The state of the art technology for medical education: Combined hand-manipulating, electronics and IT master class

In this new generation of training technology for medical education combined hand-manipulating and IT master class will be presented by the International Bureau of Human Body Design & Biomodeling Alliance and iBellaInt Ltd. from Moscow Institute of Physics and Technology (State University). This state-of-the-art technology is opening a new era in medical education where surgeons can gain hand-manipulation skills by means of a unique training kit, which is a combination of hand-training tool with electronics, IT and telemedicine. Surgeons can see target structures under the skin while performing manipulation on real face-model by using real routinely used instrument-syringe on the monitor. Surgeons will see moving of their instrument-syringe needle inserted under the skin, its movement contour during procedure, injection site of medication in the right place—target muscles or wrong places—vessels, nerve fibers, lymphatic drainage structures with complications. Special electronic devices and software were realized between face-model and PC with remote monitor via internet with our server in order to realize real time visualization technology during hand manipulations. Efficiency of training is going to be analyzed by a special program based on principles of artificial intelligent development by programmers from department of artificial technology and robotics. Master class can be translated by simultaneous internet connection to elsewhere by choice of the organizing committee. In conclusion, the state of the art training technology for medical education combined hand-manipulating and IT will give understanding of unique next generation educational and training technology principles for all surgical disciplines, especially for cosmetology, plastic surgery and nursery.

Biography

Prof.Dr. Ospan A Mynbaev has completed his PhD and ScD studies in Kulakov Research Center of Obstetrics, Gynecology, and Perinatology, Russian Health Ministry in cooperation with Petrovsky Russian National Center of Surgery and Lomonosov Moscow State University followed with postdoctoral studies in Belgian universities (KULeuven, Ghent University, VUB). Recently he established an international alliance of researchers from basic sciences and medical practitioners named “The International Bureau of Human Body Design & Biomodeling” at the MIPT. His research interests include surgical topics closely related to multidisciplinary translational research and personalized medicine. He developed new generation of training kits for medical education based on hand skills manipulation & ultra modern technologies especially designed for cosmetologists and plastic surgeons.

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