The detailed programme of Optimisation in X-ray and Molecular Imaging 2020 is now available at the conference website (www.oxmi2020.org). The scientific programme consists of more than 80 oral and poster presentations by authors from over 15 countries and includes invited talks from well-known experts in the field. Registration pricing and details are available at www.oxmi2020.org.

OXMI 2020 will cover a wide area of research related to optimisation of medical imaging and is intended for a broad audience of medical physicists, radiologists, nuclear medicine physicians, engineers, radiographers and biomedical scientists, as well as representatives for authorities and manufacturers. The conference is the 5th in a series of scientific conferences focusing on optimisation of medical imaging, with special emphasis on image quality evaluation and radiological protection. Previous conferences have been held in Malmö, Sweden (1999, 2004, 2009) and Gothenburg (2015).

Invited speakers:

Göran Bergström, University of Gothenburg & Sahlgrenska University Hospital, Sweden
How can machine learning advance large population trials? – The Swedish CArdioPulmonary bioImage Study (SCAPIS)

Mika Kortesniemi, HUS Medical Imaging Center, University of Helsinki, Finland
From image quality to care outcome – Evolved optimisation process supported by AI/Deep Learning

Glenn Flux, Royal Marsden Hospital & Institute of Cancer Research, UK
Personalised treatment planning for molecular radiotherapy
Part 1: The Good – Benefits and opportunities
Part 2: The Bad – Risks and threats

Sophia Zackrisson, Lund University & Skåne University Hospital, Sweden
Breast tomosynthesis in screening – From optimization to a large screening trial. 14 years of experience from Malmö, Sweden

Conference oral sessions:
- Machine-learning-based segmentation and detection in medical imaging
- Radiation dose and image quality in computed tomography
- Mammography and tomosynthesis
- Estimation of patient radiation doses in radiology
- Optimisation of molecular imaging, absorbed dose estimates and radiation risk models
- Software and online tools enabling studies of image quality and radiation dose
- Addressing the potential for improved education, diagnostics and therapy
- Quality control, quality assurance and characterisation of medical imaging systems
- AI and machine learning for optimisation of medical imaging
- Strategies for optimisation of medical imaging

The conference will include a commercial exhibition.