

Symposium Programme

Saturday May 28

- 18.00 Opening words – Professor Juhani Knuti, Chairman of the organising Committee
18.10 Gadolin Lecture – Professor Bengt Långström, Uppsala University
19.00– Get-together Party

Sunday May 29

9.00–10.30 Radionuclide Production and Radiochemistry I

Chair: A. Windhorst and O. Solin

- 9.00–9.30 Future of accelerator based radionuclide production – David Schlyer, US
9.30–10.00 Recent advances in ^{18}F -radiochemistry – Veronique Gouverneur, UK
10.00–10.30 An industry view on development of PET tracers – Jindy Luthra, UK

10.30–11.00 Coffee

11.00–12.15 Radionuclide Production and Radiochemistry II

Chair: D. Schlyer and S. Forsback

- 11.00–11.30 Rational design of new tracers – Albert Windhorst, NL
11.30–11.45 Salty targets as a rapid means for radiopharmaceutical development – Thomas Ruth, CA
11.45–12.00 The approach to n.c.a synthesis of 6- ^{18}F -L-threo-3,4-dihydroxyphenylserine, potential PET radiotracer for norepinephrine system – Olga Fedorova, RU
12.00–12.15 Impact of alkaline hydrolysis of acetonitrile in the synthesis of ^{18}F FAKBC and ^{18}F FDG – Anders Svadberg, NO

12.15 Lunch

13.15–14.45 Instrumentation and Modelling I

Chair: H. Iida and M. Teräs

- 13.15–13.45 Whole body PET/MRI, where are we? – Bernd Pichler, DE
13.45–14.15 New innovations and factors affecting quantitation in PET/CT – Paul Kinahan, US
14.15–14.45 Modelling a novel tracer: checklist – Ronald Boellaard, NL

14.45–15.15 Coffee

15.15–16.15 Instrumentation and Modelling II

Chair: P. Kinahan and M. Teräs

- 15.15–15.45 Ultra rapid assessment of brain blood flow and oxygen consumption for acute stroke research – Hidehiro Iida, JP
15.45–16.00 AX-PET: Concept of a new PET scanner with axially elongated crystals – Viviana Fanti, IT
16.00–16.15 Experiments with a gel tumour model for verification of manual and automatic definition of radiation treatment target volume from FDG-PET – Arne Skretting, NO

Monday May 30

8.30–10.00 Preclinical Imaging I

Chair: M. de Jong and A. Roivainen

- 8.30–9.00 Logistics of operating a small animal imaging center – David Stout, US
9.00–9.30 In vivo PET quantification of the dopaminergic system in mice: potentials and limitations – Kristina Fisher, DE
09.30–9.45 A 7-(2-[^{18}F]fluoroethoxy)-6-methoxy-pyrrodinylquinazoline for PET imaging of PDE10A: Radiosynthesis and evaluation in vivo and in vitro – Uta Funke, DE
09.45–10.00 PET imaging of $\alpha_v\beta_3$ -integrin expression in tumors with ^{68}Ga -labelled mono-, di- and tetrameric RGD peptides – Cheng-Bin Yim, NL

- 10.00–10.30 Coffee**
- 10.30–12.00 Preclinical Imaging II**
Chair: B. Pichler and M. Haaparanta
- 10.30–11.00 Animal models in translational research – Marion de Jong, NL
- 11.00–11.30 Imaging of stem cells and gene expression – Frank Bengel, DE
- 11.30–11.45 ⁶⁸Ga-DOTA-Puromycin: Imaging of protein synthesis via PET – Sebastian Eigner, GE
- 11.45–12.00 Uptake of [¹⁸F]FDG and [¹⁸F]EF5 is associated with the hypoxic phenotype in HNSCC cell lines and mouse xenografts – Jonna Sinkkonen, FI

12.00 Lunch

- 13.00–14.30 Oncology**
Chair: H. Minn and M. Seppänen
- 13.00–13.30 Radiolabelled antibodies in oncologic PET imaging – Thijs Oude Munnink, NL
- 13.30–14.00 ⁶⁸Ga-labelled peptides in somatostatin receptor positive tumours – Stefano Fanti, IT
- 14.00–14.15 Improvement of Al ¹⁸F-labeling of peptides and in vivo characterization – Ingrid Dijkgraaf, NL
- 14.15–14.30 Comparison of ¹²⁴I-Theraloc[®] and ⁸⁶Y-DOTA-Theraloc[®] as suitable PET tracers for radioimmunoimaging of EGFR overexpressing tumors – Denis Beckford, CZ

