

Bioengineering Seminar

John Haller, Ph.D.

*Clinical Research Program Manager for the
Toshiba Medical Research Institute, USA.*

Clinical Needs, Clinical Translational Science And Medical Device Development

The analysis of clinical needs is particularly important for the development of medical devices. The objective of this discussion will be to highlight the importance of research and development that take into account clinical needs. Many grant applications and new device developments fail because of a disconnect between the technology developer and needs of clinical end-users. By assessing clinical needs, developers gain vital information and a clear focus that help minimize the risks associated with the development and engineering of new technologies. The following questions will be addressed in this discussion:

- How does the federal government really work?
 - Some insights into how the NIH & NSF fund research.
- Is clinical needs assessment important for grant-funded research and development (R&D)?
 - Are clinical hypotheses needed in NIH grant applications?
- What role does clinical needs assessment play in reengineering technologies for global health?
- For clinical needs assessment, what are some alternatives to traditional market surveys?

One method to generate requirements at the outset of medical device development is through clinical needs assessment. Clinical needs assessment is a process by which information is gathered regarding the scope and potential impact of gaps or deficiencies in the current delivery and practice of health care. The processes and techniques utilized to gather and analyze information regarding clinical needs encompass a diverse set of qualitative and quantitative techniques. This presentation will discuss some of methods for clinical needs assessment, and illustrate its use in the development of diagnostic devices.

Friday April 6th, 2012

12:30PM-1:30PM, Room 3507

Nguyen Engineering Building

BIOGRAPHY

John Haller, Ph.D. is a Clinical Research Program Manager for the Toshiba Medical Research Institute, USA. Dr. Haller's interests include all applications of imaging in clinical medicine.

John Haller previously served as Program Director at the National Institute of Biomedical Imaging and Bioengineering at NIH, where he managed imaging programs, acted as Liaison for International Activities, served as a Science Officer for national Centers for biomedical computing and Centers for point-of-care diagnostics. Before leaving the federal government, Dr. Haller served as the NIH author of the multi-agency, National Robotics Initiative of the White House.

Dr. Haller has held faculty positions at Washington University School of Medicine, the University Of Iowa College Of Medicine and most recently served as an adjunct professor of Bioengineering at George Mason University. Additional interests of Dr. Haller's include the impact of medical technology, in particular the economic and social implications of these technologies.

*For any questions please contact Claudia
Borke at cborke@gmu.edu, (703) 993-4190*