melerit PhacoVision®



The VR Simulator Melerit PhacoVision offers an excellent training possibility in Cataract Surgery using the phacoemulsification method, including both the capsulorhexis part and the phacoemulsification part.

During the practice sessions the surgical field is seen in a microscope and handpieces, representing the instruments, are used in the same way as in real operations. Pedals are used to control the microscope image and the phaco machine. The pedals and the handpieces are designed to closely resemble average commercial equipment.

An eye model including lens, iris, capsule and cornea is updated according to the user input. The model holds information about volume and pressure as well as geometry. Through an administrator interface the properties of the eyemodel can be set to create virtual patient cases with various difficulty. The updated version of Melerit PhacoVision now includes an eyemodel with enhanced resolution.

The quality of the performance is measured continously and is presented after surgery.

Altogether, Melerit PhacoVision is a complete interactive environment for learning. Performance quality can be assessed from saved data, which enables running statistics of the progress of the trainee.

