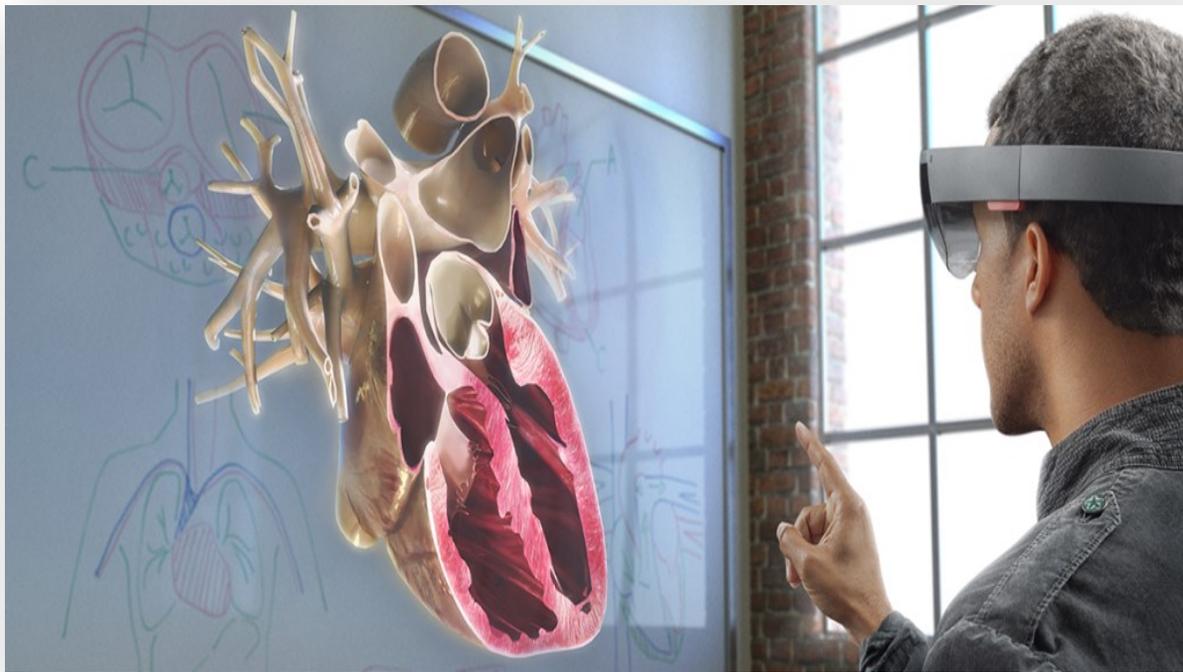


Stereoscopic 3D Medical Education

Implementing virtual reality in medical education

NVU is the one of the first institutions in Europe to adopt Stereoscopic 3D Medical Education, bringing cutting edge Virtual reality and Augmented Reality Technologies in Medical education. S3D MediMagic is a digital medical education product, based on progressive Pedagogy which focusses on teaching with the aid of Stereoscopic visualisation providing a superficial orientation of various anatomical structures as well as their deep perception.

At the initial stage, S3D medical education at NVU is focused on five key directions including: Human Anatomy, Physiology, Biochemistry, Histology and Embryology. Throughout the newsletter one has an opportunity to get acquainted with the content through the demos of 3D visualization.



HUMAN ANATOMY

S3D MediMagic covers over a hundred topics in Anatomy that aims to simplify the memorization of complex information via visualization of the structures presented in Human body. It gives the viewer a succinct understanding of the localization and function of every organ, muscle, bone, blood vessel and nerve in the Human body. A student will be able to visualize particular structure layer by layer, turn it around in different directions and create organ sections.

HUMAN PHYSIOLOGY

Learning in three-dimensional software completely differs from traditional teaching methods of physiological processes occurring in Human body. Physiology content is mapped to a curriculum and covers the following broad sections, including basics of cytology, characteristics of blood and body fluids, nerve and muscle physiology, as well as all organ systems physiology and the clinical implications of various medical

BIOCHEMISTRY

S3D MediMagic has also revolutionized teaching methods of Biochemistry and Molecular Biology. It depicts cellular and molecular mechanisms, facilitating student to easily memorize learning material. The covered topics range from several metabolic pathways, such as glycolysis, gluconeogenesis, citric acid cycle and etc. to DNA replication and process of transcription and translation. Supplementing classroom teaching with immersive medical animations can truly prove to have a great impact on the students and reduces the time taken for each concept to be understood and registered.



HISTOLOGY

Visualizing in three-dimension brings excellent visuals of Histology to assist professors as a convenient teaching aid in classrooms and laboratory settings and allows to visualize different histological sections of every tissue and organ.

EMBRYOLOGY

S3D MediMagic helps students understand the process of development through stunning animations. The content provides the student with the understanding of the mechanisms underlying normal, as well as abnormal development and birth defects, thus increasing its relevance in the curriculum. It begins with the process of fertilization and traces the different stages of development of specialized organ systems.