

Objective Neuroradiology: cortical reconstruction and DTI reconstruction

Director: Eduardo Gonzalez Toledo

Affiliation: LSU School of Medicine. Professor Neurology and Radiology. Director Neuroradiology

Cell Phone: 318-797-6067

Email: ecgtoledo@gmail.com

Assistant: Christina Ledbetter PhD, cledbe@lsuhsc.edu

Description of Submitted Course (please limit to 2000 characters): Workshop: Participants bring their computers. We will use Brain Suite and 3D Slicer, available free from the Internet.

Objective 1: Install software to produce 3D reconstruction of the brain with segmentation and cortical thickness measurement as well as volume and area of deep nuclei and cortex Install software to reconstruct white matter tracts with measurements of fractional anisotropy and diffusivity

Objective 2: How to obtain the raw images to be analyzed directly from scanner, downloaded from a workstation or from CDs containing the DICOM images

Objective 3: How to operate the software: interactive session.

Type of Course: Hand-on Workshop

What modality will your Course address?: MRI

Target Audience: Neurologist Neurosurgeons Radiologists Technologists

Lecture - oral didactic presentation: Yes

Panel Discussion - 3 to 6 faculty engaged in dialogue: No

Forum - open dialogue and discussion among all participants: Yes

Case Presentation - detailed information about an event(s): Yes

Why were the above educational methods chosen for this course?: This is an interactive course Participants follow the steps shown in the presentation The instructor performs the task in real time

What practice gap will this course address? (Practice gap is the difference between current and optimal practice): Most of the physicians do not know how to operate with imaging software and reconstructions, generally left to physicists

Survey Results: No

Evaluation Results: Yes

Consensus of Experts: No

New Medical Developments: No

Peer Review: No

Legal Requirements: No

Grant/Accreditation Requirements: No

Suggestions of Potential Audience: Yes

Hospital Data/Public Health Statistics: Yes

Specialty Requirements: No

Audits/Reports/Quality Assurance: No

What Desirable Physician Attribute(s) will your course address? (Select all that apply, press the Ctrl key to make multiple selections): Patient care, Medical knowledge, Practice-based learning and improvement, Systems-based practice, Provide patient centered care, Work in interdisciplinary teams, Apply quality improvement, Utilize informatics, Commitment to lifelong learning, Cognitive expertise, Performance in practice

Knowledge (information): Yes

Competence (having strategies and ability to use knowledge or skills): Yes

Patient Outcome (result of medical care for the patient): Yes

Quality Improvement (processes, systems or leadership): Yes

Performance (actual behavior or performance): Yes