



EUROPEAN COMMISSION  
European Research Area



**The MADEIRA Consortium announces the**

## **Third MADEIRA Training Course on IMAGING IN NUCLEAR MEDICINE**

A four-day theoretical and practical course aimed at university students and young researchers with a strong interest in imaging techniques applied to nuclear medicine organised by

**HelmholtzZentrum münchen**

German Research Center for Environmental Health

in collaboration with

Lund University, Malmö University Hospital, Sweden

Institut Jožef Stefan, Slovenia

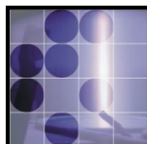
Consejo Superior de Investigaciones Científicas-IFIC, Valencia, Spain

Scivis wissenschaftliche Bildverarbeitung GmbH, Germany

Università degli Studi di Milano, Italy

University of Michigan, Michigan, USA

Department of Nuclear Medicine "rechts der Isar", TUM, Germany



**Munich (Germany), 5-8 October 2010**

**SECOND ANNOUNCEMENT**

## AIM

The use of diagnostic procedures based on nuclear medical imaging such as PET, SPECT and combined PET/CT, SPECT/CT and PET/MR systems is gaining every day more and more importance.

The MADEIRA Project (Minimizing Activity and Dose with Enhanced Image quality by Radiopharmaceutical Administrations), cofunded by the European Commission within the FP7-EURATOM Programme, aims to reduce the exposure of the patients to radiation in nuclear medicine, through the improvement of the imaging process.

This Training Course on **Imaging in Nuclear Medicine** is the last in a series of three courses organized by the MADEIRA Consortium. The course, which is aimed at university students (graduate level) and young researchers with a strong interest in medical physics and imaging, will deal with fundamental aspects and current research trends. The lectures will be supported by practical exercises on image reconstruction techniques and by visits to the research laboratories of **Helmholtz Zentrum München** and of the Nuclear Medicine Department of the University Hospital **rechts der Isar**.

---

---

## REGISTRATION AND FEES

Online registration is available at [www.madeira-training.org](http://www.madeira-training.org).

Please note that the number of participants is limited to 50.

### Registration fees:

early bird registration (until 15.08.2010): 120.- €

late registration (after 15.08.2010): 150.- €

### Fees include:

access to all lectures, learning material, coffee breaks, lunches, social event on Tuesday evening and three-day ticket for public transportation (for Tuesday, Wednesday and Thursday).

Fees can be paid by bank transfer; an invoice will be sent to you with detailed information on bank account and payment modalities.

Please be aware that the invoice will be sent to the address you have entered at the moment of online registration, so please check the correctness of the data.

# PROGRAM AND LIST OF SPEAKERS

3rd MADEIRA TRAINING COURSE				
IMAGING IN NUCLEAR MEDICINE				
München, October 5-8 2010				
	Tuesday 5	Wednesday 6	Thursday 7	Friday 8
	Nuclear medicine imaging systems	New geometries and detectors	Noise reduction and image reconstruction	Optimization of the exposure
9:00	Welcome address			
9:15	Keynote Lecture: Setting the scene ( <i>Katrine Åhlström Riklund</i> )	New geometries in tomographic imaging ( <i>Oleg Tischenko</i> )	Noise reduction ( <i>Oleg Tischenko</i> )	Optimizing time-schemes in nuclear imaging ( <i>Augusto Giussani</i> )
9:45	The physics of nuclear imaging ( <i>Andrej Studen</i> )	New geometries applied to small animal imaging ( <i>Matthias KlafTEN</i> )	Image reconstruction, Part I ( <i>Magdalena Rafecas</i> )	Dose reduction strategies: The MADEIRA Project ( <i>Christoph Hoeschen</i> )
10:30	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK
11:00	Nuclear imaging systems, Part I: Planary and tomographic systems ( <i>Sigrid Leide-Svegborn</i> )	Visit to prototype machines at HMGU laboratories	Image Reconstruction, Part II ( <i>Timo Aspelmeier</i> )	Rules of the thumb ( <i>Christoph Hoeschen</i> )
11:45	Nuclear imaging systems, Part II: combined systems ( <i>Sibylle Ziegler</i> )	Development of PET probe system ( <i>Marko Mikuž</i> )	Scientific Visualizer ( <i>Björn Thiel</i> )	Course evaluation and conclusions
12:30	LUNCH	LUNCH	LUNCH	LUNCH
13:15	COFFEE WITH THE TEACHERS	COFFEE WITH THE TEACHERS	COFFEE WITH THE TEACHERS	
13:45	New approaches to QA in medical imaging ( <i>Hugo de las Heras Gala</i> )	Visit to the Department of Nuclear Medicine, Klinikum "rechts der Isar"	Guided exercises with image reconstruction software ( <i>Gernot Ebel, Timo Aspelmeier, Magdalena Rafecas, Josep Oliver</i> )	
14:30	A new phantom for QA in nuclear medicine ( <i>Uwe Engeland</i> )			
15:15	COFFEE BREAK - GET TOGETHER (news from the companies)			
17:00	SOCIAL ACTIVITIES (followed by dinner)			

