

“Novel Physiology Experiments Online: From Lab to VR, From School to Home”

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Abstract

With the rapid development of multimedia digital technology, the integration of virtual simulation, augmented reality technology and medical education has brought great changes to basic medical education, especially represented by the change of experimental teaching methods. Experimental teaching is very important for medical students to understand medical theoretical knowledge and cultivate experimental skills.

Since 2020, the epidemic of COVID-19 has put a serious impact on social and economic development, as well as unprecedented challenges to the medical education mode. Physiology experiment teaching changed, for example, from the laboratory, to home or dormitory, from real or actual experiment teaching (including laboratory animal experiment, human experiment, etc.) to teaching by man- machine interactive virtual simulation, VR, AR online. This change of teaching mode has given medical experimental teaching opportunities, and then also new problems. In this workshop, I will operate several virtual experiments online such as skeletal muscle contraction, nerve excitation conduction, observation of cardiac physiological characteristics, and regulating of respiration, to share our practices, experiences and thoughts of physiological experiment teaching online in Jin Zhou Medical University.