

## Sunday, August 28

08:00-20:00 *Reg. desk* *Registration desk open*

08:00-10:00 *Exhibition area* *Coffee & tea*

### Pre Symposium Workshops

#### 10:00-15:00

- 10:00-12:00 Auditorium **Pre Symposium Workshops**  
**Hot topics in translational radiotracer development**  
Chairs: Cathy Cutler, Sally Schwarz, Philip Elsinga, Clemens DiChristoforo and Ivan Penuelas (together with EANM radiopharmacy committee)
- 10:00-12:00 KC07 **How to develop radiotracers together with industry, pros and cons**  
Chairs: Christer Halldin, Dennis Guilloteau, Heinz Coenen (together with EANM drug development committee)
- 10:00-12:00 2A00 **Basics of Fluorine-18 chemistry**  
Chairs: Frédéric Dollé, Johannes Ermert

12:00-13:00 *Lunch*

- 13:00-15:00 Auditorium **Hot topics in translational radiotracer development**  
Chairs: Cathy Cutler, Sally Schwarz, Philip Elsinga, Clemens DiChristoforo and Ivan Penuelas (together with EANM radiopharmacy committee)
- 13:00-15:00 2A00 **Basics of Carbon-11 chemistry**  
Chairs: Sajinder Luthra, Jonas Eriksson
- 13:00-15:00 KC07 **Basics of radiometals**  
Chairs: Wynn Volkert, Danielle Vugts

15:00-16:00 *Coffee & tea*

#### 16:00-18:00

- Aula** **Welcome ISRS 2011**
- 16:00-16:20 **Opening**
- 16:20-16:30 Intermezzo
- 16:30-17:00 **Lecture by Michael Welch:** The birth of the International Symposia of Radiopharmaceutical Chemistry and ISRS and SRS today
- 17:00-18:00 **Opening Keynote: Bengt Långström:** Carbon-11 chemistry, what have we learned, what is the future

18:00-20:00 *Welcome reception*

## Monday, August 29

08:00-18:00 Reg. desk Registration desk open

**08:45-09:30** **Aula** **Keynote lecture**  
K-001 **Molecular Imaging From an Industry Perspective**  
Matthias Friebe (Bayern HealthCare, Berlin, Germany)

**09:30-10:30** **Aula** **Wiley award session**  
Chairs: Robert Dannals and Bert Windhorst  
O-001 **Copper-free Click for PET**  
Richard D. Carpenter (University of California, Davis, USA)  
O-002 **Radiolabeling of a Saxitoxin derivative for PET-MRI imaging of pain**  
Aileen Hoehne (Molecular Imaging Program at Stanford (MIPS) / Stanford University School of Medicine, Stanford, USA)  
O-003 **Molecular grafting of binding epitopes into the miniprotein scaffold Min-23 for the design of novel radiopharmaceuticals**  
Frederic Zoller (German Cancer Research Center / University Hospital Heidelberg, Heidelberg, Germany)  
O-004 **<sup>89</sup>Zr-Bevacizumab PET imaging of human glioblastoma**  
Samuel L. Rice (Memorial Sloan-Kettering Cancer Center, New York, USA)

