

**Program of Study** : General Medicine  
**Course** : Molecular Pathology  
**Abbreviation** : PAT/VAB31  
**Schedule** : 15 hours of seminar  
**Course Distribution** : 3<sup>rd</sup> year, 6<sup>th</sup> semester  
**Number of Credits** : 3  
**Course Form** : Seminar

**Lectures:**

**Teachers:** **Doc. Mgr. Jan Bouchal, Ph.D. (garant)**  
 Mgr. Dana Šimková, Ph.D.  
 MUDr. Dominika Fritzová  
 Mgr. Eva Szczyrbová  
 Mgr. Jiří Voller, Ph.D.

**Study:** Continuous

	<b>Date</b>	<b>Subject</b>	<b>No. of Less.</b>	<b>Teacher</b>
1	<b>17/ 2/ 2023</b>	Methodic principles of molecular pathology.	<b>2</b>	<b>Bouchal</b>
2	<b>3/ 3/ 2023</b>	Basic terms in molecular pathology.	<b>2</b>	<b>Bouchal</b>
3	<b>17/ 3/ 2023</b>	Cell cycle, oncogenes, tumor supressor genes.	<b>2</b>	<b>Szczyrbová</b>
4	<b>31/ 3/ 2023</b>	Apoptosis. Gene therapy.	<b>2</b>	<b>Šimková</b>
5	<b>14/ 4/ 2023</b>	Predictive and prognostic pathology.	<b>2</b>	<b>Fritzová</b>
6	<b>28/ 4/ 2023</b>	New high-throughput technologies in molecular pathology.	<b>2</b>	<b>Voller</b>
7	<b>12/ 5/ 2023</b>	Tutorial for final test	<b>2</b>	<b>Bouchal</b>
8	<b>26/ 5/ 2023</b>	Test. Credit.	<b>1</b>	<b>Bouchal</b>

**Completed by:** Practicavit

**Requirements:** 90 % attendance at classes. Successfull passing the test = minimal 75% of correct answers is required.

**Literature:**

1. Müllauer L. Milestones in pathology-from histology to molecular biology. Memo 2017; 10: 42-45.
2. Hanahan et Weinberg. Hallmarks of Cancer: The Next Generation. Cell 2011; 144: 646-674.
3. Alberts B. et al. Molecular Biology of the Cell. Garland Science 2014 (or Essential Cell Biology, Garland Science 2013).
4. Cagle PT and Craig T: Basic concepts of molecular pathology. Springer 2009.
5. Tubbs RT and Stoler MH: Cell and tissue based molecular pathology. Churchil Livingstone, 2009