

### Welcome to Action TD1007

Welcome to the 2nd Action's TD1007 Newsletter, the first for 2012.

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### Working Groups 3,4 & 5 Meeting in Athens

A one day meeting was organized on 2<sup>nd</sup> of December 2011, at the Technological Educational Institute of Athens (Greece), which brought together three Working Groups: Bimodal Tracers (WG3), Preclinical Applications (WG4) and Clinical Applications (WG5). More than 25 Action members participated in the meeting, which was attended by Action's DC Rapporteur, Prof. Ivan Nedkov from the Bulgarian Academy of Sciences.



### Short Term Scientific Missions

During January two STSMs took place. The first from Ms. Irene Tsiapa, from Greece to France and the second from Ms. Cecilia Oscovaine Steinbach, from Hungary to Poland. In addition more than 4 STSMs are already scheduled.

#### Irene Tsiapa

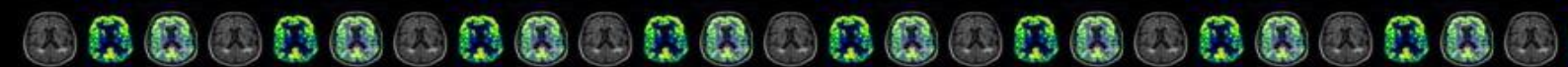
*Department of Medical Physics School of Medicine, University of Patras, Greece*

Irene Tsiapa visited the Laboratory of Chemistry of Organic Polymers, of Sebastien Lecommandoux at the University of Bordeaux in March 2012. The aim was to carry out initial assessments on the appropriate process for the functionalization of magnetic nanoparticles with an existing RGD peptide analogue, in order to develop targeting nanoparticles for angiogenesis bimodal imaging. The conjugated RGD - magnetic nanoparticles will be initially radiolabelled for imaging using SPECT or PET and MRI. The final goal is the development of multifunctional nanoparticles conjugates allowing both (S)PECT/MRI imaging and therapy through hyperthermia.

#### Cecilia Oscovaine Steinbach

*Department of PhD School of Physical Sciences, Budapest University of Technology and Economics, Hungary*

The purpose of this STSM in Prof. Marek Moszynski Laboratory in National Center of Nuclear Research in Poland, was: a) to be trained in the technique of absolute light output measurements with different photodetectors, b) to measure the absolute light output of LYSO scintillator crystals, and c) to try to answer the question how the photocathode reflectivity influences the measurement, using optical simulations. During the visit, two set of crystals prepared from different shipments of the same producer, as well as two crystal samples from



another producers were measured, allowing to reduce the effect of light loss due to the self-absorption of the crystal and the reflective wrapping.

### PSMR2012 conference, 27-30 May 2012

By continuing the successful tradition of the Julich meetings held in 2008 and 2010 and of the Knoxville workshop in 2011, the first Conference on PET-MR and SPECT-MR in sharing by Pisa University-INFN, the COST Action PET-MRI (funded by EU for 4 years 2011-2014) and Julich Forschungszentrum is planned.

**26-30 May, 2012**  
**PSMR 2012**  
*PET/MR and SPECT/MR: New Paradigms for Combined Modalities in Molecular Imaging*  
Hotel Hermitage La Biodola, Isola d'Elba - Italy

**Conference chairs**  
Alberto Del Guerra, Italy  
Hans Herzog, Germany  
George Loudos, Greece

**International Advisory Committee**  
Paul Marsden, UK  
Stefan Vanderberghe, Belgium  
Simon Cherry, USA  
Sybille Ziegler, Germany  
Dimitris Vakis, France  
Benjamin Tsui, USA  
Hidehiro Iida, Japan  
Jon Shah, Germany  
Silvio Aime, Italy  
Osman Ratib, Switzerland

**Local Organizing Committee**  
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Department of Physics and INFN, Pisa,  
Nicola Belcarì  
Maria Giuseppina Bisogni  
Alberto Del Guerra  
Lucia Lilli  
<http://psmr2012.df.unipi.it>

Logos for Università di Pisa, INFN, JÜLICH, and COST are also present.

This conference will take place in ELBA island (Italy) and it will be the first of a series that will run as annual conferences with the next one scheduled to take place in Julich in 2013 and the following one in Greece in 2014.

The conference will cover all technological and applicative aspects of both sequential and simultaneous PET/MR and SPECT/MR systems. Current clinical and preclinical applications will be discussed in detail. The latest results on the search for new tracers with focus on bimodal tracers will be presented. Finally, an industrial session will be organized where various companies will present the latest information on their products in this field.

In order to bring together Early Stage Researchers to present and discuss their STSM results and recent work, an ESRs event has been planned.

#### Conference Chairs:

Alberto Del Guerra, *University of Pisa, Italy*

Hans Herzog, *Julich Forschungszentrum, Germany*

George Loudos, *Technological Educational Institute of Athens, Greece*

### Next MC meeting

The Annual MC meeting of Action TD1007, as well as joint Working Groups meeting will take place on May 30<sup>th</sup> 2012, following the 1<sup>st</sup> PSMR conference. The Action will revise first year activities and prepare the scientific, dissemination and budget plan for its second year. The meetings will be held at Hotel Hermitage, La Biodola, Isola d' Elba, Italy.

### New members

Cyprus signed the memorandum of understanding and became a member of COST Action TD1007 on 27/9/2011. The MC members for Cyprus are Dr Stelios Christofides and Dr Christakis Damianou.



**Contact us**

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