



## ***Terapia moleculară și medicina de precizie și Imunoterapia, medicina translațională***

### **TEMATICA**

1. Disorders of circulation.
2. Necrosis and apoptosis.
3. Inflammation – phases of the inflammatory process.
4. Acute inflammation.
5. Chronic inflammations
6. Malignant tumors – invasion and metastasis
7. Epithelial tumors.
8. Melanocytic tumors
9. Arteriosclerosi and arteritis.
10. Pathology of veins.
11. Bronhopulmonary tumors.
12. Tumors of the stomach.
13. Acute and chronic enterocolitis
14. Tumors of the intestine.
15. Acute and chronic hepatitis. Liver cirrhosis
16. Tumors of the liver and pancreas
17. Tumors of the kidney.
18. Hodgkin lymphoma
19. Theory and Practice of Histological Techniques
20. Theory and Practice of Immunohistochemical Techniques
21. Autopsy pathology – theory and practice
22. Molecular Pathology—In Situ Hybridization
23. DNA extraction
24. RNA extraction
25. Evaluation of nucleic acids
26. PCR – theory and practice
27. qPCR - theory and practice
28. Gene expression
29. Mutations, gene polymorphism
30. DNA sequencing – theory and practice
31. Sangersequencing
32. Next generation sequencing (NGS)





33. Molecular testing in oncology
34. Laboratory approaches in Molecular Pathology
35. Internal quality control in molecular pathology
36. Biosecurity in molecular pathology
37. Laboratory approaches in Molecular Pathology – contamination

#### BIBLIOGRAFIE

1. Kumar V, Abbas A, Aster J. Robbins and Cotran Pathologic Basis of Diseases. 10th Edition, Elsevier, Amsterdam. 2020 (for subjects 1-18)
2. Bancroft JD, Gamble M. Theory and Practice of Histological Techniques. Churchill Livingstone 2007; ISBN: 978-0-443-10279-0 (for subjects 19, 20, 22, 33, 34, 36, 37)
3. Suvarna KS, Layton C, Bancroft JD. Bancroft's Theory and Practice of Histological Techniques. 8th edition. Elsevier. 2018 (for subjects 19, 20, 22, 33, 34, 36, 37)
4. Connolly AJ, Finkbeiner WE, et al. Autopsy pathology: A manual and atlas. Third edition. Elsevier 2016 (for subject 21)
5. Coleman WB, Tsongalis GJ. Molecular Pathology. Elsevier, London 2009 (for subjects 22-32)
6. Coleman WB, Tsongalis GJ. Diagnostic Molecular Pathology. Elsevier, 2016 (for subjects 22-37)
7. Rapoport BL, Troncone G, Schmitt F, Nayler SJ. Comprehensive Genomic Profiling. Karger, Oxford 2020 (for subjects 22-32)

