

FOREWORD

This issue and the subsequent issue of IJBEM include selected papers presented at NFSI & ICBEM 2011: The 8th International Symposium on Noninvasive Functional Source Imaging of the Brain & Heart and the 8th Intl. Conference on Bioelectromagnetism held in Banff Alberta, Canada on May 13-16, 2011.

The symposium is chaired by Prof. Zoltan Koles, University of Alberta. The meeting is sponsored by the International Society for Noninvasive Functional Source Imaging (ISFSI), International Society for Bioelectromagnetism (ISBEM) and the local institution: Campus Saint-Jean, University of Alberta.

The meeting invited ten distinguished guest speakers. Their talks were: “Non-invasive localization of the epileptic focus with EEG-fMRI” by Prof. Jean Gotman, Montreal Neurological Institute; “Illuminating Brain Function: Functional Near-Infrared Spectroscopy of Cognitive Dynamics” by Prof. Gabriele Gratton, University of Illinois; “Functional Imaging of Brain and Cardiac Electrical Activity” by Prof. Bin He, University of Minnesota; “Hyper excitable 'Epilepsy' Networks Explored by EEG – fMRI” by Prof. Graeme Jackson, University of Melbourne; “Combining EEG Mapping and fMRI to reveal cerebral network dynamics” by Prof. Christoph Michel, University of Geneva; “MEG and fMRI as probes of cognitive function: Multimodal imaging of language perception and production” by Prof. Riitta Salmelin, Aalto University; “Functional Source Imaging of Spinal Cord Activity from its Evoked Magnetic Field” by Prof. Kensuke Sekihara, Tokyo Metropolitan University; “Image-Based Cardiac Modeling: Implications for Ventricular Ablation, Cardiac Resynchronization Therapy and Arrhythmia Mechanisms” by Prof. Natalia Trayanova, Johns Hopkins University; “Functional Brain Imaging Using MREIT and EIT: Requirements and Feasibility” by Prof. Eung Je Woo, Kyung Hee University; “From phantoms to humans: development of intracranial EEG fMRI” by Prof. Paolo Federico, University of Calgary.

Besides all these invited talks, 75 original contributions are presented. This issue includes selected papers on EEG, MEG, fMRI and other bio magnetic phenomena. Papers on ECG and those focusing on modeling and methodology will be published in the subsequent issue Vol. 14, No. 1. Readers will learn the latest trends in the field of noninvasive functional source imaging and study of bioelectromagnetism.

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