DEVELOPMENT OF AN INTERACTIVE METHODOLOGICAL GUIDE ON HISTOLOGY USING COMPUTER TECHNOLOGIES IN THE ISEI BSU

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To optimize the educational process, the interface of the «Virtual Histology program» has been developed, which includes the creation of photographs of histological preparations using a Nikon 50-i microscope and computer software, the development of control tests with histological preparations.

Keywords: computer technology, histology, methodological manual.

The emergence of new pedagogical educational technologies using information, computer telecommunication systems and multimedia turned out to be a promising and important means of improving the quality and effectiveness of education in the study of cytology, histology and embryology. For these disciplines, traditional drawings on the blackboard, training tables, slides, transparent films are gradually replaced by multimedia accompaniment of not only lectures, but also laboratory classes [1].

These digital methods allowed visualizing histological preparations on the screen using multimedia technology at lectures and laboratory classes, with which, firstly, the student realizes the need for this subject for his further education, which facilitates further study of the discipline and, secondly, allows you to raise the study of micropreparations to a new level, contributing to the improvement of the skill of identification of organs, their tissue components, cells and non-cellular structures [2–3].

The multimedia-software methodological complex makes it possible to expediently solve a number of methodological and didactic tasks in the teaching of histology. A significant increase in visibility in the study of cytological and histological micropreparations, since some cytological structures are difficult to show using a standard light microscope (for example, microvilli, brush border, basal striation, etc.); optimization of student knowledge assessment based on the results of the current and final computer testing, etc.

This method ensures accessibility in obtaining the information necessary for self-training (thematic plan, test tasks, etc.).

The creation of the site "Virtual Histology allows you to expand the possibilities in the study of the discipline" Histology ". An important aspect that serves to create this manual is its mobility:

- the ability to use ready-made and systematized material on the desired topic.

- use both in the classroom and at home, in the library, etc.

In the process of this work, students develop their skills of independent mental work, which contribute to the integration of theoretical knowledge gained, develop analytical skills, broadens the horizons and gradually develop a habit of systematic training.

Thus, computer and multimedia technologies expand the possibilities of visualization of lectures and practical classes in histology, solve the problems of methodological support for extracurricular independent work of students not only in an environmental university, but also in other specialized educational institutions.

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