

BRIDGING THE GAP BETWEEN CLINICAL NEEDS AND TECHNOLOGICAL SOLUTIONS

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

ISMRM WORKSHOP SERIES 2017

GROUNDBREAKING MR SCIENCE . SUPERIOR MR EDUCATION . GLOBAL NETWORKING

Quantitative MRI in White Matter Disorders: Useful, Usable and Used?



COMMITTEE CHAIRS:

Chair: Piotr Kozlowski, Ph.D. UBC MRI Research Centre Vancouver, BC, Canada

Linda Chandler University of British Columbia Vancouver, BC, Canada

Mark D. Does, Ph.D. Vanderbilt University Nashville, TN, USA

Claudia A. Gandini Wheeler-Kingshott, Ph.D. UCL Institute of Neurology London, England, UK

Cornelia Laule, Ph.D. University of British Columbia Vancouver, BC, Canada

David K. B. Li, M.D., FRCPC University of British Columbia Vancouver, BC, Canada

Alex L. MacKay, D.Phil. University of British Columbia Vancouver, BC, Canada

Bruce Pike, Ph.D. University of Calgary Calgary, AB, Canada

Anthony Traboulsee, M.D. University of British Columbia Vancouver, BC, Canada

Hugo Vrenken, Ph.D. VU University Medical Center Amsterdam, The Netherlands

Vancouver, BC, Canada • 07-10 February 2017 Fairmont Waterfront Hotel

TARGET AUDIENCE: This workshop is designed for members of the ISMRM White Matter Study Group, basic scientists and physicians using MRI in studying white matter disorders, computer scientists interested in clinical platform and multi-modal image analyses, researchers interested in clinical trial design and analysis, neuroscientists and clinicians (neurologists, radiologists, neuropathologists), trainees and early career researchers.





15 CONTRACTOR CONTRACT

OVERVIEW

This workshop will focus on the role that quantitative MRI can play in examining White Matter (WM) diseases in a clinical setting. Despite great advances in the development of sophisticated quantitative MRI (qMRI) techniques capable of characterizing central nervous system (CNS) tissue, these techniques have yet to be proven useful in every-day clinical practice. The main objective of the proposed workshop is to address this important issue.

The workshop is structured as a series of sessions devoted to specific qMRI techniques: resting state fMRI, DTI, susceptibility MRI, myelin imaging, and spectroscopy. Each session consists of a technical summary, an overview of the current clinical applications and a series of proffered talks. At the end of each session a panel of experts will lead a discussion on the clinical applicability of a given technique, with the purpose of assessing whether the technique is indeed useful and usable, and providing specific recommendations on what needs to be done so it can be used in every-day clinical practice. The workshop will also include an opening lecture that will discuss the use of MRI techniques in characterizing WM disorders, a "cutting edge technologies" session, and poster presentations.

EDUCATIONAL OBJECTIVES

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

- Discuss the technical aspects of the quantitative MRI techniques used to study WM disorders;
- Recognize the limitations of these techniques with regards to their clinical applications;
- Explain the key role of quantitative MRI in cross-sectional and longitudinal studies;
- Describe the importance of appropriate image analysis tools, especially when dealing with multi-modal analysis; and
- Summarize the current state of the field and gain a glimpse of where the future may lead.

FOR MORE INFORMATION INCLUDING HOUSING & REGISTRATION, PLEASE VISIT:

www.ismrm.org/workshops/WhiteMatter17/

OR CALL: +1 510 841 1899

The International Society for Magnetic Resonance in Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The International Society for Magnetic Resonance in Medicine designates this live activity for a preliminary maximum of 15.00 AMA PRA Category 1 CreditsTM Physicians should claim only the credit commensurate with the extent of their participation in the activity.