



DIMI NEWS (7/2010)

No. 15



Sixth Framework Programme

INSIGHT

DIMI FINAL REPORTING

It is finally time to prepare the last DiMI report. The completed templates of the DiMI Periodic Activity Report – PAR 2010 should have been uploaded via our intranet reporting tool dot.project by June 15, 2010. The last reporting period covers months 49-66 from 04/2009 to 09/2010.

The final Form C will thus cover the fifth reporting period April 1, 2009 to September 30, 2010. Your DiMI budget can be spent until September 30, 2010. Therefore templates for the Periodic Management Report - PMR as well as the templates for the Final Report will follow in due time.

END OF DIMI 09/2010 – ACHIEVEMENT OF SUSTAINABILITY MILESTONE

IN 2005 THE EUROPEAN SOCIETY FOR MOLECULAR IMAGING – ESMI WAS CREATED TO ENSURE THE CONTINUANCE AND THE ENLARGEMENT OF DIMI, EMIL, AND MOLIM SCIENTIFIC ACHIEVEMENTS AND TO PROVIDE A PLATFORM FOR MI NETWORKING ACTIVITIES

One of the most important milestone of DiMI was the founding of the European Society for Molecular Imaging – ESMI to ensure the sustainability of the network's scientific excellence, cross-communication, and interaction.

The ESMI extends actions which were initiated in the scope of the 6th Framework Programme by the European networks of excellence “DiMI”, the “European Molecular Imaging Laboratories EMIL”, and the

“European Integrated Project for *in vivo* imaging Molim” – both ended in 2009.

The European Society for Molecular Imaging is committed to scientific and technical excellence, to innovation and quality in healthcare, to the promotion of knowledge and understanding, and to interdisciplinary co-operation.

Join the ESMI and be part of the European MI community! www.e-smi.eu

FORESIGHT

WORLD MOLECULAR IMAGING CONGRESS – WMIC 2010

SEPTEMBER 8 – 11, 2010 IN KYOTO, JAPAN

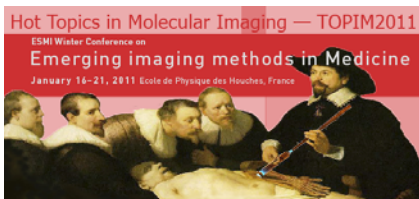
The WMIC2010 is being organized by the joint efforts of the [ESMI](http://www.e-smi.eu), [SMI](http://www.smi.eu), [AMI](http://www.ami.eu), and [FASMI](http://www.fasmi.eu). Scientists from all over the world will come together at the International Conference Centre which has been home to many conferences of global significance.

Like WMIC 2009 the 2010 congress programme is being constructed primarily on the strength of submitted abstracts, and the programme committee is integrating many of these abstracts into special sessions that

bring attendees from different disciplines together for a comprehensive examination of the role of molecular imaging in particular biomedical problems. Further information is available at www.wmicmeeting.org

Reduced fee for ESMI members! The ESMI membership fee for regular membership is 40€ per year and for educational member 20€ per year.

Join the ESMI via www.e-smi.eu/index.php?id=1990



WINTER CONFERENCE – TOPIM 2011 “EMERGING IMAGING METHODS IN MEDICINE” JANUARY 16-21, 2011 ECOLE DE PHYSIQUE DES HOUCHES, FRANCE

TOPIM is the annual Winter Conference of the European Society for Molecular Imaging. In the past years TOPIM was organized in close collaboration with DiMI.

TOPIM stands for “hot TOPics in molecular IMaging”. As in previous years, the effort is to concentrate on one aspect at the forefront of Molecular Imaging, a hot topic. The hot topic 2011 is “Emerging Imaging Methods in Medicine”.

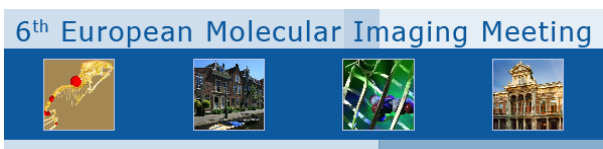
The Winter Conference aims at bringing together scientists from various fields of MI and providing a “think tank” to foster new ideas and interdisciplinary cross-connections through discussions between senior and young scientists.

TOPIM2011 will attract leaders in emerging imaging developments to present techniques and – importantly – present examples and the outlook of utilizing these new tools in improving the outcome and reducing the cost of modern healthcare.

