EIBIR Session at ECR 2010

The European Institute for Biomedical Imaging in Research (EIBIR) is very proud to have held the 2nd EIBIR Session at ECR 2010 in Vienna that attracted more than 70 attentive listeners. The Session showed an impressive picture of EIBIR itself as a central hub for research communication & networking activities and for the development of strategic plans and cutting-edge research ideas to foster collaboration in biomedical imaging throughout Europe.

G. Krestin, Chairman of the EIBIR General Meeting

Prof. Gabriel Krestin, Chairman of the EIBIR General Meeting welcomed the huge audience and expressed his pleasure to see that the interest in European activities and the EIBIR's networking activities are still of high interest. He briefly described the development and mission of EIBIR and proudly presented the speakers. In particular, it was a great honour for EIBIR to welcome **Dr. Philippe Jehenson**, European Commission, as a guest speaker who gave a detailed presentation on the latest funding possibilities and budget 2007-2013 for biomedical imaging research within the 7th European Framework Programme for Research and the increased emphasize on imaging. Of particular interest is the planned 2011 Conference on European perspectives in personalised medicine where EIBIR expressed its interest to participate in a workshop on imaging. As shown up at the launching session in 2009, EU funding possibilities were again of high interest at the audience. With these funding programmes new developments and practicable scheme on a scientific level may be brought forward within Europe.

Prof. Jürgen Hennig, EIBIR Scientific Director, presented news on the EIBIR scientific strategy and its differentiated scientific horizons like: cell or cancer imaging, chemistry, biomedical image analysis and evidence-based radiology, etc. The network helps to set up and coordinate collaborations and international projects and supports the organisation and promotion of meetings. Answering the questions on „What can EIBIR do for scientists?" and „What the scientists can do for EIBIR" keeps a clear and transparent message: EIBIR is an organisation for scientists driven by scientists and is an efficient tool ready for use.
With the composition of the new appointed Scientific Advisory Board with 20 members specialised in biomedical imaging on a European dimension, EIBIR will be a vehicle that takes active care to let an idea sprout and become real.

Prof. Francesco Sardanelli, Milan/IT, presented the newly launched European Working Group on Evidence-Based Radiology within the EIBIR Joint Initiative EuroAIM. The aim of the group will be to assess which topics have been covered by systematic review and meta-analyses over the last 10 to 15 years and which have not. In addition, the group will identify uncovered topics with sufficient original primary studies to be meta-analysed. Societal impact is rarely reached by radiological research. Hence, a European-Based Radiology approach is important in terms of ethics, economy and professional issues. He pointed out that European-Based Radiology needs to be adopted by European radiologists to create a young radiological working group.

Speakers at the EIBIR Session:
M. Hoehn, J. Hennig, N. Karssemeijer, P. Jehenson, G. Krestin, F. Sardanelli, J. Frokajer

Prof. Mathias Höhn, Köln/Germany, presented the EU project ENCITE, the European Network for Cell Imaging and Tracking Expertise. When talking about „stem cell based regeneration in the brain: the contribution of molecular imaging“, he welcomed the audience to a different trip on experimental neuroscience, such as use of stem cells after stroke and non-invasive imaging methods to label cells and implant into animal, to test if it does anything therapeutically and to see what cells then do.
A new challenge is to also observe the functional, cell-specific fate of these cells during their dynamics, such as: do they differentiate? It was searched for neuron-specific contrast agents and as a result, strong contrasts in brain tissues were found, but liver tissues showed low effects. Hence, cell specific effects were evaluated in vivo and a robust protocol for mature neurons was developed. Science in imaging needs in fact not just weeks and months but many years to get outstanding findings useful for (pre-)clinical applications and recommends to be patient with non-invasive imaging.

Prof. Nico Karrsemeijer , associate professor of medical image analysis from the Radboud Universiteit Nijmegen/NL, gave a very illuminating presentation on the EU project HAMAM, which is also coordinated by EIBIR. The project tackles the challenge of enhancing the sensitivity and specificity of breast cancer detection and diagnosis by integrating available multi-modal images and patient information plus a number of specialized tools for workflow assistance and computer aided diagnosis on a single clinical workstation. The presenter gave not only an overview of the current challenges of breast cancer diagnosis but also outlined the technical challenges of the project. He also pointed to the high potential the development of this workstation has for the image-based breast cancer diagnosis in Europe.

Prof. Jørgen Frøkiær, Aarhus/DK, a member of the ESFRI (European Strategy Forum on Research Infrastructures) Biomedical Sciences Thematic Working Group and partner of the Research Infrastructure project Euro-BioImaging presented an outline, what the EU framework can offer for the imaging society in terms of infrastructure.
ESFRI, an EC independent expert forum identifies Research Infrastructures of pan European interest in order to strengthen Europe`s scientific outreach, to facilitate multilateral initiatives and to support a coherent and strategy led approach to policy making. The European Roadmap for research Infrastructures is published by ESFRI and currently includes 10 projects in the field of Biomedical Sciences. Successful Research Infrastructures are characterised by scientific excellence, openness to external users, and by the provision of unique services for cutting edge research.

Euro-BioImaging, the Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences, is listed on the ESFRI roadmap and aims to establish a pan European Infrastructure for biomedical imaging in a harmonised manner. It brings together the key research areas in imaging stretching from basic biological imaging with advanced light microscopy up to the clinical and epidemiological level of medical imaging of patients and populations. The Research Infrastructure will run through 3 phases: the Preparatory Phase, Construction Phase and Operation Phase. The initial project phase will be funded by the EC. From the Construction Phase onwards funding has to be obtained from Member States e.g. via national governmental grants, private foundations, multinational grants or collaborations with industry.

EIBIR, led by Prof. Gabriel Krestin, Chairman of the EIBIR General Meeting, is a non-profit, limited liability company that was founded in 2006 and is dedicated to the coordination of research. It supports networking activities in research and plays a key role in spreading good practice and promoting common initiatives and interoperability in the field of biomedical imaging research.

More information on the EIBIR networking activities and project results can be found at:
www.eibir.org, www.encite.org, www.hamam-projects.org, www.eurobioimaging.eu