

The Medical Educator's Resource Guide

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The Journal of the International Association of Medical Science Educators invites the members of the Association to submit reviews of their favorite Websites to The Medical Educator's Resource Guide. The Journal also accepts reviews written by nonmembers. In this issue of the Guide for example, two of the reviews are written by nonmember students.

The subject related sites reviewed in the Guide are chosen with students in mind. The Guide looks forward to further student participation because student reviewers can identify Websites that possess the qualities students hold in high regard. The members of the Association should encourage nonmember students and instructors to participate by submitting a review.

Send the submissions to jrcotter@buffalo.edu. Please include the URL and a short critique summarizing the content and utility of the site. All submissions will be reviewed for relevance, content and length. Revisions, if needed, will be made in consultation with the author.

Easy Access to More Than 380 Medical e-Learning Applications. Leiden University Medical Center, Leiden, Netherlands.

<http://medischonderwijs.nl> or <http://medicaleducation.nl>

A consortium of Dutch Medical Schools has developed a website directory of medical education lessons that are "self contained interactive learning units with a defined learning goal". The website catalogues "learning units" in both basic medical science and clinical medicine. The "learning units" were developed at several Dutch medical schools and medical institutions worldwide. The site claims a total of 380 "learning units", including animations, case histories, review questions, and links to external websites. The materials are classified by Academic Department, Institution, and Organ System. There is also a keyword search function. At present, most of the instructional materials are in Dutch or English – a user can specify his or her preferred language. The search engine is quick and efficiently displays a list of the retrieved sites with a capsule summary of the contents, language of instruction, and authoring institution. A "user rating" for some units reflects feedback from users, although in most cases this is based on a rather small sample. Based on information available from the search result, a medical student, resident or faculty member can quickly identify appropriate material for self-study or as a learning resource. Once a user has registered and setup a password, all of the catalogued "learning units" are directly accessible for free without a separate password by clicking on the website link. The site has a brief "user manual"; however, few users will need this, as the site is fairly intuitive. Lastly, the website offers RSS feeds to track "What's hot" and "What's new" in medical education. (Reviewed by Thomas Pisarri, Ph.D. and Floyd Knoop, Ph.D., Creighton University School of Medicine.)

Electron Micrographs. Loyola University Stritch School of Medicine.

<http://library.luhs.org/MedicalStudents.htm>

I was recently working through the electron microscopy unit of the computer program used by the medical students to learn about the structure of the cell at the University at Buffalo and wished to buttress my understanding of cell structure by seeing additional examples of the organelles that are found in the cell. As a matter of habit, I logged on to Google Images, and believing in the axiom 'everything is on the Internet' was disappointed by the paucity of high-quality, transmission electron photomicrographs. There were many self titled resources with pages of links, but perhaps as a sign of the times and attitudes, most of the links and resources had either migrated to password-protected sites, were nonexistent, or were just collecting dust, not having been updated in years. It seems the initial enthusiasm and rush to share such images and knowledge online has partly passed. Interestingly, there was no shortage of scanning electron images, perhaps due to their abilities to impress professions and laymen alike. After an exhaustive search however, I located the Loyola Health Science Library's website and a link to electron photomicrographs under the headings "Medical Students SSOM Texts"/ "Special Collections". The images were taken from a binder of electron micrographs used by Loyola medical students. This is a four volume set of photomicrographs that contains 125 labeled images of organelles and cells from a variety of organs. (Reviewed by William Fleischman, B.S., University at Buffalo.)

Introduction to Chest Radiology. University of Virginia Health Science Center.

<http://www.med-ed.virginia.edu/courses/rad/cxr>

The purpose of this website is to provide the reader with a self-guided tutorial on the technique, anatomy, interpretation, and pathology of the chest x-ray. Medical students encounter chest x-ray images on a near-daily basis and having a web-based resource at their fingertips is extremely useful. The website features simplified drawings, actual x-rays, correlation with clinical problems, and questions with answers to test the user's knowledge. It gives information about proper ways to read an x-ray and defines commonly used terminology. In addition, it provides detailed information relative to anatomy, physiology, and pathology and would be a useful resource for both clinical and pre-clinical learning. There are numerous x-ray interpretation sites on the internet, but this site allows the users to go through the tutorial or choose to navigate directly to the section of interest if they have a specific question. This website is an excellent guide to chest x-rays for all levels of training. It easily serves as an easy-to-understand introduction for beginning students, a quick self-study for busy residents, and a refresher for all health care professionals. (Reviewed by Emily J. Wells, B.A., University of Louisville)

Online Tutorial for the Pterygopalatine Fossa.

https://www1.columbia.edu/sec/itc/hs/medical/anatomy_resources/anatomy/ppfossa/

This website is an animated tutorial designed to explore the pterygopalatine fossa in an interactive multimedia environment. It was authored by Dr. Ahmet Sinav from Columbia University. This program effectively addresses the anatomy of the pterygopalatine fossa by providing a modular overview of its position, boundaries, communications and contents. A pop-up text box with each module guides the student through the relevant landmarks. The introductory module provides a lateral view of the skull that highlights many of the regions that communicate with the pterygopalatine fossa (such as the orbit, cranial cavity, etc.). The boundaries module is based on a high quality depiction of the lateral aspect of the skull, with roll-over labels for each visible bone. The zygomatic bone can be removed revealing landmarks such as the sphenopalatine foramen and the palatine bone. The communications module is based on the use of an isolated pyramid-shaped model of the pterygopalatine fossa. When clicked, the model is positioned to demonstrate the location of the fossa. Clicking the model a second time removes the model from the skull so the openings in the walls of the fossa can be visualized. Each foramen is labeled on the isolated fossa model and the lateral skull and information regarding the region with which each opening communicates is provided. The content module enables the student to add the structures located within the fossa, including the pterygopalatine ganglion, vidian nerve, maxillary nerve and maxillary artery. Overall, this program is an innovative and useful learning tool for students. It does have several limitations, however. The pterygopalatine fossa is only demonstrated from a lateral view, limiting the program's ability to provide an

anatomical perspective for this region. The font size used in the pop-up text boxes is too small to read easily. At times, the program's interface is not intuitive; it is not clear what should be done to move forward in a module. The "show all" button works sporadically throughout the modules. Despite these limitations, the program will be of great benefit for students in their study of this deep region of the head. (Reviewed by Jennifer Brueckner, Ph.D., University of Kentucky College of Medicine.)