

### ISMRM WORKSHOP ON

# **Body MRI:**

## **Unsolved Problems & Unmet Needs**



27-30 March 2025



Children's Hospital of Philadelphia (CHOP) Philadelphia, PA, USA

EXTENDED Abstract Submission Deadline: 02 January 2025 | 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 didactic lectures, case-based scenarios, invited scientific presentations, poster session, and moderated panel discussions. Awards for eligible students and post-doctoral fellows will be awarded based on the quality of the presented work and presentation didactics. Question & answer sessions and social breaks between scheduled sessions will provide a venue for informal discussion and community building.

Program Topics:

- a. Protocol optimization including mitigating artifacts, protocol design focusing on quality, efficiency, and reproducibility;
- b. Appropriateness of use and accessibility of MRI in relation to other modalities such as PET/CT and contrast-enhanced US;
- c. Advances, opportunities and pitfalls of Artificial Intelligence and its integration into clinical practice from workflow to image acquisition/post-processing to multimedia reporting;
- d. Team science and change management accelerating the translation of new advances in body MRI to clinical practice from various perspectives such as clinicians, scientists, and vendors; and
- e. Quantitative imaging with a focus on unmet needs for research versus clinical applications.

#### **TARGET AUDIENCE**

Radiologists, physicists, biomedical engineers, computational scientists, technologists, and other scientists involved in using advanced body MRI in clinical practice, including trainees of all levels, and committed to developing or translating advanced technologies into clinical practice to address unmet needs in clinical body MRI.

#### **EDUCATIONAL OBJECTIVES**

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

- Describe recent advances in MRI that can mitigate motion and susceptibility artifacts that are still common in Body MRI;
- Identify protocols that can be optimized using the latest MRI technology, including faster and more patient-friendly protocols that are more accessible and robust;
- Manage consensus building toward standardization of protocols at your institution;
- Assess the quality and reproducibility of quantitative imaging biomarkers to determine their clinical utility;
- Appraise and critique the quality of new AI/ML algorithms and prepare to implement them in clinical
  practice safely and efficiently; and
- List post-processing methods for providing rigorous approaches to data presentation and analysis.

#### **ORGANIZING COMMITTEE**

Co-chairs: Elizabeth Hecht, M.D. & Suraj Serai, Ph.D.

**Organizing committee:** Ryan Brunsing, M.D., Ph.D.; Alexander R. Guimaraes, M.D., Ph.D.; Houchun Harry Hu, Ph.D.; Sila Kurugol, Ph.D.; Kristina Ringe, M.D., Ph.D.; Ali B. Syed, M.D. & Holden Wu, Ph.D.