Scientific Committee of TOPIM2011:

Silvio Aime, John Clark, Frédéric Dollé, Andreas H. Jacobs, Clemens W.G.M. Löwik, Adriana Maggi, Chrit Moonen, Vasilis Ntziachristos, Bertrand Tavitian, and Annemie van der Linden.

Please visit the TOPIM 2011 [website](#).



6TH EUROPEAN MOLECULAR IMAGING MEETING IN LEIDEN, THE NETHERLANDS JUNE 19-21, 2011 IN LEIDEN, THE NETHERLANDS

It is with great pleasure to announce the 6th annual Meeting of the ESMI. The EMIM2011 will take place from **June 19 to 21, 2011** in Leiden, The Netherlands.

Save the date and enjoy the beautiful venue of the historic “Stadsgehoorzaal”; take advantage of the easy accessibility – 15 min by train from International Airport Schiphol, Amsterdam.

IN RETROSPECT

FINAL DIMI MEETING AND 5TH EUROPEAN MOLECULAR IMAGING MEETING – EMIM 2010 MAY 26 – 29, 2010 IN WARSAW, POLAND

The final DiMI Meeting took place from May 26 to 29 in Warsaw, Poland in the scope of the 5th European Molecular Imaging Meeting of the ESMI. About 300 scientists from 13 European countries, Asia, as well as USA took the opportunity to present recent scientific breakthroughs, to discuss results and future research activities.

The meeting succeeded in showing the advantage of translational networking by bringing together physicists, technologists, physicians, biologists, chemists, and industry;

as well as by the close organisational collaboration with the EU funded network of Excellence “Clinigene – Clinical Gene and Cell Therapy” and the “European Society for Radiology – ESR”. The meeting was also supported through “COST Actions – European Cooperation in Science and Technology”. The excellence of the scientific programme should ensure further success of the interdisciplinary society:

The 5th annual meeting was a milestone on the way to a sustainable and competitive

establishment of a European MI community. For detailed information on programme, people as well as abstracts please visit: www.e-smi.eu/index.php?id=2332

We are very pleased that ART, Berthold Technologies, Bioscan, Bruker, CaliperLS,

carestream, covidien, Fluoptics, GEHC, LICOR, Philips, Siemens, Skyscan, MILabs, visualsonics, MR solutions, CT Imaging, Lot-Oriel, Promega, Polatom, Animascope, BiospaceLab and sedecal were supporting the EMIM2010. **Thanks for your support!**

NEW ESMI PRESIDENT: CLEMENS W.G.M. LÖWIK

CLEMENS W.G.M. LÖWIK IS A FULL PROFESSOR IN MOLECULAR ENDOCRINOLOGY AND MOLECULAR IMAGING AT THE LEIDEN UNIVERSITY MEDICAL CENTER IN THE NETHERLANDS

Within the ESMI General Assembly Andreas H. Jacobs (left) handed over the ESMI presidency and the "key of success" to Professor Clemens W.G.M. Löwik. His mission statement:



"Trying to build on the achievements (of my predecessors), I am determined to focus on three goals during my presidency:

[...] to further strengthen and expand its (ESMI's) spectrum,

[...] to continue and expand the opportunities for members to advance their understanding and knowledge in the field of molecular imaging, and

[...] to strengthen the Society's relationship with industry as technical development is an essential aspect". For the full mission statement click [here](#).

ESMI AWARDEES 2010

ESMI AWARD, YOUNG INVESTIGATOR AWARD, POSTER AWARDS PRESENTED AT THE EMIM 2010

Within the Opening Ceremony the **ESMI Award 2010** was given to the DiMI coordinator Professor Andreas H. Jacobs for his outstanding contributions to the Society and the field of Molecular Imaging.

The **ESMI Young Investigator Awards 2010** went to three deserving individuals whose laboratories and research highlight the scientific diversity of the European Molecular Imaging Meeting: Anu Autio from Turku for her work on "*A leukocyte ligand of vascular adhesion protein-1 as an imaging tool in PET*"; to Stefanie Lehmann from Zürich for her work on "*Assessment of HIF transcriptional activity in a mouse tumor model using GPI anchored avidin– a novel protein reporter for in vivo imaging*"; and to Caroline Vandeputte from Leuven for her presentation on "*The type 2 cannabinoid receptor as a new PET reporter gene for the brain*".



The **ESMI Poster Awards 2010** were presented to ten outstanding scientific contributions in seven diverse fields of MI: Imaging Cancer Biology, Technology and Data Analysis Methods, Molecular Neuroimaging, Probe Design, Imaging in Cancer and Drug Development, Imaging in other Diseases, as well as Imaging Guided Gene and Cell based Therapies.

