



NANOHEALTH:

Nanoengineering and Nanocomputing Applications for Pervasive Health Environments of the Future

A PETRA Conference WORKSHOP JUNE 9-13, 2009 (www.petrae.org)

Workshop Chairs

Agis Iliadis, *University of Maryland, USA*

Samir M. Iqbal, *University of Texas at Arlington, USA*

Invited Speaker

Srikanth Nadadur, *NIH Nanohealth and Safety*

Nickolas Declaris, *University of Maryland, USA*

Workshop Programme Committee

Zeynep Celik-Butler, *University of Texas At Arlington, USA*

Samir Iqbal, *University of Texas At Arlington, USA*

Robert Magnusson, *University of Texas At Arlington, USA*

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Important Dates

Paper Submission Deadline: March 11, 2009

Paper Acceptance Notification: March 15, 2009

Camera Ready Paper Deadline: April 3, 2009

Workshop theme

This workshop focuses on nano-computing and nano-engineering applications and services in health and assistive environments that are based on information and communication technologies and use ambient intelligence to promote innovation and ubiquitous access to information and communication for life-long learning, higher quality of life for the elderly, and for citizens with special needs. Research in nanoscale science and engineering is about to revolutionize many fields and lead to a new technological infrastructure that will have major impact on health care, as well as areas such as biotechnology, environment, energy, transportation, and others.

Topics of interest

Topics include but are not limited to:

- nano and biotechnologies and distributed computing
- Nanohealth and Safety
- Nanomachines for drug delivery and clinical applications
- Nano-biosensor design, manufacturing and health applications
- Nanobioelectronics and biomaterials
- Grid computing
- Patient biomedical and clinical diagnostics
- Assistive environments and remote security monitoring
- Evaluation methodologies for health applications
- Microfabrication issues
- Nanoscale architectures for human centered applications
- Nanomachine drug delivery tracking
- Minimal power grid computing and power scavenging nanosystems
- Neural net based real-time information nanosystems
- Intelligent nanocomputing
- Nano-medicine
- Low cost and rapid biometric devices
- Computational Genomics and Proteomics
- Interfaces, architectures and intelligence of point-of-care & personalized diagnostics