



“Cerebral Blood Flow as a Biomarker of Brain Function”



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7:30 AM - 8:30 AM
Clark Auditorium*

Global Learning Objectives

- Critically analyze research, guidelines and appropriate use criteria to develop best-practice diagnosis and treatment strategies
- Evaluate latest innovations in imaging to assess safety and effectiveness

Session Learning Objectives

- Compare and contrast methods for quantifying cerebral blood flow non-invasively
- Distinguish between applications of cerebral flow as a biomarker of cerebrovascular
- Assess ways to utilize cerebral blood flow imaging in clinical research and clinical practice

Course Directors: Sanjiv Sam Gambhir, MD, PhD
Andrei Iagaru, MD

ABSTRACT The brain is a highly perfused organ, receiving approximately 20% of the cardiac output. Alterations in cerebral blood flow (CBF) occur in cerebrovascular disorders, but regional CBF is also tightly coupled to regional brain function. Accordingly, CBF can be used as a versatile biomarker of regional brain function at rest, in response to sensorimotor or cognitive tasks, in disease states, or to assess the effects of pharmacological therapies and other interventions. A variety of methods exist for monitoring of CBF in vivo, including noninvasive methods based on magnetic resonance and optical signals. This presentation will review the measurement of CBF, with a focus on arterial spin labeled perfusion MRI, and illustrate its applications in basic and clinical neuroscience.

Accreditation

The Stanford University School of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Credit Designation

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Cultural and Linguistic Competency

California Assembly Bill 1195 requires continuing medical education activities with patient care components to include curriculum in the subjects of cultural and linguistic competency. The planners and speakers of this CME activity have been encouraged to address cultural issues relevant to their topic area. The Stanford University School of Medicine Multicultural Health Portal also contains many useful cultural and linguistic competency tools including culture guides, language access information and pertinent state and federal laws. You are encouraged to visit the portal: <http://lane.stanford.edu/portals/cultural.html>