American Association of Clinical Anatomists

COVID-19 Teaching and Learning Resources

Updated on 8/3/2020

Teaching Resources for Neuroanatomy

- visible body
- Camtasia
- You tube videos
- 3D videos of brain and cerebral angiograms in Abrahams and Mcminn 8 th on line Elsevier
- https://www.youtube.com/playlist?list=PLrjMc8u3pXMtGryVKFqdeEZu19f-kh5np
- Moodle
- youtube channel - LIFE IN THE WOMB BY DR ROSE
- www.neuroanatomy.ca
- I have created my own interactive Digital Brain programs (6) that I show with my students through Skype. I have shared my Skype ID with them.
- I have 100 + Cadaver Brain dissection videos in my YouTube Channel 'Sanjoy Sanyal' that students can access online. They have the links."
- UBC Functional Neuroanatomy (www.neuroanatomy.ca)
- The Neurosurgical Atlas (www.neurosurgicalatlas.com)
- Atlas of Functional Neuroanatomy (http://fn.med.utoronto.ca/)
- Brain-inter-atlas (Interactive Atlas of Neuroanatomy) (http://sites.uclouvain.be/braininteratlas/en)
- Neuroscientifically Challenged (& 2-Minute Neuroscience) (www.neuroscientificallychallenged.com/)
- BrainMaps.org (http://brainmaps.org/)
- TheHumanBrain.info (www.thehumanbrain.info/)
- Self-Directed Neuroanatomy Lab, UWO (http://360anatomy.uwo.ca/
- The Brain from Top to Bottom, McGill (http://360anatomy.uwo.ca/)
- Soton Brain Hub (http://www.sotonbrainhub.co.uk/)
- Hyper Brain, University of Utah School of Medicine (https://library.med.utah.edu/kw/hyperbrain/)"
- VHD, Radiopaedia MRI and CT scans, created annotated normal MR video (I only teach case studyand radiologic portions)
- Toltech virtual reality headsets with 7D neuroimaging
- Sectra interactive 3D table"

American Association of Clinical Anatomists

COVID-19 Teaching and Learning Resources

Updated on 8/3/2020

Teaching Resources for Histology

- visible body
- You tube videos
- histologyguide.com
- Online Lab Manual (https://act.downstate.edu/courseware/histomanual/index.html)
- YOUTUBE CHANNEL - VBS HISTOMED BY DR BALASUBRAMANYAM
- - Virtual Microscopy Database (http://virtualmicroscopydatabase.org/) [account required]
  - Virtual Slidebox, UWO (http://slides.uwo.ca/)
  - Chapman Histology with Dr. Jamie Chapman (Three Minute Histology) (http://www.youtube.com/channel/UCvSvCkHjCbHn8aGd6OPno_A/featured)
  - I Heart Histo (www.ihearthisto.com)
  - Damien Harkin's YouTube Channel (Staining Techniques & Troubleshooting) (https://www.youtube.com/channel/UC96_9B9ZAcB8l6AOnpm8vng/videos)
  - The OpenScience Laboratory, Histology & Histopathology: Virtual Microscopy (http://learn5.open.ac.uk/mod/htmlactivity/view.php?id=19)
  - Mikaela Stiver's Histology Website (https://www.mikaelastiver.com/histology-the-basics/)
  - Histology @ Yale (http://medcell.med.yale.edu/histology/histology.php)
  - Jerad Gardner, MD's YouTube Channel (Pathology) (https://www.youtube.com/user/JeradMGardnerMD)
- Sectra interactive 3D table with Histology

COVID-19 Teaching and Learning Resources

Updated on 8/3/2020

Teaching Resources for Embryology

- Teaching Resources for Embryology
- You tube videos
- The Developing Human: Clinically Oriented Embryology by Moore & Dalley
- https://www.youtube.com/playlist?list=PLrjMc8u3pXMuKveL2BjAG7izTz776DMjB
- Moodle
- youtube channel - LIFE IN THE WOMB BY DR ROSE
- https://www.youtube.com/channel/UC2X7h11Oa-NtVbRp2p3GV8Q
- https://anatomy.elpaso.ttuhsc.edu/embryo/index.html
- UNSW Embryology (https://embryology.med.unsw.edu.au/embryology/index.php/Main_Page)
- UBC Embryology (http://clinicalanatomy.ca/embryology.html)"
- Sectra interactive 3D table with Histology

