

LIST OF PRACTICAL SKILLS IN MEDICAL BIOLOGY

- microscopy technique;
- make temporary micropreparations;
- to differentiate cell components;
- make a karyogram of human chromosomes;
- to identify the primary structure, number of amino acids, molecular mass of the polypeptide according to the structure of the gene encoding it;
- to analyze the sequence of stages of gene expression regulation;
- determine the type of inheritance of Mendelian traits of a person;
- to predict the genotypes and phenotypes of the offspring based on the genotypes of the parents;
- exclude paternity when determining the blood groups of the parents and the child;
- to analyze the complex mechanisms of inheritance of traits in humans;
- to develop measures to reduce the degree of manifestation of the pathological condition in patients with hereditary pathology;
- choose appropriate methods of studying human heredity for diagnosis various hereditary diseases;
- calculate the probability of the manifestation of hereditary diseases in descendants depending on gene penetrance;
- to differentiate human chromosomal diseases;
- to build and conduct a genealogical analysis of pedigrees with hereditary illness;
- calculate the role of heredity and environmental conditions in the development of traits (for results of twin analysis);
- calculate the genetic composition of human populations;
- apply the biogenetic law to define ontogenetically conditioned inborn human developmental defects;
- to compare the mechanisms of birth defects of human development of various genesis;
- learn the basic principles of regeneration and transplantation;
- determine the place of the biological object in the living nature system;
- justify the belonging of human parasitic diseases to a group transmission and natural sources;
- to diagnose pathogens and vectors on macro- and micro-preparations causative agents of parasitic diseases;
- determine the species affiliation of protozoan pathogens;
- to identify different stages of the life cycle of human parasites;
- substantiate methods of laboratory diagnosis of parasitic diseases;

- determine the species belonging to helminths and their eggs;
- to differentiate the diagnosis of invasions using laboratory methods;
- to determine the species belonging to carriers of infectious agents;
- prove the effectiveness of methods of prevention of parasitic diseases, based on the methods of infection with them;
- predict the impact of environmental factors on the human body.