

ISMRM Workshop on Osteoarthritis Imaging

(11th International Workshop on Osteoarthritis Imaging)



Sydney, NSW, Australia • 01-03 June 2017
 Sydney Harbour Marriott Hotel at Circular Quay

TARGET AUDIENCE: This workshop is designed for scientists and clinicians including physicists, engineers, computer scientists, radiologists, rheumatologists and orthopedic surgeons, students working on pulse sequences (rf coil design, image reconstruction, musculoskeletal and body imaging), MRI technologists, clinical investigators and anyone pursuing imaging of OA.

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OVERVIEW

The Osteoarthritis Imaging Workshop will focus on the rapidly developing magnetic resonance imaging (MRI) and other imaging modalities for assessment of osteoarthritis (OA). MRI is useful for assessment of joint structures such as cartilage, bone, ligaments, menisci, and synovium. It has also shown promise in detection of biochemical changes in these tissues by measurement of MRI parameters (including T2, T1rho). However, at the current time the FDA does not accept MRI as a trial endpoint for drug trials.

The emphasis will be both on the emerging imaging techniques as well as promoting the use of imaging based measures of OA as tools in epidemiological research and clinical trials, understanding OA-pathoetiology and OA-related joint biomechanics, and eventually, in diagnosis and treatment of OA. Presentations will focus on recent advances

in designs of pulse sequence, coil designs, and applications to enhance our understanding of the OA disease process.

The format will include both educational and topical scientific presentations describing cutting-edge technical developments for OA imaging, with the aim of enhancing mutual understanding across several technical areas of research and bridging knowledge gaps to areas of clinical and OA applications. Abstracts will be selected as either brief proffered presentations or as posters. Invited presenters will include international researchers in respective areas of OA and MRI research including junior scientists. A pre-conference hands-on session will familiarize researchers with preclinical osteoarthritis models and application of imaging in that context.

EDUCATIONAL OBJECTIVES

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

- Describe the state-of-the art techniques in imaging of osteoarthritis;
- List currently available, established and emerging imaging techniques;
- Identify the challenges and opportunities for measurements of osteoarthritis in all joint tissues, including bone, cartilage, synovium, menisci and ligaments;
- Discuss the use of different imaging modalities for clinical research and clinical applications in osteoarthritis;
- Assess the research needs for moving the field forward on MRI Biomarker Qualification and regulatory acceptance;
- Illustrate how different imaging modalities can be used to generate biomechanical model of a joint; and
- Compare the merits of different pre-clinical models of osteoarthritis, as taught in the hands-on session of the workshop.

**FOR MORE INFORMATION INCLUDING HOUSING & REGISTRATION, PLEASE CALL:
 +1 510 841 1899 OR VISIT: www.ismrm.org/workshops/Osteo17/**