



## Plenary Session 2

Sunday, September 10, 11:30–13:00

### Session Title

**New Imaging Techniques – Jump Aboard or Watch and Wait**

### Chairpersons

**Dimitris Visvikis** (Brest, France)

**Laetitia Imbert** (Nancy, France)

### Programme

11:30 – 11:33 Introduction by Chairperson

11:33 – 11:45 **Francesca M. Buffa** (Milan, Italy): AI Technology: Living up to Expectations?

11:45 – 11:57 **Laetitia Imbert** (Nancy, France): SPECT/CT CZT based Systems: Jump Aboard

11:57 – 12:09 **John Dickson** (London, UK): SPECT/CT CZT based Systems: Watch and Wait?

12:09 – 12:21 **Antonia Dimitrakopoulou-Strauss** (Heidelberg, Germany): Total Body PET: Opportunities and Challenges

12:21 – 12:33 **Axel Rominger** (Bern, Switzerland): Total Body PET: Jump Aboard

12:33 – 12:45 **Simon Wan** (London, UK): PET/MR: Is it still worth it?

12:45 – 12:57 **May Abdel Wahab** (Vienna, AU) Innovation and Sustainability in Nuclear Medicine: the IAEA Perspective

12:57 – 13:00 Summary by Chairperson

### Educational Objectives

1. Learn about the advances and expectations of new technologies (hardware and software) introduced in nuclear medical imaging
2. Learn about the most up-to-date developments in translating these technologies into clinical practice
3. Develop the necessary knowledge to critically assess such new technologies and their interest in clinical practice



### **Summary**

Since the revolution introduced by the PET/CT multimodality system which was very rapidly embraced and became the gold standard in clinical practice, numerous technological innovations have been introduced in the last decade. These include the introduction of new multimodality devices such as PET/MR, and more recently CZT based SPECT/CT and finally Total Body PET systems. On the other hand, over the last few years we have been witnessing an increasing application of artificial intelligence in medical imaging including in Nuclear Medicine, albeit with a reduced rhythm in comparison to radiology. All of these hardware and software solutions represent clear advantages over more traditional technologies but at the same time there are also numerous questions raised on their clinical value and potential impact for clinical applications in association with their increased cost. This session aims at providing evidence on both sides of this argument.

### **Key Words**

new technologies, AI, Total Body PET, PET/MR, CZT SPECT/CT systems