

BRIDGING THE GAP BETWEEN CLINICAL NEEDS AND TECHNOLOGICAL SOLUTIONS

International Society for Magnetic Resonance in Medicine www.ismrm.org

ISMRM WORKSHOP SERIES 2018

GROUNDBREAKING MR SCIENCE . SUPERIOR MR EDUCATION . GLOBAL NETWORKING

ISMRM Workshop on Advanced Neuro MR: Best Practices for Technical Implementation



Seoul, South Korea • 26–28 March 2018 The Korea Science and Technology Center (KOFST)

TARGET AUDIENCE: This workshop is intended for MR physicists who develop MR technologies and/or support clinical and neuroscience research, as well as for high-end users who will benefit from the comprehensive presentations and discussions in order to define the best practices and resources available to the MR community; ISMRM members including MR scientists and engineers; high-end users including clinicians, neuroscientists and psychologists; and postdoctoral fellows, Ph.D. and M.D./Ph.D. students, residents and fellows using – or considering the use of – neuro MR technologies.

ORGANIZINGCOMMITTEE

Chair: In-Young Choi, M.D., Ph.D. University of Kansas Medical Center Kansas City, KS, USA

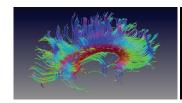
Peter Jezzard, Ph.D. University of Oxford Oxford, England, UK

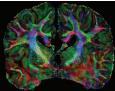
Seong-Gi Kim, Ph.D. Institute for Basic Science and Sungkyunkwan University Suwon, South Korea

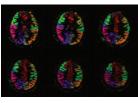
James G. Pipe, Ph.D. Barrow Neurological Institute Phoenix, AZ, USA

Daniel K. Sodickson, M.D., Ph.D. New York University New York, NY, USA

Peter van Zijl, Ph.D. Johns Hopkins University Baltimore, MD, USA









OVERVIEW

In our pursuit of improving brain health and ameliorating disease conditions, rapid advances in innovative neuro MR technologies and in neuroscience and clinical research increasingly demand scientists to be equipped with expertise in multiple MR techniques. In recognition of the current brain research climate and the high demands on incorporating multiple MR techniques in each scan, we have identified multiple advanced neuro MR techniques for clinical and neuroscience applications for review and discussion with the goal of facilitating the collaborative exchange of MR technical capabilities and introducing emerging MR techniques for the future.

This workshop will feature speakers who are not only leading efforts in advanced neuro MR techniques, but who are also providing important resources to enhance the quality of global MR science. Each technical category will be allotted time for round-table discussions to obtain a consensus on best practices and their pros and cons.

- Fast and Robust Imaging
- Diffusion
- Perfusion
- Susceptibility MRI
- Advanced MRS
- MR Fingerprinting & Parametric Mapping
- Magnetization Transfer/CEST
- Emerging Advanced MRS Strategies
- fMRI & Brain Connectome

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be able to:

- Identify advanced neuro MR techniques and best practices that are ready for clinical and neuroscience applications;
- Discuss emerging neuro MR techniques that could impact clinical applications;
- Describe best available data acquisition, processing, reconstruction and analysis strategies for clinical and neuroscience applications; and
- Review readily available sources of recommended advanced neuro MR techniques.

FOR MORE INFORMATION INCLUDING HOUSING & REGISTRATION, PLEASE VISIT: www.ismrm.org/workshops/18Neuro/ OR CALL: +1 510 841 1899