14.30–15.30 Coffee

- 15.30–17.00 Cardiology**
Chair: A. Saraste and H. Ukkonen
- 15.30–16.00 Cardiovascular molecular imaging: new targets and approaches – Frank Bengel, DE
- 16.00–16.30 PET and PET/CT in clinical cardiology – Rob Beanlands, CA
- 16.30–16.45 Endothelin Receptor imaging of the Rat Heart – Takahiro Higuchi, US
- 16.45–17.00 Myocardial perfusion in healthy young men and coronary artery calcification after 11 years of follow-up – Valtteri Uusitalo, FI

Tuesday May 31

- 8.30–10.00 Molecular Imaging in Endocrinology**
Chair: P. Nuutila and K. Virtanen
- 8.30–9.00 Past and present of FDG in metabolic studies – Pirjo Nuutila, FI
- 9.00–9.30 Imaging fatty acid metabolism – Tim DeGrado, US
- 9.30–9.45 The dynamic uptake of ¹⁸F-FDG in brown adipose tissue of men and women – A pilot study – Anouk van der Lans, NL
- 9.45–10.00 Metabolic responses of human brown adipose tissue to activation by cold and insulin – Janne Orava, FI

10.00–10.30 Coffee

- 10.30–12.15 Neurotransmission**
Chair: J. Rinne and J. Hietala
- 10.30–11.05 Imaging in affective neurosciences – Jon-Kar Zubieta, US
- 11.05–11.40 Current challenges in the use of PET in CNS drug development – Lars Farde, SE
- 11.40–12.15 Cannabinoid receptors in neurodegeneration and psychiatric disorders – Koen Van Laere, NL

12.15 Lunch

- 13.15–15.15 GMP in Commercial PET Tracer Production**
Chair: J. Luthra and K. Torniaainen
- 13.15–13.45 Setting up for multi-center clinical trials in PET – Ole Hjelstuen, NO
- 13.45–14.15 Academic view on commercial PET tracer production – Olli Eskola, FI
- 14.15–14.45 EMA/FIMEA's view on commercial PET tracer production – Kristine Salminen, FI
- 14.45–15.00 Discussion
- 15.00–15.15 Closing of the Symposium** – Juhani Knuuti, Chairman of the Organising Committee

Technologist Session

Sunday May 29

10.30–12.10 Technologist Session

Chair: R. Kivelä

- 10.30–10.50 Manufacture/preparation of radiopharmaceuticals: GMP-guidelines – Kristine Salminen, FI
10.50–11.10 Working in a cleanroom – Riikka Kivelä, FI
11.10–11.30 Quality control of ¹⁵O-labelled radiowater – Emilia Puhakka, FI
11.30–11.50 Production of ⁶⁸Ga-labelled tracers – Henri Sipilä and Pauliina Luoto, FI
11.50–12.10 New clinical tracers - New challenges – Marko Seppänen, FI
12.10–12.25 Comparison of ⁶⁸Ga-DOTA-NOC and ¹⁸FDOPA in humans locating neuroendocrine tumors – Gitte Kodahl, DK

12.35 Lunch

13.15–15.00 Technologist Session continues

Chairs: H. Luotolinna-Lübeck

- 13.15–13.35 Basics of PET/CT and SPECT/CT imaging – Tommi Noponen, FI
13.35–13.55 Fusion imaging in practice – Heidi Betlehem, FI
13.55–14.15 PET/CT images in radiotherapy planning – Nina Lindholm and Sami Suilamo, FI
14.15–14.35 Integrated PET/MR Imaging: A status update – Ronald Borra, US

14.45 Coffee

Software Session

Sunday May 29

9.00–10.30 Software Session I

Chair: A. Crabb and S. Nesterov

- 9.00–9.30 Medical imaging: The state of the art in free software – Andrew Crabb, US
9.30–10.00 Cloud computing in PET/CT/MR – Jan Bertling, SE
10.00–10.30 Carimas 2: Raison d'être – Chunlei Han, FI

Monday May 30

10.30–12.00 Software Session II

Chair: R. Boellaard and T. Shepherd

- 10.30–11.00 Standardization of FDG PET/CT imaging for tracer uptake quantification and automated metabolic volume assessment – Ronald Boellaard, NL
11.00–11.30 Results of the contouring challenge – Tony Shepherd, FI
11.30–12.00 Challenges in standardizing the evaluation and acceptance of PET auto-segmentation methods – Assen Kirov

Tuesday May 31

13.15–15.00 Software Session III

Chair: G. Flandin and J. Johansson

- 13.15–13.40 SPM software: an overview – Guillaume Flandin, UK
13.40–14.05 Why go commercial – Rudolf Keller, CH
14.05–14.30 Imalytics research tool – Timo Paulus, GE
14.30–14.45 Validation and reproducibility of a PET reconstruction system – Andrew Crabb, US
14.45–15.00 Fusion for software PET/MR – Mark Gooding, UK