- Aspelmeier, Timo** - SCIVIS Wissenschaftliche Bildverarbeitung GmbH, Göttingen (D)  
**Åhlström Riklund, Katrine** - Department of Radiation Sciences, Umeå University (SE)  
**de las Heras Gala, Hugo** - Division of Radiological Devices, FDA, Silver Spring MD (USA)  
**Engeland, Uwe** - SCIVIS Wissenschaftliche Bildverarbeitung GmbH, Göttingen (D)  
**KlafTEN, Matthias** - Helmholtz Zentrum München (D)  
**Giussani, Augusto** - Helmholtz Zentrum München (D)  
**Hoeschen, Christoph** - Helmholtz Zentrum München (D)  
**Leide-Svegborn, Sigrid** - Radiation Physics Department, Skåne University Hospital Malmö (SE)  
**Mikuž, Marko** - University of Ljubljana and Institut Jožef Stefan, Ljubljana (SLO)  
**Oliver, Josep** - Instituto de Física Curpuscular (CSIC / Universidad de Valencia), Valencia (ES)  
**Rafecas, Magdalena** - Instituto de Física Curpuscular (CSIC / Universidad de Valencia), Valencia (ES)  
**Studen, Andrej** - Institut Jožef Stefan, Ljubljana (SLO)  
**Thiel, Björn** - SCIVIS Wissenschaftliche Bildverarbeitung GmbH, Göttingen (D)  
**Tischenko, Oleg** - Helmholtz Zentrum München (D)  
**Ziegler, Sibylle** - Department of Nuclear Medicine "rechts der Isar", TU München (D)

## GRANTS

A restricted number of grants (covering fees and accommodation in double room, NOT travel costs) will be made available.

To apply for a grant, please send to the secretariat:

- ▶ an informal letter of request, motivating the reasons why you need the grant;
- ▶ a short CV (max. two pages), listing your most relevant degrees, research activity and scientific publications (if any);
- ▶ a letter of recommendation by your supervisor or by the head of your department (unit).

You can send the documents by ordinary mail or e-mail (scans of the original documents) to the Technical Secretariat (see addresses below).

---

---

## LOGISTICS AND ACCOMMODATION

The training course will be held at Helmholtz Zentrum München.

A number of rooms has been reserved for the course participants at Etap Hotel München Garching. You can choose between single (60 €/night) or double room (39 €/night) accommodation. Prices include breakfast. Grant holders are entitled to double-room occupancy. Please notify the secretariat in case you already know the name of the person with whom you would like to share the room.

Etap Hotel München Garching has a direct bus connection to the course venue. The city center is easily reached with the underground (Line U6). Detailed information and maps regarding logistics and transportation will be available in the website.

## IMPORTANT DEADLINES

10.07.10: deadline for grant application

31.07.10: grants notification

15.08.10: deadline for early bird registration

5-8.10.10: Training Course

---

---

## CONTACTS

*Third MADEIRA Training Course - Technical secretariat*

Helmholtz Zentrum München

Ingolstädter Landstr. 1, 85764 Neuherberg (Germany)

*e-mail:*

[madeira-tc2010@helmholtz-muenchen.de](mailto:madeira-tc2010@helmholtz-muenchen.de)

*Website:*

[www.madeira-project.eu](http://www.madeira-project.eu)  
[www.madeira-training.org](http://www.madeira-training.org)