

HIGH-IMPACT PROJECTS/ EMERGING TECHNOLOGIES

Group 6



Moderators:

William Hendee (Wisconsin)

Donald Giddens (GA Tech)

Cartier/Tiffany Salons

December 17 – 12:00 PM

Session Focus

Determine the highest priority research focus areas that the NIBIB can support to address a critical biomedical research or health care need in the next five to ten years.



Philip Alderson, PhD

Columbia University

High-impact Project

Optical Imaging.



Eileen Bradley, PhD
NIH/CSR

High-impact Project
Integrated Imaging.



Laurence Clarke, PhD

NIH/NCI

High-impact Project

Development of next generation software tools including open source and related databases for validation; Tera Hertz Imaging.



Carlo DeLuca, PhD

Boston University

High-impact Project

Development of sensor-based technologies for imaging (EEG, EKG, EMG), for motor abnormalities, and for basic neurophysiology.



Donald Giddens, PhD

Georgia Institute of Technology

High-impact Project

Complete model of the endothelial cell that includes structural and functional response to biochemical and mechanical stimuli.



Michael Huerta, PhD

NIH/NIMH

High-impact Project

Tools for obtaining quantitative data about molecular structures and processes.



Michael Marron, PhD

NIH/NCRR

High-impact Project

Imaging Technology Assessment – methods for evaluation and comparison of new and existing imaging technologies to establish effectiveness, robustness & range of applicability.



Larry McIntire, PhD

Rice University

High-impact Project

The nano/bio Interface – new targeted contrast agents, new generation of biosensors, new technology for quantitative accurate estimation of gene expression.



Hunter Peckham, PhD

Case Western Reserve University

High-impact Project

Development of a brain interface using electrical and chemical techniques for acquisition of information and modification of function.



Michael Viola, MD

U.S. Department of Energy

High-impact Project

Development of comprehensive image databases (for storage, visualization, registration, interpretation of data from different technologies).

