

Subjects and bibliography for vacant positions – Biochemistry Discipline

Department IV: Biochemistry and Pharmacology

University professor, Position 5, Disciplines : Biochemistry, Clinical Biochemistry

Exam Subjects

1. Nucleic acids metabolism.
2. Molecular markers in clinical and medical research.
3. Elements of integrative metabolism.
4. Relation between structure and properties of proteins with biomedical applications.
5. Small non-coding RNA as biomarkers in cancer.
6. Free radicals metabolism with medical implications.
7. Epigenetical determinants in cancer.
8. Competitive inhibition of enzymes as research ground for new drugs design.
9. Small non-coding RNA as biomarker in neurodegenerative diseases.
10. “Omics”-Technologies in medical biochemistry curriculum.

Bibliography

1. Thomas M. Devlin, “Textbook of Biochemistry with Clinical Correlations”, 7th Ed, Publisher John Wiley & Sons, 2010, ISBN: 978-0470281734
2. Michael L. Bishop, Edward P. Fody, Larry E. Schoeff, Clinical Chemistry: Techniques, Principles, Correlations, 6th Ed., Lippincott Williams & Wilkins, 2009
3. Gerhard Meisenberg, William H. Simmons, Principles of Medical Biochemistry, 3rd, Saunders Elsevier, 2013
4. P. Kamoun, A. Lavoine, H. de Verneuil.”Biochimie et biologie moleculaire”. Ed. Medicine-Sciences Flammarion, 2003
5. „Biochimie de Harper”, 2013, Murray, Bender, Botham, Kennelly, Rodwell, Weil, Editura: De Boeck Superieur s.a. ISBN: 978-2-8041-7561-0