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JAMA review praises Georgetown professor's online anatomy dissector

February 14 2012

A Georgetown University School of Medicine professor's online anatomy dissector designed to assist medical students in learning gross anatomy is described as a "superb learning tool" in a review published in the February 15 issue of the *Journal of the American Medical Association* (*JAMA*).

The Online Guided Gross Anatomy Dissector (published by Sinauer Associates, Inc.) was developed by Carlos Suárez-Quian, Ph.D., professor in the department of biochemistry and molecular and cellular biology at Georgetown. He created the dissector to help students master the fundamentals of human dissection and gross anatomy, the course that Suárez-Quian teaches at the medical school.

Writing in the "Books and Media Reviews" section of *JAMA*, Russell J. Nauta, M.D., of Harvard Medical School, underscores the importance of gross anatomy knowledge throughout one's medical career. "…Clinicians in virtually all specialties, especially surgical disciplines, perform invasive procedures or at least make diagnoses grounded in knowledge of gross anatomy," he says. Nauta describes the dissector as "an easily accessible, well-indexed, user-friendly guide to gross anatomy applicable to a wide range of potential uses, from first-year medical student to specialty clinician."

The dissector can be accessed on any electronic device with web functions, including student favorites such as the iPad and iPhone. It includes more than six hours of short cadaver dissection videos and

interactive step-by-step instructions of actual cadaveric dissection images. With each set of dissection instructions, users click through the sequence of images that show exactly what they should reveal in their own dissection, gradually progressing until every region of the body is thoroughly dissected. Users can then test themselves and reinforce their knowledge with more than 300 interactive flash cards .

"The beauty of the Online Guided Gross Anatomy Dissector is in its indexing and presentation of Information," says Nauta in his review. "The online dissector makes it less likely that the medical student will damage key anatomical features during cadaveric dissection, but if key structures are affected, the online tool provides 'rescue' in the form of a compelling visual alternative," he explains.

As a guided tutorial that enables the user to progress from novice to mastery of human anatomy, it is also suitable for undergraduates and students preparing to enter medical school who do not have access to a laboratory.

"Little had changed since I was a graduate student in the seventies, lugging around a textbook, atlas, and a 200-page dissection manual," Suárez-Quian recalls. After seeing his own students struggle with the amount of material and its traditional presentation, he set out to harness the power of digital technology and the internet to make learning more student-friendly, without compromising knowledge or proficiency.

"There is no getting around the fact that gross anatomy requires mastering a large new vocabulary, thousands of images, interdependencies and processes, but it doesn't need to be a bewildering or inflexible experience," says Suárez-Quian.

Georgetown University provides on campus and remote access enabling students to review before, during, and after their lab dissections. "The

dissector won't replace what students learn in the laboratory, but serves as a lab tutorial, allowing students to reinforce their dissection experience through self-directed learning," Suárez-Quian explains.

Nauta concludes his review declaring, "… there is no reason to use only a printed guide when a convenient and well-presented online source such as this is available."

More information: www.sinauer.com/detail.php?id=6052

Provided by Georgetown University Medical Center