For details on awardees, titles, and abstracts please visit:

[Looking back at EMIM2010](#)

EVENTS AND EDUCATION

EUROPEAN MASTER IN MOLECULAR IMAGING – EMMI

REGISTRATION FOR THE ACADEMIC YEAR 2010 - 2011 IS OPEN –REGISTRATION DEADLINE **SEPTEMBER 30, 2010!**

The EMMI offers an interdisciplinary programme dedicated to molecular imaging in all its multimodal aspects. This two-year curriculum, entirely held in English, has been compiled by prominent European molecular imaging research groups and prepares students for academic as well as industrial positions.

Supported by the ERASMUS programme, EMMI is a partnership between four European institutions from France, Italy, Belgium, and Greece.

EMMI is suitable for students with at least a bachelor degree from a recognized institution in biomedical sciences, chemistry, biology, bioengineering, or biotechnology. Please note that fluency in English is required.

Detailed programme, grants and career opportunities as well as the registration form are available via the EMMI [website](#) or contact [Vivienne Fardeau](#)

MOLECULAR IMAGING MEETING SCHEDULE 2010

July 3-7, 2010	7th FENS Forum of European Neuroscience in Amsterdam, The Netherlands
July 5-9, 2010	SNM2010: Annual Meeting in Salt Lake City, USA
July 21, 2010	Radiochemistry Symposium at the Wolfson Molecular Imaging Centre in Manchester, UK
July 22-24, 2010	Neuroreceptor mapping congress in Glasgow, UK
Sep. 1-4, 2010	Advanced imaging techniques in biomedicine: from molecules to organisms – Symposium in Prague, Czech Republic
Sept. 8-11, 2010	WMIC 2010 in Kyoto, Japan
Sept 17, 2010	Conference on Bioimaging of laboratory animals in cancer research in Villejuif, France
Oct. 9-13, 2010	EANM'10: Annual Congress in Vienna, Austria
Nov. 4-6, 2010	26th Ernst Klenk Symposium in Molecular Medicine in Cologne, Germany
Nov. 4-6, 2010	Meeting of the "Interdisciplinary German Network Molecular Imaging" Kloster Seeon (Chiemsee), Germany

For details please visit the "[MI Meeting Schedule](#)"

WORKSHOPS, SCHOOLS, INTENSIVE PROGRAMMES 2010

starting now	Registration for the European Master in MI – EMMI for the academic year 2010–2011 is now open; deadline for registration: Sep. 10,2010
Sep. 8-10, 2010	Summer School on "The Hematopoietic System as Tool and Target for Gene Therapy" in Cologne, Germany
Sep. 6-17, 2010	Interdisciplinary Summer School on Bio-medical Imaging in Zuerich, Switzerland
Jan. 24-28, 2011	6th Small Animal Imaging Workshop 2011 in Tuebingen, Germany

For details please visit the "[Education Section](#)"

LATEST DIMI RELATED PUBLICATIONS - APRIL TO JUNE, 2010

Carlou M, Toelen J, Van der Perren A, Vandenberghe LH, Reumers V, Sbragia L, Gijsbers R, Baekelandt V, Uwe Himmelreich, Wilson JM, Deprest J and Debyser Z. Efficient gene transfer into the mouse lung by fetal intratracheal injection of rAAV2/6.2. *Mol Therapy*, in press.

Celen S, Cleynhens J, Deroose C, de Groot T, Ibrahim A, Gijsbers R, Debyser Z, Mortelmans L, Verbruggen A, Bormans G. Synthesis and biological evaluation of ¹¹C-labeled b-galactosyl triazoles as potential PET tracers for in vivo LacZ reporter gene imaging. *Bioorg Med Chem* 2009 17(14):5117-25. Epub 2009 May 29.

Celen S, Deroose C, de Groot T, Chitneni SK, Gijsbers R, Debyser Z, Mortelmans L, Verbruggen A, Bormans G. Synthesis and evaluation of ¹⁸F- and ¹¹C-labeled phenyl-galactopyranosides as potential probes for in vivo visualization of LacZ gene expression using positron emission tomography. *Bioconjug Chem*.2008 Feb;19(2):441-9. Epub 2008 Jan 8.

De Groof G, Van der Linden A. Love Songs, Bird Brains and Diffusion Tensor Imaging. Review. *NMR in Biomedicine*; in press. 2010 (IF 3.1) DOI:10.1002/nbm.1551.

