Teaching unit 06

1. Function of proteins encoded by tumor-suppressor genes

2. The role of tumor suppressor genes in tumor development.

3. Mechanisms by which r53 arrests the cell cycle.

4. Pro-apoptotic effect of r53 protein.

5. Loss of r53 protein heterozygosity.

6. Half-life of r53 protein.

7. Inhibitors of cyclin-dependent kinases. The role of TGF-β in cell cycle regulation.

8. r21Cip1. The role of mitogens in cell cycle regulation.

9. The role of ATM and ATR in the elimination of DNA damage.

10. Replicative age. Mechanism of origin.

11. Telomeres. Basic characteristics and significance.

12. Bcl-2 gene family role in the regulation of apoptosis.

13. Bcl-2 gene expression disorder and tumor development. Mechanisms.

14. Autophagy and tumor.