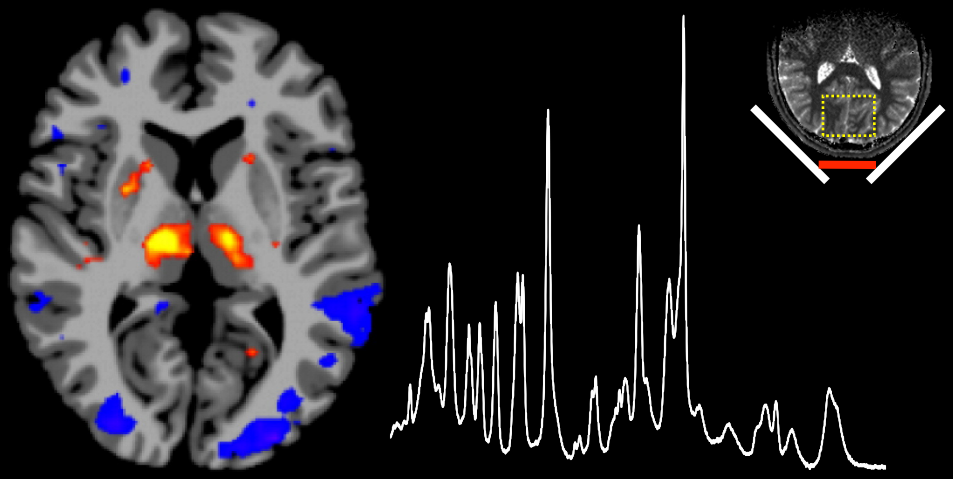
2012 Robert G. Shulman Lectures in Magnetic Resonance

Symposium on

Imaging Brain Function with Magnetic Resonance: The Next 20 Years



Thursday, January 12, 2012
2:15 – 5:30 pm
The Anlyan Center Auditorium
300 Cedar Street, New Haven

A reception follows the Symposium in the TAC lobby.

2012 marks the 20th anniversary of functional MRI. Since its introduction, functional MRI has become a major method for mapping human and animal brain activity. Improved MRI and MRS techniques and related equipment have uncovered functional activity of individual cortical columns, the energy cost of functional activity, and have described the nature of brain connectivity in stimulated and resting conditions. For the Department of Diagnostic Radiology and MRRC 2012 Robert G. Shulman Lectures in Magnetic Resonance, we have two of the pioneers in functional MRI, Professors Seiji Ogawa and Kamil Ugurbil, who will discuss the state-of-the-art of research and technology in MRI and MRS of brain function, as well as what the future holds. Their lectures, along with lectures by Professors Todd Constable, Fahmeed Hyder, and Robert Shulman will address the future of imaging brain function with magnetic resonance in studying the stimulated and resting condition, directly measuring neuronal activity and their connections towards the study of consciousness.

email questions to qnmr@yale.edu

OPENING REMARKS

Douglas L. Rothman, Ph.D.
Professor of Diagnostic Radiology and Biomedical Engineering
Co-Director of MRRC, Yale University

PRESENTATIONS

2:15 – 3:00 pm, fMRI: Present and Future
Seiji Ogawa, Ph.D.
Professor of Kansei Fukushi Research Center
Tohoku Fukushi University, Sendai, Japan

3:00 – 3:45 pm, Frontiers in Functional Neuroimaging: From Cortical Columns to Whole Brain Functional Dynamics
Kamil Ugurbil, Ph.D.
Professor of Diagnostic Radiology, Neuroscience, and Medicine
Director of CMMR, University of Minnesota

3:45 – 4:15 pm, Functional Network Organization of the Brain as Revealed by fMRI
R. Todd Constable, Ph.D.
Professor of Diagnostic Radiology. Biomedical Engineering, and Neurosurgery
Co-Director of MRRC, Yale University

4:15 – 4:45 pm, Brain Energetics and Neuronal Activity: Can fMRI Provide Quantitative Neuronal Activity Maps?
D. S. Fahmeed Hyder, Ph.D.
Professor of Diagnostic Radiology and Biomedical Engineering
Director of QNMR Core Center, Yale University

4:45 – 5:15 pm, Brain Energy and Consciousness
Robert G. Shulman, Ph.D.
Sterling Professor Emeritus of Molecular Biophysics & Biochemistry
Yale University

CLOSING REMARKS

Douglas L. Rothman, Ph.D.
Professor of Diagnostic Radiology and Biomedical Engineering
Co-Director of MRRC

Sponsored by Department of Diagnostic Radiology and MRRC, Yale School of Medicine.