## Optimisation in X-ray and Molecular Imaging 2020

Online meeting 22-24 June 2020



## Register at www.oxmi2020.org at a reduced price!

Due to the ongoing COVID-19 pandemic, it will not be possible to arrange OXMI 2020 as originally planned. OXMI 2020 will instead be held as an online meeting and take place 22-24 June 2020. Additionally, all presentations will be made available for registered participants regardless of possibility to attend during the actual days of the meeting. To reflect the changed conditions the conference fee will be reduced to 50% of the ordinary price (3750 SEK incl. VAT for all attendees, including students).

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 5<sup>th</sup> 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 Al/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
- Al and machine learning for optimisation of medical imaging
- Strategies for optimisation of medical imaging

The conference will also include a session for poster presentations and presentations by commercial companies.

Sahlgrenska University Hospital, Gothenburg – University of Gothenburg – Skåne University Hospital, Malmö – Lund University – Otto von Guericke University Magdeburg – IRS Liverpool – Swedish Society for Radiation Physics