

## **PRELIMINARY PROGRAM**

## Monday, April 14

7:30 AM	Breakfast

#### 8:00 AM Welcome and Introduction

### **Clinical Evidence and Trial Progress in MRgRT**

8:30 AM

- Michael Chuong, MD, Miami Cancer Institute, Miami, FL, United States
- Anna Bruynzeel, MD, PhD, Amsterdam University Medical Centers, Amsterdam, The Netherlands
- Himanshu Nagar, MD, MS, Memorial Sloan Kettering Cancer Center, New York, NY, United States

# Proffered Papers 1 - Clinical Studies and Applications in MRgRT

Time	Title	Speaker
9:30 AM	A Super-Resolution model for auto-segmentation of low-resolution Prostate MR-Linac data	Rob Tijssen
9:40 AM	Simulation and Pre-Planning Omitted Radiation Therapy (SPORT): Advancing MR-Guided Adaptive Radiotherapy for Prostate Cancer	Tsuicheng Chiu
9:50 AM	Liver Function Preservation after Feraheme-Enhanced MRI-Guided SBRT on 1.5T MR-Linac in Patients with HCC and Advanced Hepatic Cirrhosis	Parisa Shamsesfandabadi

9:30 AM



10:00 AM	Low-field (0.55T) respiratory-resolved and pulmonary functional MRI for lung radiotherapy	Jessica Scholey
10:10 AM	Deliverability of biologically guided RT plans driven by quantitative MR imaging	Annette Haworth
10:20 AM	Evaluating T1 and T2-weighted MR images for improved liver GTV delineation and subsequent ITV generation using a novel 4D multitasking MR sequence	Theodore Geoghegan

10:30 AM Break

# Improving Patient Throughput: Novel Workflows and Tools in MRgRT

11:00 AM

- Eric Paulson, PhD, Medical College of Wisconsin, Milwaukee, WI, United States
- Harini Veeraraghavan, PhD, Memorial Sloan Kettering Cancer Center, New York, NY, United States
- Kathyrn Mittauer, PhD, Miami Cancer Institute, Miami, FL, United States

12:00 PM **Lunch** 

### **Proffered Papers 2 - MRI for Treatment Planning**

1:00 PM

Time	Title	Speaker
1:00 PM	Evaluating MR based ultra-hypofractionated focal boost to intraprostatic lesions for high-risk	Tufve Nyholm



	localized prostate cancer with histological reference	
1:10 PM	Longitudinal per fraction lesion segmentation and tracking via few-shot deep learning for MR-guided radiotherapy of prostate cancer patients	Josiah Simeth
1:20 PM	Identification of Radiotherapy Target Volumes in Glioblastoma using Advanced MRI and 18F-DOPA PET/CT	Eyesha Younus
1:30 PM	A simplified online adaptive workflow for long-course MR-guided radiotherapy in esophageal cancer	Koen Kuijer
1:40 PM	Investigating artefact-free online MR imaging during actively scanned proton therapy using a bi-directional whole-body in-beam MRI scanner	Emely Weichert
1:50 PM	Initial clinical experience of stereotactic body radiotherapy (SBRT) for lung metastases with target intrafraction tracking and gating by means 1.5T MR-Linac	Michele Rigo

# Sustainability in MRgRT: Strategies for Resource Management and Local Practices

#### 2:00 PM

- Rob Tijssen, PhD, Catharina Hospital, Eindhoven, The Netherlands
- Daniel Hyer, PhD, University of Iowa, Iowa City, IA, United States

### 3:00 PM Break



# Young Investigator Award Finalists Presentations

Time	Title	Speaker
3:30 PM	Patient-specific imaging modality agnostic virtual digit twins modeling temporally varying digestive motion	Jorge Tapias Gomez
3:40 PM	Towards a clinically-relevant computational platform for systematically adapting radiation therapy for treating glioma	Hugo J Miniere
3:50 PM	Highly-Accelerated, Time-Resolved 4D Golden-Angle Radial MRI with Self-Supervised Learning	Haoyang Pei
4:00 PM	A Longitudinal Study of Functional Connectivity Changes of Patients with Diffuse Glioma After Chemoradiotherapy using Aberrancy Parcel Map Analysis of Resting-state Functional MRI	Tong Zhu
4:10 PM	Correlation of histopathological cell density and hypoxic fraction with time-dependent diffusion MRI in glioblastoma	Minea Jokivuolle
4:20 PM	Deducing Cardiorespiratory Motion of Cardiac Substructures Using a Novel 5D-MRI Workflow for Radiotherapy	Chase Ruff
4:30 PM	Distortion-Free Diffusion-Weighted Imaging of the Prostate Using TGSE-Based Golden-Angle PROPELLER Acquisition and Deep Learning Denoising	Jingjia Chen
4:40 PM	Modality-AGnostic Image Cascade: Cross-Modality MAGIC for improved MR-Linac Cardiac Segmentation	Nicholas Summerfield
4:50 PM	Segmentation Regularized Registration Training Improves Multi-Domain Generalization of Deformable Image Registration for MR-Guided Prostate Radiotherapy	Sudharsan Madhavan

3:30 PM



# Novel Imaging Biomarkers: Leveraging Quantitative MRI for Image-Guided Adaptive Radiotherapy

#### 5:00 PM

- Faisal Mahmood, PhD, Odense University Hospital, Odense, Denmark
- Michael Dubec, PhD, University of Manchester, Manchester, United Kingdom
- Angus Lau, PhD, Sunnybrook Health Sciences Centre, Toronto, Canada

#### 6:30 PM

**Reception (Location TBD)**