

Library: Using VR to Enhance Anatomy Education for Medical Imaging Learners

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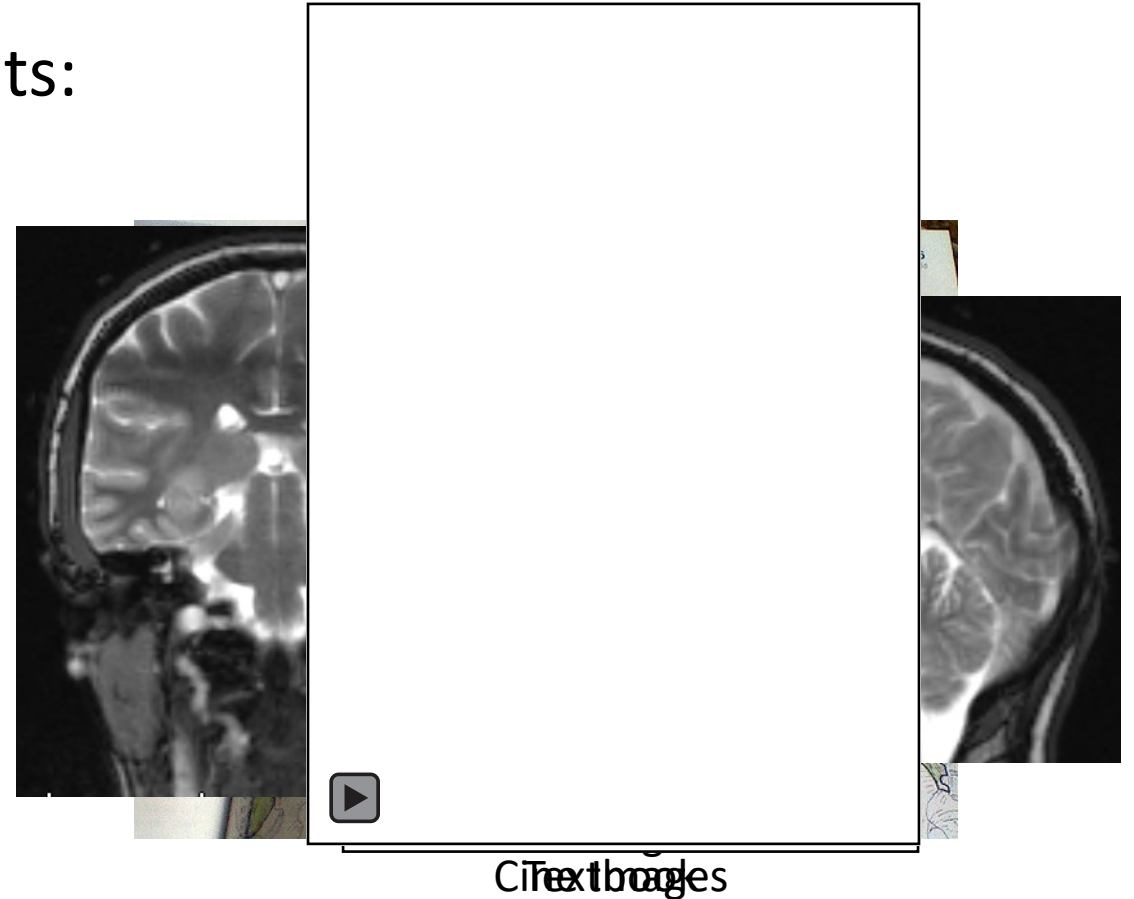


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Introduction: VR in Medical Imaging

- Undergraduate medical imaging students:
 - Bone Densitometry (BD)
 - Cardiac Interventional (CI)
 - **Computed Tomography (CT)**
 - **Nuclear Medicine (NMT)**
 - **Magnetic Resonance Imaging (MRI)**
 - Mammography (M)
 - **Vascular Interventional (VI)**
- Limited interaction & retention



VR at the Medical Library

Nexus Collaborative Learning Lab, IB 207

24/7 access for students, on demand for faculty and Services:

- 4 HTC Vive headsets and stations
- Touch-enabled IQ-Wall with Solstice
- 3D Printing Service
- TechTalks and classes/events
- Google Cardboard and Virtuali-Tee AR shirt



Development of VR Labs

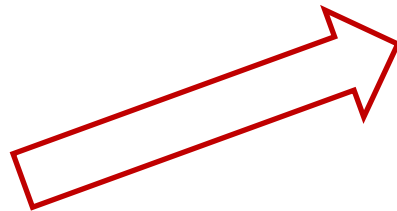
- VR Lab Student Structure

- ✓ First cohort: 19 students from CT, NMT, MRI & VI (6 pairs/1 triad)

- Familiarity (1/19)

- VR Lab Content Structure

- ✓ Learn
 - ✓ Interact
 - ✓ Enjoy
 - ✓ Accountable



Lab 1: While in the 3D Organon VR Anatomy program, go to the body system where you would expect to find the external jugular vein. Once you have located this anatomy answer the following questions:

a. The EJV:

i. runs on the _____ side of the _____.

ii. arises from the _____.