10:30-11:00 Exhibition area Coffee & tea

**11:00-12:30** **Aula** **Fluorine-18 chemistry: new labeled compounds**  
Chairs: Koos Herscheid and Anu Airaksinen  
O-005 **Synthesis and radiofluorination of a high affinity MMP2/MMP9 inhibitor as a potential imaging tracer: systematic study of diaryliodonium salts precursors**  
Svetlana V. Selivanova (Center for Radiopharmaceutical Sciences / Swiss Federal Institute of Technology, Zürich, Switzerland)  
O-006 **Fluorine-18 labeling of a novel series of chimeric, mdm2 oncogene-targeting, peptide-pna oligomers using [<sup>18</sup>F]FPyME**  
Bertrand Kuhnast (Service Hospitalier Frédéric Joliot, Orsay, France)  
O-007 **Synthesis and evaluation of <sup>18</sup>F labeled fluoroalanine derivatives as potential tumor imaging agents**  
Limin Wang (University of Pennsylvania, Philadelphia, USA)  
O-008 **Radiosynthesis of fluorine-18 labeled GnRH peptide analogues: *in vitro* studies and *in vivo* assessment of brain uptake in rats**  
Sven Hausner (University of California, Davis, USA)  
O-009 **Radiolabeling and monkey PET evaluation of the dopamine D<sub>2</sub> and D<sub>3</sub> receptor agonist radioligand [<sup>18</sup>F]MCL-524**  
Vladimir Stepanov (Karolinska Institutet, Stockholm, Sweden)  
O-010 **Copper-free click-chemistry with <sup>18</sup>F-labeled compounds**  
Vincent R. Bouvet (University of Alberta, Edmonton, Canada)  
O-011 **A new polar <sup>18</sup>F-labelled folic acid derivative via <sup>18</sup>F-click-chemistry**  
Hanno Schieferstein (Institute of Nuclear Chemistry / Johannes Gutenberg University, Mainz, Germany)

12:30-13:30 Exhibition area Lunch

- 13:30-14:45**    **Aula**    **Radiometals**  
 Chairs: Wynn Volkert and Frank Rösch
- O-012    **Emulsion reactors; A new platform for the synthesis of metal-based molecular imaging agents**  
 Ryan W. Simms (Centre for Probe Development and Commercialization / McMaster University, Hamilton, Canada)
- O-013    **Facile labeling of an anti-epidermal growth factor receptor Nanobody with Ga-68 via a novel bifunctional desferal chelate for immuno-PET**  
 Maria J.W.D. Vosjan (VU University Medical Center, Amsterdam, The Netherlands)
- O-014    **Effects of the amino acid linkers on melanoma targeting and pharmacokinetic properties of In-111-labeled lactam bridge-cyclized alpha-MSH peptides**  
 Miao Yubin (University of New Mexico, Albuquerque, USA)
- O-015    **Diels-Alder click chemistry as a modular strategy for the construction of radiometallated antibodies for positron emission tomography**  
 Brian M. Zeglis (Memorial Sloan-Kettering Cancer Center, New York, USA)
- O-016    **Procedures for the production of <sup>90</sup>Nb-labeled monoclonal antibodies and stability studies**  
 Valery Radchenko (Institute of Nuclear Chemistry / Johannes Gutenberg-University Mainz, Mainz, Germany)
- O-017    **Chemical properties of the <sup>68</sup>Ga-chelator HBED-CC improve binding of urea-based inhibitors to the prostate-specific membrane antigen (PSMA)**  
 Matthias Eder (German Cancer Research Center, Heidelberg, Germany)
- 14:45-15:15*    *Exhibition area*    *Coffee & tea*
- 15:15-16:05**    **Aula**    **Radiometals, continued**  
 Chairs: Wynn Volkert and Frank Rösch
- O-018    **<sup>68</sup>Ga anti-HER2 nanobodies labeled via NOTA for immuno-PET of breast cancer**  
 Catarina Xavier (Vrije Universiteit Brussel, Brussels, Belgium)
- O-019    **Synthesis, radiolabeling and characterization of novel rhenium(I) and technetium(I) tricarbonyl complexes with a tridentate, water-soluble phosphine-polycarboxylate ligand**  
 Malgorzata Lipowska (Emory University, Atlanta, USA)
- O-020    **A New Generation of M(I) Chelates for Correlating in vitro and in vivo Imaging**  
 Michael W. Cooke (McMaster University, Hamilton, Canada)
- O-021    **Design and Synthesis of Metal-Centric Reverse-Turn Peptidomimetics**  
 Jennifer L. Hickey (The University of Western Ontario / London Regional Cancer Program, London, Canada)
- 16:05-17:55**    **Poster area**    **Poster session I (P-001 – P-161)**  
*with coffee, tea & drinks*

