

## **Tematica concursului de admitere la doctorat, anul univ. 2020-2021**

**Conducator de doctorat : Prof. Dr. Habil. Manuela Banciu**

1. Acizi nucleici: structură și funcții.
2. Metabolismul energetic al celulei eucariote.
3. Comunicarea intercelulară prin intermediul veziculelor extracelulare.
4. Bionanotehnologii pentru țintirea terapeutică a celulelor și compartimentelor intracelulare.

### **Bibliografie:**

- Alberts B., Johnson A., Lewis J., Wilson J.H., Hunt T., Molecular biology of the cell. Garland Science, Taylor & Francis Group, 2015.
- Lodish H.F., Berk A., Kaiser C.A., Molecular cell biology. W.H. Freeman and Co., New York, 2013.
- Nelson D.L., Cox M.M., Lehninger principles of biochemistry. W. H. Freeman, New York, 2005.
- Patras L, Banciu M. Intercellular Crosstalk Via Extracellular Vesicles in Tumor Milieu as Emerging Therapies for Cancer Progression. *Curr Pharm Des.* 2019;25(17):1980-2006.
- Alupei MC, Licarete E, Patras L, Banciu M. Liposomal simvastatin inhibits tumor growth via targeting tumor-associated macrophages-mediated oxidative stress. *Cancer Lett.* 2015;356(2 Pt B):946-952.
- Zhao Z, Ukidve A, Kim J, Mitragotri S. Targeting Strategies for Tissue-Specific Drug Delivery. *Cell.* 2020;181(1):151-167.
- Luput L, Sesarman A, Porfire A, Achim M, Muntean D, Casian T, Patras L, Rauca VF, Drotar DM, Stejerean I, Tomuta I, Vlase L, Dragos N, Toma VA, Licarete E, Banciu M. Liposomal simvastatin sensitizes C26 murine colon carcinoma to the antitumor effects of liposomal 5-fluorouracil in vivo. *Cancer Sci.* 2020 Apr;111(4):1344-1356.

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