

Transcript and visual description for Sim-Lab VR Demo

1

00:00:00,000 --> 00:00:27,840

[Intro Music Plays as man in right hand corner of the screen wears Virtual reality headset in a room. The main screen displays a virtual reality figure of a man standing in a circle of parts of the human body displayed: nervous system, kidneys, digestive system, muscles, skeletal system, lungs, blood flow paths, and more.]

virtual reality is a rapidly changing the way we interact and how we are entertained and now

2

00:00:27,840 --> 00:00:35,040

how we can learn this is that unique case when a technological wonder is now becoming deeply

3

00:00:35,040 --> 00:00:39,600

[Virtual Reality figure of a man is seen manipulated with on screen tools the VR student selects to move the figure into separate body parts]

interested and implemented in medical education and healthcare

4

00:00:57,840 --> 00:01:23,680

[A virtual reality figure of a woman appears on the main screen standing in a circle of parts of the human body displayed. The circle rotates allowing the viewer to view all parts of the body]

[Screen changes to a virtual reality body in muscle form with parts of the body standing independent of the figure, labeled to identify the parts]

imagine a time in our near future where virtual reality will replace the traditional cadaver labs

5

00:01:23,680 --> 00:01:31,120

for a medical student the way VR is heading it could become a part of our reality

6

00:01:53,680 --> 00:02:03,120

[Virtual reality figure is pulled apart into separate systems of the body as we see the medical student wearing the VR headset move and make selections in the bottom corner of the screen]

7

00:02:04,480 --> 00:02:07,120

[background music plays]

8

00:02:07,120 --> 00:02:30,120

[Body organs are displayed with a close up of the human heart seen pumping and labels positioned around it to identify the different parts]

VR and medical simulation is on its way to becoming the most effective tool in the advancement

9

00:02:30,120 --> 00:02:32,120

of medical education.

10

00:02:32,120 --> 00:02:39,120

This technology, such as Oculus Rift, offers an immersive, unique experience for viewers.

11

00:03:02,120 --> 00:03:09,120

As you're encouraged, you press the icon, and you can use to create the train.

12

00:03:09,120 --> 00:03:39,100

[View of the heart changes as viewer is moved to inside the human heart where the flow of blood and muscles can be seen moving]

[View of the heart changes back to outside the heart where the VR student is moving through the controls to highlight the different parts of the heart]

13

00:03:39,120 --> 00:04:09,100

[VR student uses controls to select from an assortment of medical conditions to view the effects on the heart. Viewer can see the heart muscles contract and move.]

[View shifts to a cross section of the heart to view the inner workings and flow of blood during a medical procedure where a thin tube is inserted into the heart and a balloon inflates.]

14

00:04:09,120 --> 00:04:39,100

[VR student can repeat the medical procedure and draw on the screen, circling views and information as they learn.]

15

00:04:39,120 --> 00:05:09,100

[View changes to a cross section view of a vein and what appears to be a blood clot and blood moving through it. A mesh surgical tool flows from the right to left of the vein, inflating like a balloon and the mesh pushing the clot to not obstruct blood flow]

16

00:05:09,120 --> 00:05:39,100

[View changes back the figure of a virtual reality man standing in the circle around his organs. A laser controlled by the VR student selects the mans lungs where a close up view of them is displayed]

[The viewer can see the lungs in detail as the VR student goes through the different parts of the lungs and displays label names of those parts]

17

00:05:39,120 --> 00:06:09,100

[VR student is selecting tools to add arrows and circles to parts of the the lungs as they learn.]

18

00:06:09,120 --> 00:06:39,100

[View changes to a close up view of the inside of human lungs displaying details. The VR student then manipulates the VR controls to increase the severity of a disease to see the inside of the lungs change color from pink and healthy to black and unhealthy]

19

00:06:39,120 --> 00:07:09,100

[VR student toggles controls back and forth to view the difference and adds arrows as they learn.]

20

00:07:09,120 --> 00:07:39,100

[View changes back the figure of a virtual reality man standing in the circle around his organs and puts the figure back together again.]

21

00:07:39,120 --> 00:08:09,100

[View changes to a selection screen with body parts displayed in individual boxes.]

While the traditional cadaver lab is unlikely to disappear, yet another tool to learn the complexities of medical education. UCSF Fresno Medical Education Program can offer the medical students, residents, and our faculty a unique experience in enhancing how the curriculum is taught; bringing to life the textbook of human anatomy come to life can have a huge learning aspect to the medical student.

22

00:08:09,120 --> 00:08:11,120

Imagine reviewing the anatomy in a virtual space prior to an orthopedic skills session and the clinical skills lab. The advancement in VR in medical education is limitless. Who knows what the future holds.

23

00:08:39,120 --> 00:09:09,100

[VR Student moves though a standing anatomy body figure, highlighting parts, hovering over to view the names of parts of the body, viewing from different angles]

24

00:09:09,120 --> 00:09:39,100

[VR students uses selection tool screen to focus on parts of the body for study removing the parts they do not want to see from the anatomy body figure]

25

00:09:39,120 --> 00:10:09,100

[VR students uses selection tool screen to focus on parts of the body for study removing the parts they do not want to see from the anatomy body figure]

26

00:10:09,120 --> 00:10:39,100

[VR students uses selection tool screen to focus on parts of the body for study removing the parts they do not want to see from the anatomy body figure]

[View changes to a computer screen panning out where a female student is seated in VR headset moving through the program overseen by a male teacher holding a book]

27

00:10:39,120 --> 00:11:09,100

[Male teacher is seen showing a female student parts of the hand while a patient sits on an observation table. The teacher then shows the student how to look at the patient's hand and provide care with a white bandage and applying a cast.]

28

00:11:09,120 --> 00:11:39,100

[Student completes applying arm cast for the patient, supervised by teacher.]