

AI in Practice for PET and Nuclear Medicine

30th November 2022 – Online

10:20 – 10:25 **Welcome and Introduction**

Morning Session – Basics of AI and Implementation

10:25 – 11:05 **Machine learning – What it is, how it works, the nuclear medicine data it could be applied to and a live demo**

Richard Meades, Royal Free London NHS Foundation Trust

11:05 – 11:35 **Image reconstruction in PET: from state-of-the-art to AI**

Andrew Reader, King's College London

11:35 – 12:00 **An In-House Automated Segmentation Tool for MUGA Scans**

Jonathan Taylor, Sheffield Teaching Hospitals NHS Foundation Trust

12:00 – 12:30 **Role of AI Research Radiographers – Artificial Intelligence Imaging Hub**

Sharon Vit and Robby Emsley, Royal Marsden NHS Foundation Trust

12:30 – 14:00 **Lunch**

Afternoon Session 1 – Development and Clinical Use of AI in PET and Nuclear Medicine

14:00 – 14:05 **Welcome (afternoon session)**

14:05 – 14:30 **BRAIN AI: An Artificial Intelligence Tool for Dementia Diagnosis**

Sofia Michopoulou, University Hospital Southampton NHS Foundation Trust

14:30 – 15:00 **AI in PET and Nuclear Medicine: Separating Signal from the Noise**

Shah Islam, Imperial College London

15:00 – 15:20 **Coffee Break**

Afternoon Session 2 – Development and Clinical Use of AI in PET and Nuclear Medicine (continued)

15:20 – 15:50 **Artificial Intelligence and Nuclear Medicine: Best Practices and Trustworthy Ecosystems**

Arman Rahmim, University of British Columbia and BCCA

15:50 – 16:10 **Panel Discussion**

16:10 **Close**