

## FOR IMMEDIATE RELEASE

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## WMIC 2014: Propelling Discoveries with Molecular Imaging

**CULVER CITY, Calif., October 8, 2014 -** The 7th annual meeting of the World Molecular Imaging Society, which just concluded in Seoul, Korea, highlighted new discoveries in molecular imaging during 180 oral presentations and more than 650 scientific poster presentations from world-renowned institutions from around the globe.

"WMIS is based on innovation, imagination and integration. Our members are inventing and combining strategies that drive scientific investigation and we are creating paradigm shifts in the understanding of biological systems," said WMIS President Dr. Jason Lewis (Emily Tow Jackson Chair, Memorial Sloan Kettering).

This multidisciplinary research covers developments of imaging technologies and chemical probes, which spans the study of cells and animal models, to critical "first-in-human" studies that are impacting clinical care. Exemplifying the high creativity brought to molecular imaging by scientists from many research disciplines and from around the world, highlights of key research presented at the World Molecular Imaging Congress include:

- Hybrid Imaging to Monitor Blood Oxygenation in the Brain: An innovative method that combines ultrasound imaging with optical imaging has been developed by Dr. Vasilis Ntziachristos, Daniel Razansky and their colleagues at the Max Planck Institute for Biological Cybernetics, in Tübingen, Baden-Württemberg, Germany. This hybrid imaging method is designed to track changes in blood oxygenation in the brain, which has profound implications for assessing treatment outcomes in brain cancer and neurological diseases.
- Nanoparticle Drug Delivery for Targeted Therapy: Nanoparticle technologies and drug development efforts have been combined to create a new method that can "light up" a tumor for detection with optical imaging. This method also uses light to cause a drug to become active only in the tumor tissue, which can spare surrounding normal tissues from being affected by potentially toxic drugs. This combined therapeutic, diagnostic, and theranostic study was presented by Dr. Xing Bengang and his colleagues at Nanyang Technological University in Singapore.
- Fiber Optics Support Non-invasive Detection of Lung Infections: Late-breaking results from Dr. Uwe Himmelreich and his colleagues at the University of Leuven in Belgium demonstrated how a fiber optic bundle can be used to non-invasively detect microscopic fungal infections within the lungs. The early detection of lung infections can clearly lead to improved treatment options and faster recovery.

"We are committed to bringing key technologies that enable the study of biology in the complexity of living systems to the greater scientific community, and to advancing the imaging tools that will help patients who suffer from the most devastating diseases. Disseminating knowledge on the development and deployment of new tools and technologies on a global scale is the aim of WMIS and we work with our international colleagues to ensure that our voice reflects the advances taking place around the world," stated Dr. Christopher Contag (WMIS President-Elect, Professor at Stanford University).

# Gold Medal Award Recognizes Pioneering Work in Hyperpolarized MRI

For pioneering work in the field of hyperpolarized MRI, for the introduction of new and novel hyperpolarizable agents with biological significance, and for advancing the applications of these agents for in vivo diagnosis in humans, the World Molecular Imaging Society bestowed the Gold Medal Award to three outstanding research teams. The Gold Medal Award is jointly made to UCSF Professors Nelson, Kurhanewicz and Vigneron, GE-Amersham Professors Golman and Ardenkjaer-Larsen, and University of

Cambridge Professor Brindle and colleagues. The WMIS Gold Award winners were recently featured in an article in <u>Molecular Imaging</u>.

"While the field of hyperpolarized MRI has exploded over the past decade, the Gold Medal winners have led the way in identifying novel biologically relevant compounds that can be exploited by this technology," Dr. Zaver Bhujwalla (John Hopkins University), who chaired the WMIS Gold Medal committee, said. "There is a great unmet need for more precise and versatile molecular imaging technologies, and the development of such means would have an enormous public-health impact. Hyperpolarized MRI is an emerging technology with the unique capacity to image a large variety of metabolic processes in near real-time in vivo and in 3D. The WMIS is leading the effort to educate the scientific community about the advantages of this technology, both pre-clinically and clinically."

### Young Investigator Award Recognizes Next Generation Researchers

The World Molecular Imaging Congress proudly recognizes the outstanding commitment to research and endeavor of the next generation of researchers with the 2014 Young Investigator Award. Honoring distinction in his work based on the quality of the science and the clarity of presentation, the 2014 Young Investigator Award was presented to Florian C. Maier, Werner Siemens Imaging Center, Department of Preclinical Imaging and Radiopharmacy, Eberhard Karls University Tübingen, Germany for his work entitled "Quantification of cerebral  $\beta$ -amyloidosis and rCBF with PET/MRI at 7 T and high-resolution  $\mu$ MRI at 16.4 T in APP23 mice".

Two young investigators were also recognized as finalists for the 2014 award: Ines R. Violante of IBILI, Faculty of Medicine, University of Coimbra, Coimbra, Portugal for the paper entitled "GABA alterations in patients with Neurofibromatosis type 1: a multimodal 11C-Flumazenil PET and MRS study" and Olga Volotskova, Radiation Oncology, School of Medicine, Stanford University, for her research entitled, "Cerenkov Radiation Energy Transfer (CRET) by Gold Nanoclusters as a Novel Strategy for Tumor Imaging and Delineation".

#### ABOUT WORLD MOLECULAR IMAGING SOCIETY

The WMIS is dedicated to developing and promoting translational research through multimodality molecular imaging. The education and abstract-driven WMIC is the annual meeting of the WMIS and is held in conjunction with partner societies including the European Society for Molecular Imaging (ESMI) and the Federation of Asian Societies for Molecular Imaging (FASMI). WMIC provides a unique setting for scientists and clinicians with very diverse backgrounds to interact, present, and follow cutting-edge advances in the rapidly expanding field of molecular imaging that impacts nearly every biomedical discipline. Industry exhibits at the congress included corporations who have created the latest advances in preclinical and clinical imaging approaches and equipment, providing a complete molecular imaging educational technology showcase. For more information: www.wmis.org

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