# Computing Community Consortium (CCC) Council Meeting July 15, 2011 • Hotel Sofitel • Madeleine Room • Washington, DC

# Bios: SUSTAINABILITY & IT

### Susanne Hambrusch, National Science Foundation

Dr. Hambrusch is currently serving at the National Science Foundation (NSF) as the Director of the Division of Computing and Communication Foundation within the Directorate for Computer and Information Science and Engineering (CISE). She is on leave from Purdue University where she is a professor of computer science. At Purdue, she served as the Department Head from 2002 to 2007. She made a total of 14 faculty hires, six of them interdisciplinary hires. Her research interests are in query and data management in mobile environments, parallel and distributed computation, analysis of algorithms,

and computer science education. She initiated two interdisciplinary projects on "Science Education in Computational Thinking" and "Computer Science for Education." She is a member of the editorial board for Information Processing Letters and a co-chair for CACM's Viewpoints section. Before joining NSF, she served on the board of directors of the CRA and the CRA-W.

Arun Majumdar, Advanced Research Projects Agency-Energy (ARPA-E)

Dr. Majumdar became the first Director of the Advanced Research Projects Agency-Energy (ARPA-E) in October 2009. He also currently serves as Senior Advisor to the Secretary of Energy. Prior to joining ARPA-E, he was the Associate Laboratory Director for Energy and Environment at Lawrence Berkeley National Laboratory and a Professor of Mechanical Engineering and Materials Science and Engineering at the University of California, Berkeley. His highly distinguished research career includes the science and engineering of energy conversion, transport, and storage ranging from molecular and nanoscale level to large energy systems. In 2005, Dr. Majumdar was elected

a member of the National Academy of Engineering for this pioneering work. Dr. Majumdar has testified before Congress on how to reduce energy consumption in buildings, and he has served on the advisory committee of the National Science Foundation's engineering directorate, on the advisory council to the materials sciences and engineering division of the Department of Energy's Basic Energy Sciences, and as an advisor on nanotechnology to the President's Council of Advisors on Science and Technology (PCAST). Dr. Majumdar has also been an advisor to startup companies and venture capital firms in the Silicon Valley.

## Amir Roth, Department of Energy

Dr. Roth is the acting program manager for building performance simulation tools at DOE's Building Technologies Program. He was previously with the University of Pennsylvania as an associate professor in the computer and information science department and a former chair of the undergraduate computer science program. He has also worked as a software engineer at Microsoft and a research engineer at Intel. He is a member of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE); the Institute of Electrical and Electronics Engineers (IEEE); and the Association for Computing Machinery (ACM).







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## **Bios: SMART HEALTH & WELLBEING**

**Doug Fridsma**, Office of the National Coordinator for Health Information Technology

Dr. Fridsma is the director of the Office of Standards and Interoperability in the Office of the National Coordinator for Health Information Technology. He is currently on leave from the Department of Biomedical Informatics at Arizona State University and from his clinical practice at Mayo Clinic Scottsdale. Dr. Fridsma completed his medical training at the University of Michigan in 1990,

and his Ph.D. in biomedical informatics from Stanford University in 2003. His research interests include the development of computational tools to study patient safety, clinical work processes, and methods to improve model-driven standards development processes. He has served on the Clinical Data Interchange Standards Consortium (CDISC) Board of Directors from 2005-2008, and was appointed to the HIT Standards Committee (SC) in 2009. He recently resigned from the HIT SC to become the acting director of the Office of Interoperability and Standards at ONC.

#### Bradford Hesse, National Institutes of Health

Dr. Hesse is Branch Chief of the National Cancer Institute's (NCI's) Health Communication and Informatics Research Branch (HCIRB). Dr. Hesse's professional focus is bringing the power of health information technologies to bear on the problem of eliminating death and suffering from cancer, a cause to which he remains steadfastly dedicated. While at the NCI, he has championed several initiatives that evaluate and progress the science of

cancer communication and informatics, two of which include the Health Information National Trends Survey (HINTS) and the Centers of Excellence in Cancer Communication (CECCR). Previously, Dr. Hesse was with the not-for-profit American Institutes for Research in Palo Alto, CA, where he co-founded a behavioral science research lab dedicated to issues on technology, as well as the Committee for Social Science Research on Computing at Carnegie Mellon University, where he directed one of the first large-scale electronic surveys of scientists working together in an online community. Dr. Hesse received his Ph.D. from the University of Utah, where he was funded jointly by the psychology and medical informatics departments.

## Misha Pavel, National Science Foundation

Dr. Pavel recently joined the NSF's CISE Directorate to direct a new program in Smart Heath and Wellbeing. Previously, he was Professor and Chair of Biomedical Engineering with a joint appointment in Medical Informatics at the Oregon Health & Science University. There he directed the Point of Care Laboratory, researching new methods for transforming healthcare to become more proactive and patient-centered based on unobtrusive monitoring, neurobehavioral assessment, and computational modeling of behavioral and

cognitive functions. A key component of this work is a unique longitudinal study performed in conjunction with the Oregon Center for Aging and Technology (ORCATECH) that involves unobtrusive monitoring of more than 200 elders living independently. He has held appointments at AT&T Laboratories, New York University, Stanford University, and Bell Laboratories. Dr. Pavel received his Ph.D. in Experimental/Mathematical Psychology from New York University; M.S. in Electrical Engineering from Stanford University, and B.S. in Electrical Engineering from Polytechnic Institute of Brooklyn.







Richard Satava, U.S. Army Medical Research and Materiel Command

Dr. Satava is Professor of Surgery at the University of Washington Medical Center, and Senior Science Advisor at the US Army Medical Research and Materiel Command in Ft. Detrick, MD. Prior positions include Professor of Surgery at Yale University, a military appointment as Professor of Surgery (USUHS) in the Army Medical Corps assigned to General Surgery at Walter Reed Army Medical Center, and Program Manager of Advanced Biomedical Technology at the Defense Advanced Research Projects Agency (DARPA). His undergraduate training was at Johns Hopkins University, medical school at Hahnemann University of Philadelphia, internship at the Cleveland Clinic,



surgical residency at the Mayo Clinic, and a fellowship with a Master of Surgical Research at Mayo Clinic. He has been continuously active in surgical education and surgical research, with more than 200 publications and book chapters in diverse areas of advanced surgical technology, including Surgery in the Space Environment, Video and 3-D imaging, Telepresence Surgery, Virtual Reality Surgical Simulation, and Objective Assessment of Surgical Competence and Training. During his 23 years of military surgery he has been an active flight surgeon, an Army astronaut candidate, MASH surgeon for the Grenada Invasion, and a hospital commander during Desert Storm, all the while continuing clinical surgical practice. While striving to practice the complete discipline of surgery, he is aggressively pursuing the leading edge of advanced technologies to formulate the architecture for the next generation of Medicine.