

ISMRM WORKSHOP ON Advances in MR Flow



18-20 October 2024



University of Calgary
Calgary, AB, Canada



Abstract Submission Deadline: 12 July 2024 | 23:59 UTC

OVERVIEW

This workshop program will cover the latest methodological developments that are making in vivo applications feasible and reliable and will investigate how these capabilities provide new insights into clinical application. Applications in the clinical settings will be highlighted with reviews of current state-of-the-art and potential high-impact applications. The program will feature invited scientific presentations, proffered papers, a poster session, extensive panel discussions, and a technologist hands-on session. A Young Investigator Award for which students and post-doctoral fellows are eligible will be awarded based on the quality of their work and presentation.

EDUCATIONAL OBJECTIVES

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

- Identify the principal methods for evaluating cardiovascular flow;
- Compare the advantages and limitations of MR methods relative to other competitive modalities in assessing flow;
- Assess the reproducibility and reliability of flow quantitation methods and their dependence on type of acquisition;
- Describe the physiologically relevant descriptors that can be extracted from MR flow quantitation;
- List post-processing methods for providing rigorous approaches to data presentation and analysis;
- List approaches for extracting advanced flow features from in vivo measurements, such as turbulent kinetic energy, pressure drops, and flow vorticity;
- Critique the use of contrast agents in MR flow quantitation;
- Describe the use of MR flow quantitation in different organ systems and critique the clinical value of these methods; and
- Describe methodological developments that influence scan time, measurement accuracy, and clinical application.

TARGET AUDIENCE

- Members of the MR Flow and Motion Quantitation Study Group
- Basic scientists and physicians using MR in cardiovascular investigations
- Clinicians (vascular, neurovascular, and cardiac surgeons; radiologists, cardiologists, neurologists)

ORGANIZING COMMITTEE

Chair: Julio Garcia Flores, Ph.D.

Organizing Committee: Alex Barker, Ph.D.; Emilie Bollache, Ph.D.; Thekla Oechtering, M.D.; Leonardo A. Rivera-Rivera, Ph.D.; Susanne Schnell, Ph.D.; Pim van Ooij, Ph.D.

Program Committee: Daniel B. Ennis, Ph.D.; Julia Geiger, M.D.; Daniel Giese, Ph.D.; Kevin Michael Johnson, Ph.D.; Christopher K. Macgowan, Ph.D.; Vitaliy Rayz, Ph.D.; Sebastian Schmitter, Ph.D.; Martin Sherriff, B.Appl.Sc., MRT(MR); Julio Sotelo, Ph.D.

Trainee Observers: Liliana Ma, M.D., Ph.D.; Eva S. Peper, Ph.D.; Chiara Trenti, M.Sc.