The functional neuroanatomy resource (FNAR) at Weill Cornell Medicine

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3 Functional Neuroanatomy Resource Innovation for iPads

INTRODUCTION. Computer assisted instruction has long proven useful in teaching of neuroanatomy, particularly when accompanied by traditional lecture presentations that present image and text data to students. The work describes the functional neuroanatomy resource (FNAR) innovation created at Weill Cornell Medicine – the first homegrown functional neuroanatomy teaching application developed for iPads by a medical school, including the learning options actively utilized by students and plans for continued development of the app. RESOURCES. Previously the teaching of functional neuroanatomy has relied heavily on gross brain and histological material created at the medical college and presented through computer technology initially server-based and then web-based. When the institution decided to move students to mobile devices, all students were provided with iPads. The functional neuroanatomy faculty and educational computing team accepted the challenge to make the FNAR content available through an iPad app. DESCRIPTION. This first local FNAR app integrates and indexes an image database along with various text resources. The app utilizes mouse-over and overlay technology, allowing users to easily highlight and select different areas of the brain and spinal cord and their related structures; it allows students to access the self-assessment tools onto the image overlays so that students can test their knowledge as they progress. CONCLUSIONS. A recent student evaluation reflects students rating the overall quality and usefulness of the FNAR as “excellent” (3.85 on a 4-point scale). Future plans include incorporating radiographic images and an “on-the-fly image set” technology, allowing students to query the database specifically designed to answer their questions.