

*INVITATION to the
3rd Event of the Greek IEEE-EMBS Chapter*

**Technologies in Preclinical
Research**

Invited lecture by

Assoc. Prof. Arion Hadjioannou

Department of Medical & Molecular Pharmacology
David Geffen School of Medicine, UCLA

***Wednesday, 27th of June 2007, at 16:30
Multimedia Amphitheatre, Central Library Building
National Technical University of Athens, Zografou Campus***

Abstract

Imaging is a powerful tool not only for the visualization, but also for the quantification of fundamental and complex biological processes. In this presentation, we will discuss how the principles of signal detection and quantitative imaging can be applied to preclinical research. Furthermore, we will also demonstrate examples of successful implementation of new ideas in this rich field, for the imaging of preclinical models of disease.

Short CV

Arion Hadjioannou is an Associate Professor at the Department of Medical & Molecular Pharmacology, David Geffen School of Medicine at UCLA, a member of the Crump Institute for Molecular Imaging, and a member of the UCLA Jonsson Comprehensive Cancer Center. He is the Co-director of the small animal imaging resource at the Crump Institute for Molecular Imaging, and a member of the UCLA Institute for Molecular Medicine.

Dr. Hadjioannou received his B.S. degree in Physics from the University of Athens, Greece and his Ph.D. degree in Biomedical Physics from the University of California at Los Angeles. After the completion of his degree, he worked on the development of the high-resolution microPET technology. This technology enabled the application of Positron Emission Tomography (PET) for in-vivo imaging of small animal models. His current research interests are in the continued development of instrumentation and technology for preclinical research with emphasis on dedicated small animal imaging systems. He is especially interested in multimodality approaches for quantitative preclinical imaging including x-ray micro computed tomography, microPET and optical imaging. In addition, his interests are in quantitative imaging methodologies for other preclinical assays specific to molecular imaging, including microfluidic cell cultures and synthesis of biomolecules.

Dr. Hadjioannou has authored or coauthored more than 50 journal articles, reviews and book chapters. In addition, he has been invited to speak at many national and international symposia, and currently is the Principal Investigator in two NIH funded projects.