American Association of Clinical Anatomists

COVID-19 Teaching and Learning Resources

Updated on 5/7/2020

Teaching Resources for Gross Anatomy

- 3D4Medical "Complete Anatomy" software
- visible body courseware
- Camtasia; VH Dissector Pro
- You tube videos
- Anatomy.TV 3D Atlas and 3D Real Time
- Complete Anatomy
- Visible body is extremely useful
- 3D4Medical Complete Anatomy App
- https://www.youtube.com/playlist?list=PLrjMc8u3pXMtZQ2sX3H6J3RVm3ilGAf7N
- https://www.youtube.com/playlist?list=PLrjMc8u3pXMtcNK0cm9gh8RYelvXndIto"
- Acland's Video Atlas of Human Anatomy (https://aclandanatomy.com/, 3D4Medical Complete Anatomy digital app (https://3d4medical.com/educator, useful for demonstrating "digital dissection" via screen sharing in online classroom); Images from Gray's Anatomy (https://commons.wikimedia.org/wiki/Gray%27s_Anatomy_plates,%20free%20and%20in%20public%20domain, University of Michigan Medical School resources (https://sites.google.com/a/umich.edu/bluelink/curricula); Anatomy Zone videos (http://anatomyzone.com/)
- Sectra Table and all its associated programs
- Moodle
- youtube channel - LIFE IN THE WOMB BY DR ROSE
- https://aclandanatomy.com/
- Acland Anatomy Series
- https://anatomy.elpaso.ttuhsc.edu/index.html
- Visible Human Body 2020 on Samsung Galaxy S4 tablet shown through Skype. I have shared my Skype ID with them.
- I have 500 Cadaver dissection videos from Scalp to Sole in my YouTube Channel 'Sanjoy Sanyal' that students can access online. They have the links."
- Acland Videos; Mark Nielsen book
- In 2005 I was charged with teaching gross anatomy to 200 master level students here at Georgetown University School of Medicine. The students were required to pass the same exams as the medical students, but were not permitted to dissect at the cadavers. Accordingly, I developed the Online Guided Gross Anatomy Dissector, a linear dissection guide that was deployed using power point presentations. In 2011, Sinauer Associate Press published this online resource using HTML. Two years ago Sinauer was incorporated into Oxford University Press to maintain scholarly continuity. Here is the web site: https://global.oup.com/ushe/product/online-guided-gross-anatomy-dissector-

9780878936052?cc=us&lang=en& We used this dissector with excellent success and still do so today. If you request the Online Dissector as a faculty member I believe you can now request the power points as a faculty resource and develop all your online dissection instructions using these. (I even included an ear dissection.) Additionally we developed a process to assess student knowledge: The challenge was how to assess a student on a cadaver (classic practical exam) in the same fashion that another student was being tested on an image. This situation thus paralleled what we are facing now: deliver gross anatomy content and assess students online. Since 2005, our medical students have been assessed on multiple-choice exams on a cadaver and the master students are assessed using the exact same question, but on an image. We demonstrated that there were no significant differences in performances between both cohorts. Subsequently, Joel Vilensky (Indiana University School of Medicine) and I decided to write seven ibooks using Apple authoring software, one for each region of the body to help students prepare for gross anatomy exams. Each iBook consist of a brief but comprehensive atlas of the region, a section of multi-labeled flash cards, a section of first order type questions, and a section of higher order type questions that required to look at the image to answer the question, each with an explanation for the right choice for the question. Next, we added an oral review for the particular region of the body. By combining the Online Dissector with the image-based higher order questions we did not lose a step in our gross anatomy program beginning this week when Georgetown Med went virtual. (We will simply need to find time to have our medical students finish their dissection once academia returns to normal - we will need a week to finish our dissections.) If you are interested, email me and I can provide you an idea of how to write image-based questions, or you can go to our iBooks and check them out. If you and your university an demonstrate that systems are in place guarantying that you will not post these questions, or make them available to your students except as part of an official exam, I am prepared to offer access to past image-based exams. Here are the websites to the iBooks: All-in-One Anatomy Exam Review Image-Based Questions & Answers. Volume 1. Back and Upper Limb, Carlos A. SuÃ¡rez-Quian & Joel A. Vilensky https://books.apple.com/us/book/all-in-one-anatomy-exam-review/id931277944, All-in-One Anatomy Exam Review: Volume 2. The Thorax Image-Based Questions & Answers, Carlos A. SuÃ¡rez-Quian & Joel A. Vilensky https://books.apple.com/us/book/all-in-one-anatomy-exam-review-volume-2-the-thorax/id932127719, All-in-One Anatomy Exam Review: Volume 3. The Abdomen Image-Based Questions & Answers, Carlos A. SuÃ¡rez-Quian & Joel A. Vilensky https://books.apple.com/us/book/all-in-one-anatomy-exam-review-volume-3-the-abdomen/id934173389 , All-in-One Anatomy Exam Review: Volume 4. Pelvis and Perineum Image-Based Questions & Answers, Carlos A. SuÃ¡rez-Quian & Joel A. Vilensky https://books.apple.com/us/book/all-in-one-anatomy-exam-review-volume-4-pelvis-and-perineum/id1081543000, All-in-One Anatomy Exam Review: Volume 5. The Lower Limb Image-Based Questions & Answers Carlos A. SuÃ¡rez-Quian & Joel A. Vilensky, https://books.apple.com/us/book/all-in-one-anatomy-exam-review-volume-5-the-lower-limb/id990426899, All-in-One Anatomy Exam Review: Volume 6. The Head Image-Based Questions & Answers. , Carlos A. SuÃ¡rez-Quian & Joel A. Vilensky, https://books.apple.com/us/book/all-in-one-anatomy-exam-review/id1120795214, All-in-One Anatomy Exam Review: Volume 7. The Neck. Image-Based Questions & Answers, Carlos A. SuÃ¡rez-Quian & Joel A. Vilensky https://books.apple.com/us/book/all-in-one-anatomy-exam-review-volume-7/id1216391324

