

2011 Nuclear Medical and Imaging Sciences Awards
Presented at the 2011 Medical Imaging Conference
MIC Plenary Session MIC2, Wednesday, Oct. 26, Auditorium1

The Edward J. Hoffman Medical Imaging Scientist Award



Dr. Michel Defrise, *Professor of Nuclear Medicine, Vrije Universiteit Brussel*

“For pivotal contributions to the science of tomographic reconstruction”

Michel Defrise received the Ph.D. degree in theoretical high energy physics from the Free University of Brussels (Vrije Universiteit Brussel) in 1981. He has since been working as a research scientist in that University and is currently professor in the Department of Nuclear Medicine. He worked with David Townsend and Rolf Clackdoyle on image reconstruction for the first three-dimensional acquisitions with multi-ring PET scanners operated without inter-slice septa. In recent years his work has focused on the application of pinhole micro-SPECT to molecular imaging, on time-of-flight PET and on the reconstruction from incomplete data. He is Associate Editor of the IEEE Transactions on Nuclear Science and Fellow of the IEEE and of the Institute of Physics (UK).

The Bruce H. Hasegawa Young Investigator Medical Imaging Science Award

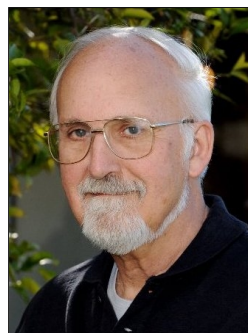


Dr. Abhijit J. Chaudhari, *UC Davis Medical Center*

“For contributions to the fields of multispectral optical tomography, PET instrumentation, and translational molecular imaging”

Abhijit J. Chaudhari, Ph.D., an assistant professor of radiology at the UC Davis School of Medicine, researches translational biomedical imaging instrumentation and image processing. Chaudhari, a Senior Member of IEEE and of the American College of Rheumatology, is investigating advanced clinical imaging technologies to study the pathogenesis of arthritis (rheumatoid, osteo, and psoriatic) and cancers (breast, oral and sarcoma). He is concentrating on early detection of disease and on early monitoring of response to treatment.

IEEE Medal for Innovation in Healthcare Technology



Dr. Harrison H. Barrett, *Regents Professor, University of Arizona*

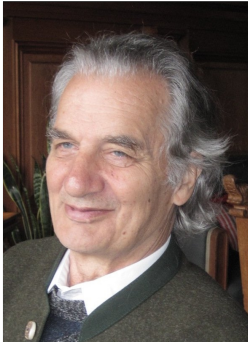
“For pioneering contributions to the foundations and applications of biomedical imaging science”

Dr. Barrett received a master's degree in physics from MIT in 1962 and a Ph.D. in applied physics from Harvard in 1969. He worked for the Raytheon Research Division until 1974, when he came to the University of Arizona. He is a Regents Professor in the College of Medicine and the College of Optical Sciences, and he has appointments in Applied Mathematics, Biomedical Engineering and the Arizona Cancer Center. He is director of the Center for Gamma-ray Imaging, and he is a fellow of the Optical Society of America, the Institute of Electrical and Electronic Engineers, the American Physical Society and the American Institute of Medical and Biological Engineering. His awards include a Humboldt Prize, the 2000 IEEE Medical Imaging Scientist Award, an E. T. S. Walton Award from Science Foundation Ireland, and the 2005 C. E. K. Mees Medal from the Optical Society of America. In collaboration with Kyle J. Myers, he has written a book entitled Foundations of Image Science, which in 2006 was awarded the First Biennial J. W. Goodman Book Writing Award from OSA and SPIE. He is the 2011 recipient of the SPIE Gold Medal of the Society.



2010 NPSS Radiation Instrumentation Awards
Presented at the 2011 Nuclear Science Symposium
NSS Luncheon, Monday Oct. 22, Meliá Valentia A&B&C

Radiation Instrumentation Outstanding Achievement Award



Dr. Gerhard Lutz, *PNSensor GmbH*

“For contributions to charmed particle physics, including silicon tracking detectors and the invention of innovative semiconductor structures such as SDDs and active pixel sensors (DePFETs) for X-ray spectroscopy and imaging”

Gerhard Lutz is senior scientist at PNSensor GmbH and former head of the MPI Semiconductor Laboratory. His scientific career spreads over a wide range of fields in physics and electrical engineering. He took part in several particle experiments at BNL and CERN. His occupation with semiconductor detectors and micro-electronics led to the development of a variety of silicon detectors, used initially for tracking in particle physics and later on for spectroscopy and imaging in X-ray astronomy and now also in industrial applications. They are partly based on the invention of new semiconductor structures (such as the Silicon Drift Diode (SDD) and the Depleted Field Effect Transistor (DePFET)) for which he has been awarded several patents. He is presently is occupied in the development of DePFETs with nonlinear characteristics and with gating capabilities to be used in X-ray spectroscopy and in astronomic missions. He lectured at Northeastern University and LMU Munich and wrote a book on Semiconductor Radiation Detectors.

Radiation Instrumentation Early Career Award



Dr. Andrew Goertzen, *University of Manitoba*

“For contributions to molecular imaging instrumentation, in particular the development and improved utilization of both clinical and preclinical PET and CT imaging systems”

Dr. Andrew Goertzen is an Assistant Professor of Radiology at the University of Manitoba and a clinical nuclear medicine physicist at Health Sciences Centre in Winnipeg, Canada. He received his Ph.D. in Biomedical Physics from the University of California, Los Angeles. Dr. Goertzen is a Member of the Canadian College of Physicists in Medicine with certification in nuclear medicine. His research interests are the development of detectors and technologies for multimodality PET imaging and their application to improve image quality in both clinical and preclinical PET imaging.

Please consider nominating your colleagues for these and other IEEE, NPSS, NMISTC and RITC Awards:

IEEE Innovations in Healthcare Technology	(\$20,000)	http://www.ieee.org/portal/pages/about/awards/sums/healthcaretechmedal.html
IEEE Marie Sklodowska-Curie Award	(\$10,000)	http://www.ieee.org/portal/pages/about/awards/sums/curietfa.html
NPSS Merit Award	(\$5,000)	http://ewh.ieee.org/soc/nps/awards.htm
NPSS Early Achievement Award	(\$3,000)	http://ewh.ieee.org/soc/nps/awards.htm
NPSS Graduate Scholarship Award	(\$750)	http://ewh.ieee.org/soc/nps/awards.htm
Edward J. Hoffman Nuclear Medical Imaging Scientist Award	(\$3,000)	http://ewh.ieee.org/soc/nps/nmisc/MICAWards.html
Radiation Instrumentation Outstanding Achievement Award	(\$3,000)	http://ewh.ieee.org/soc/nps/RIOAAform.htm
Bruce H. Hasegawa Young Investigator Medical Imaging Science Award	(\$1,500)	http://ewh.ieee.org/soc/nps/nmisc/MICAWards.html
Radiation Instrumentation Early Career Award	(\$1,500)	http://ewh.ieee.org/soc/nps/RIECAform.htm