

ANNOTATION
of report on Research Practice of a two-year student, group BT-51M
specialty 8.05140101 - Industrial Biotechnology
Hranina Anastasia
on the topic «Biopolymer particles poli(D,L lactic-co-glicolic acid)
as transporter of recombinant antigen of diphtheria toxin at oral
immunization»

Report on Research Practice sets out 34 pages of printed text. The report consists of an introduction, four chapters, conclusions, list of references and contains 6 figures and 2 tables.

The report of the research practices consist of next sections: the immune system of mucous membranes, the use of micro- and nanoparticles as delivery systems at oral immunization, materials and methods of research, results and discussion.

In the introduction substantiated the actuality of the chosen research topic, described purpose of the practice and its objectives.

The object of the research was to determine peculiarities of PLGA particles with immobilized recombinant fragment of diphtheria toxin for the formation the immune response. The paper used materials and techniques, which allow characterize PLGA particles as a vaccine delivery system.

The main results are determination of perspectives for creation of mucosal vaccines, research of the basic characteristics and fields of application of PLGA.

As a result of scientific research practice have been resolved following tasks: examined structural features of the immune system and mucous membranes, inspected major problems of the creation of mucosal vaccines and their solutions, defined the basic requirements to be met antigen delivery system. Examined the main systems of vaccine deliver. Processed the main methods of research for further experimental work. Determined the optimal titres of conjugates species-specific antibodies for ELISA.