 2021

Doc. MUDr. Roman Beňačka, CSc., m. prof.