De Saint-Hubert M, Mottaghy FM, Vunckx K, Nuys J, Fonge H, Prinsen K, Stroobants S, Mortelmans L, Deckers N, Hofstra L, Reutelingsperger CP, Verbruggen A, Rattat D. Site-specific labeling of 'second generation' annexin V with ^{99m}Tc(CO)₃ for improved imaging of apoptosis in vivo. *Bioorg Med Chem*. 2010 Feb;18(3):1356-63. Epub 2010 Jan 5.

Doorduyn J, Klein HC, de Jong JR, Dierckx RA, de Vries EFJ. Evaluation of [¹¹C]-DAA1106 for imaging and quantification of neuroinflammation in a rat model of herpes encephalitis. *Nucl Med Biol*. 2010 Jan;37(1):9-15. Epub 2009 Oct 22. doi:10.1016/j.nucmedbio.2009.09.002.

Fonge H, Jin L, Cleynhens J, Bormans G, Verbruggen A. ^{99m}Tc-tricarbonyl labeled agents for cell labeling: development, biodistribution in normal mice and preliminary in vitro evaluation. *Bioorg Med Chem*. 2010 Jan 1;18(1):396-402. Epub 2009 Oct 31.

Gulyas B, Brockschnieder D, Nag S, Pavlova E, Kasa K, Beliczai Z, Legradi A, Gulya K, Thiele A, Dyrks T, Halldin C. The norepinephrine transporter (NET) radioligand (S,S)-[¹⁸F]FMeNER-D2 shows significant decreases in NET density in the human brain in Alzheimer's disease: A post-mortem autoradiographic study. *Neurochemistry International* 56 (2010) 789–798. doi:10.1016/j.neuint.2010.03.001.

Kruttwig K, Brueggemann C, Kaijzel E, Vorhagen S, Hilger T, Löwik C, Hoehn M. Development of a Three-Dimensional In Vitro Model for Longitudinal Observation of Cell Behavior: Monitoring by Magnetic Resonance Imaging and Optical Imaging. *Mol Imaging Biol*. 2009 Dec 1. [Epub ahead of print], DOI: 10.1007/s11307-009-0289-x. Joint publication

Pappatà S, Varrone A, Vicidomini C, Milan G, De Falco C, Sansone V, Iavarone A, Comerci M, Loré E, Panico MR, Quarantelli M, Postiglione A, Salvatore M. SPECT imaging of GABA(A)/benzodiazepine receptors and cerebral perfusion in mild cognitive impairment. *Eur J Nucl Med Mol Imaging*. 2010 Jun;37(6):1156-63. Epub 2010 Mar 20. DOI 10.1007/s00259-010-1409-1

Prinsen K, Li J, Vanbilloen H, Vermaelen P, Devos E, Mortelmans L, Bormans G, Ni Y and Verbruggen A. Development and evaluation of a ⁶⁸Ga labeled pamoic acid derivative for in vivo visualization of necrosis using positron emission tomography. *Bioorg Med Chem* 2010 May 24. [Epub ahead of print]. doi:10.1016/j.bmc.2010.05.050.

Rando G, Horner D, Biserni A, Ramachandran B, Caruso D, Ciana P, Komm B, Maggi A. An innovative method to classify SERMs based on the dynamics of estrogen receptor transcriptional activity in living animals. *Mol Endocrinol*. 2010 Apr;24(4):735-44. Epub 2010 Mar 2. PMID: 20197311 [PubMed - in process].

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Storkebaum E, Ruiz de Almodovar C, Meens M, Zacchigna S, Mazzone M, Vanhoutte G, Vinckier S, Poesen K, Lambrechts D, Janssen GMJ, Fazzi GE, Haigh J, Schiffers PM, Rohrer H, Van der Linden A, De Mey JGR, Carmeliet P. Impaired autonomic regulation of resistance arteries in VEGF δ/δ mice upon VEGF-trap delivery. Accepted in *Circulation* 2010.

Vanhoutte G, Campo A, Van der Linden A. Neuromethods: Animal models of dementia. Chapter in *Humana Press* 2010; Book editor Van Dam D. and De Deyn PP.

Varrone A, Halldin C. Molecular Imaging of the Dopamine Transporter. *J Nucl Med* 2010; 51:1–4. DOI: 10.2967/jnumed.109.065656.

Vellema M, Van der Linden A, Gahr M. Area-Specific Migration and Recruitment of New Neurons in the Adult Songbird Brain. *J Comp Neurol*. 2010 May 1;518(9):1442-59. DOI 10.1002/cne.22281.

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