

First Mediterranean Thematic Workshop on Advanced Molecular Brain Imaging with Compact High Performance MRI-Compatible PET and SPECT Imagers – Potential for a Paradigm Shift

and the adjunct satellite technical meeting:

# The Latest Enabling Technological Breakthroughs in Compact Radiation Sensors, Electronics and Software for PET and SPECT







Top: drawing of brain by Leonardo DaVinci. Above: map of the Mediterranean and geographical place of the meeting (Giardini di Naxos). Venue: Hotel Hellenia.



Teatro Romano in Taormina, with view on Aethna.

#### List of so far confirmed/almost confirmed speakers:

Vesna Sossi, F. Orzi, C. Halldin, A. Bozzao, A. Chiaravalloti, A. Chincarini, L. Farde, Stan Majewski, G. Zacharis, B. Pichler, P. Lecoq, JM Benlloch, A. Rivetti, N. Clinthorne, E. Cisbani, B. Tsui, I. Buvat

#### Dear Colleague,

Following the successes of the previously organized medical imaging instrumentation symposia on dedicated molecular imaging instrumentation, starting originally in Rome in 2001 (on breast imaging), we are at present organizing:

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and the adjunct satellite technical meeting:

The Latest Enabling Technological Breakthroughs in Compact Radiation Sensors, Electronics and Software for PET and SPECT

More details on the programme available on the web site: <a href="https://indico.cern.ch/internalPage.py?pageId=4&confId=197337">https://indico.cern.ch/internalPage.py?pageId=4&confId=197337</a>

The purpose of this two-part workshop, planned for August 30 - September 2, 2012 in Giardini di Naxos, Sicily, Italy is to discuss the present - already identified - and the potential new applications in the field of molecular (PET and SPECT) brain imaging (cancer, dementia, behavioural, stroke, and other areas), and to review innovative instrumentation approaches applicable to the advanced brain (and head/neck) imaging.

The symposium is intended as the meeting of instrumentation experts, neuroscientists, and clinicians. We plan introductory presentations delivered by medical experts in the field of brain imaging, including the subject of novel molecular imaging agents. The following part of the meeting will consist of the talks from speakers-rapporteurs who will provide critical reviews of the PET and SPECT instrumentation issues and discuss the potential solutions and approaches how to solve them, followed by the representatives of the few selected exemplary brain imaging projects.

The major group of participants in the meeting will be the members of the imaging instrumentation community, but the most important participants will be the invited doctors who will be helping the imaging instrumentation experts to understand the real needs and requirements of the brain imaging apparatus to assist in the tasks of detecting, staging and monitoring brain diseases and functional conditions, as well as of the disease treatments.

We will also have representatives of the companies producing dedicated brain imagers, as well as companies producing the detector components and subsystems for the novel compact molecular imagers (PET and SPECT).

We do hope that you will be able to participate in the Workshop. We also welcome your suggestions as to the potential discussion subjects and presentations. We plan to have contributing presentations-posters presented at the special poster session.

To enable timely organization of this symposium, please indicate your plans to participate as soon as practical, and if applicable please send also the title of your suggested contribution.

It is planned that the presentations and contributions to the Symposium will be made available electronically on the symposium website, as soon as received from the authors.

We thank you in advance for considering participation in this workshop and by this helping us with turning this next in the series unique interdisciplinary symposium into a productive meeting providing guidance and motivation to the instrumentation community to design and built better molecular imaging instruments to assist with brain imaging. Please join us in beautiful Taormina!

Best Regards,

Franco Garibaldi for the Organizers

## **Organizing "Core Group":**

F. Garibaldi - Chair

J.M. Benlloch

P. Lecoq

G. Loudos

S. Majewski

### **International Organizing Committee:**

F. Garibaldi - Chair

J.M. Benlloch

E. Cisbani

N. Clinthorne

E. Guedi

P. Lecoq

G. Loudos

S. Majewski

E. Nappi

R. Pani

J.M. Perez

A. Rivetti