

DEVELOPMENT OF THE MODULE OF TRICHOLOGICAL IMAGE PROCESSING

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Since hair images can be obtained using various devices such as a visiograph, microscope, capillaroscope, camera, dermatoscope, there is a need to create programs for processing the resulting images.

There are many methods and means of studying the condition of the hair, most often doctors work with an enlarged image of the study area.

Many scientists and researchers have been involved in the visualization and software processing of biomedical images, including image segmentation and the search for diagnostic criteria [1-3], so after analyzing the literature, it is proposed to develop a software tool for hair damage analysis.

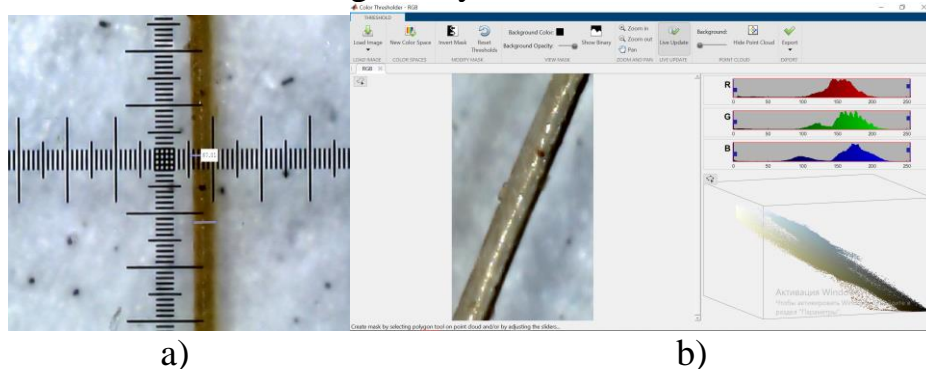


Figure 1 – Determining the geometric dimensions of the image (a); Interactive definition of segmentation thresholds for each color channel (b)

The created software downloads a digital image of a fragment of hair that corresponds to the area of interest of a trichologist. It is proposed to explore an area the size of one centimeter. The phase of the hair can be determined only by the shape of the root, and the degree of damage is best determined on a linear section of hair, without thickening.

References:

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