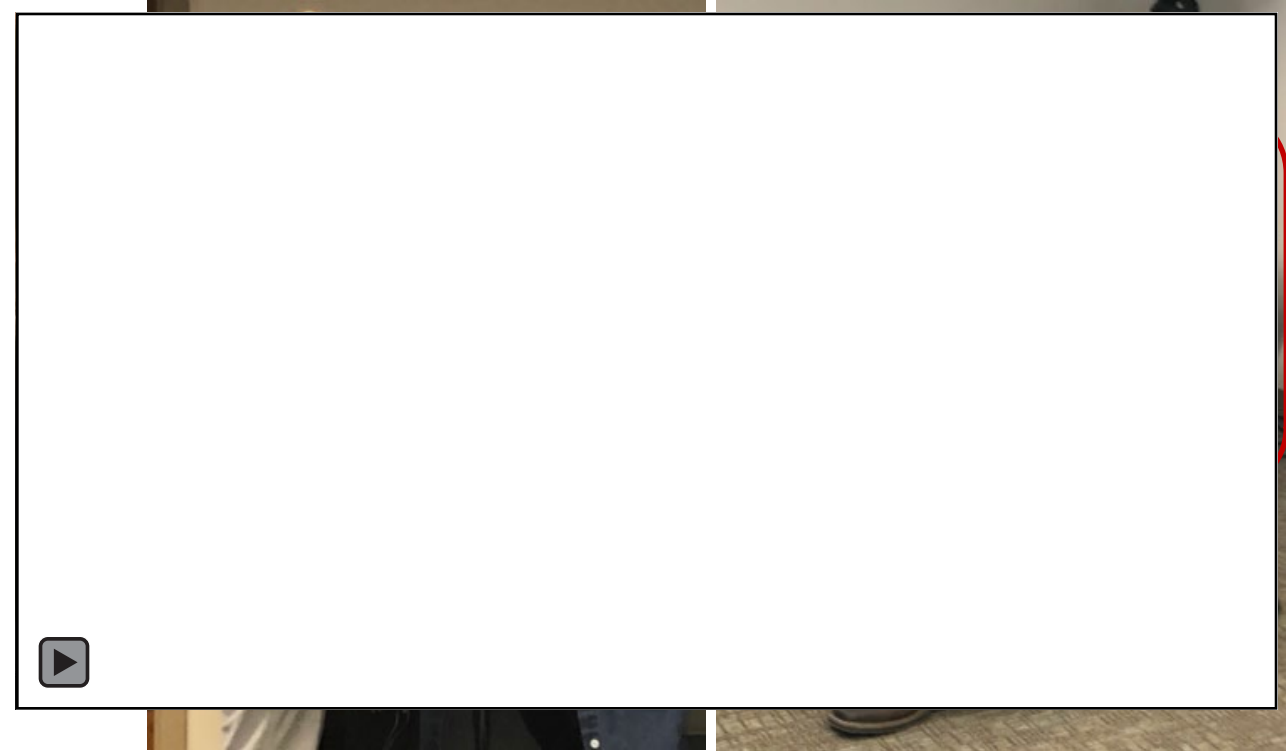
iii. receives tributaries from the _____, _____, and _____.

iv. empties into the: _____



Lab 2-4 Feedback & Future Applications

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 - **Bone Densitometry (BD)**
 - **Cardiac Interventional (CI)**
 - Computed Tomography (CT)
 - Nuclear Medicine (NMT)
 - Magnetic Resonance Imaging (MRI)
 - **Mammography (M)**
 - Vascular Interventional (VI)
- ✓ Ultrasound (US)
- ✓ Radiography (R)



3D Organon Anatomy Enterprise Edition



SCHOOL OF MEDICINE

VR at the Medical Library

Questions?

Nexus Collaborative Learning Lab: <https://library.mednet.iu.edu/nexus/>

- 3D Printing Service Guide: <http://iupui.libguides.com/3Dprinting>
- VR Service Guide: <https://iupui.libguides.com/VRAR>

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