American Association of Clinical Anatomists

- UBC Clinical Anatomy (http://www.clinicalanatomy.ca/)
- Radiopaedia (http://radiopaedia.org/)
- Dr. Matt and Dr. Mikeâ€™s Medical Youtube (https://www.youtube.com/channel/UCH6Oc4MAJzzmK0SM805ZnjQ/featured) *there is also an accompanying podcast (https://www.biologicalsci.org/)*
- University of Washington Muscle Atlas (https://rad.washington.edu/muscle-atlas/)
- The Noted Anatomist YouTube Channel, Dr. David Morton (https://www.youtube.com/channel/UCe9lb3da4XAnN7v3ciTyquQ/featured)
- Zygote Body (https://www.zygotebody.com/)"
- https://anatomytool.org
- 3D4 Medical - Complete Anatomy, Primal Pictures (2 different schools, use 2 different programs), Grant's dissector videos, faculty dissection and specimen videos, radiopaedia for normal scans, created interactive online workshops for cases and labs
- The BodyViz 3D Anatomy Learning platform
- The Noted Anatomist YouTube Channel
- Toltech virtual reality headsets with anatomy data sets from an actual human rather than computer generated or animated images. Segmented to detail not currently available in any other software.
- Sectra interactive 3D table with an impressive education portal. Sectra Table enables educators to create cases or use previous cases to initiate critical thinking and reveal 3D and/or cross-sectional anatomy and/or multiple image mediums.
- HoloAnatomyÂ® Software Suite developed and used by Case Western Reserve University School of Medicine (CWRU SOM)

American Association of Clinical Anatomists

COVID-19 Teaching and Learning Resources

Updated on 5/7/2020

Please enter in any other tools or resources that you think would be beneficial during this time.

- Video conferencing from cadaver lab
- https://sites.google.com/view/anatomy-resources/home
- Power point lectures
- 500 clinical topics related to most anatomical structures on line version of Abrahams and mcminn 8th edition of Clinical atlas of human anatomy
- Rohen Photographic Cadaver atlas for gross anatomy lectures, or online web pages.
- The A&P Professor podcast has two episodes with tips and strategies for moving from on-campus to remote teaching, with links to multiple resources. More episodes on this topic will be released in the near future. Hosted by AACA member Kevin Patton.
- https://theAPprofessor.org/podcast
- Can we get prepared lectures available on complete anatomy website.....It will be a great help to the students.
- ACLANDS DISSECTION VIDEOS
- https://www.youtube.com/channel/UCOHfqHMhHvfQCYJDXfpSAiw
- Google classroom.
- My university is currently working on Microsoft Teams platform for students to login securely using their unique username and password.
- Sketchfab.com has heaps of great 3D anatomical models from various schools. Here are a few links that Dr. Claudia Krebs shared: https://sketchfab.com/tilt (University of Dundee Medical School), https://sketchfab.com/scootsmalone (Denver), https://sketchfab.com/jef3D (Paris-Descartes), https://sketchfab.com/ubcmedvid (University of British Columbia)"
- PollEverywhere - our school has a license. I've been using it in conjunction with Zoom to do interactive sessions.
- Zoom - I have been using ""breakout rooms"" so students can work in their ""lab groups"" virtually
- Canvas - our school is in the middle of switching learning management systems, Canvas is much more compatible for online learning. Been using the assignment tool.
- together.VisualClassrooms.com (a visual discussion board that allows students to work in virtual groups)
- LinkedIn Learning - I have been using this to better learn how to use online tools available, especially for recording and editing video (Camtasia, Adobe Premiere)
- MedEdPortal has some excellent teaching resources and videos