## Tuesday, August 30

08:00-18:00 *Reg. desk* Registration desk open

**08:45-09:30** **Aula** **Keynote lecture**  
K-002 **What are the clinical needs for nuclear imaging from the perspective of a neurologist?**  
Andreas H. Jacobs (European Institute for Molecular Imaging and Department of Nuclear Medicine at the University Hospital of the Westphalian Wilhelms-University Münster, Münster, Germany)

**09:30-10:30** **Aula** **Miscellaneous**  
Chairs: Heinz Coenen and Carolyn Anderson

O-022 **Cerenkov luminescence imaging for the use of PET tracers in the intraoperative setting**  
Daniel L.J. Thorek (Memorial Sloan-Kettering Cancer Center, New York, USA)

O-023 **Structural Identification of radioactive metabolites via simulation of the oxidative metabolism by online electrochemistry-HPLC-MS**  
Andreas Faust (European Institute for Molecular Imaging, Münster, Germany)

O-024 **Synthesis of <sup>11</sup>C-labelled amide by palladium mediated carbonylation at low pressure – Efficient solvent trapping and reaction of [<sup>11</sup>C]carbon monoxide in a disposable glass vial**  
Jonas Eriksson (VU University Medical Center, Amsterdam, The Netherlands)

O-025 **C-11 labeling of the auxin (3-indolyl[1-<sup>11</sup>C]acetic acid) and its derivatives from gramine for PET imaging of transport and signaling in plants**  
Sung Won Kim (NIAAA, Bethesda, USA)

O-026 **Fluorine-18 labeled rhodamines as myocardial perfusion tracers**  
Mark Bartholomä (Children's Hospital Boston / Harvard Medical School, Boston, USA)

10:30-11:00 *Exhibition area* Coffee & tea

**11:00-12:30** **Aula** **New radiopharmaceuticals Oncology I**  
Chairs: Guus van Dongen and Jason Lewis

O-027 **Evaluation of [<sup>68</sup>Ga]CPCR4-2, a high affinity CXCR4 chemokine receptor ligand**  
Eleni Gourni (Technische Universität München, Garching, Germany)

O-028 **<sup>89</sup>Zr-DFO-cG250 imaging of hypoxia-induced CAIX in a human colorectal tumor model**  
Sean Carlin (Memorial Sloan-Kettering Cancer Center, New York, USA)

O-029 **Evaluation of a peptide ligand for targeting of GLP-1R in vivo**  
Dale O. Kiesewetter (National Institute of Biomedical Imaging and Bioengineering, Bethesda, USA)

O-030 **In vivo evaluation of 4-[<sup>11</sup>C]methoxy N-(2-diethylaminoethyl) benzamide (C-11 methoxy-BENZ): a novel C-11 labeled melanoma targeting PET imaging probe**  
Rachid Nazih (Wake Forest University Medical Center, Winston Salem, USA)

O-031 **Copper free Click Chemistry for in vivo <sup>18</sup>F-labelling**  
Leila Mirfeizi (University Medical Center Groningen / University of Groningen, Groningen, The Netherlands)

O-032 **Radiosynthesis, in vitro and in vivo characterization of O-(2-[<sup>18</sup>F]fluoroethyl)-5-hydroxy-L-tryptophan**  
Linjing Mu (Ametamey Center for Radiopharmaceutical Sciences of ETH, PSI and USZ, Zurich, Switzerland)

O-033 **Comparison of the non-natural amino acid, (S)-[<sup>18</sup>F]AFETP, and [<sup>18</sup>F]FDG for brain tumor imaging in the mouse DBT model of glioma**  
Jonathan McConathy (Washington University School of Medicine, St. Louis, USA)

12:30-13:30 *Exhibition area* *Lunch*

- 13:30-14:45** **Aula** **New radiopharmaceuticals CNS I**  
Chairs: Antony Gee and Frederic Chin
- O-034 **Novel [<sup>18</sup>F]fluoroethoxy- and [<sup>18</sup>F]fluoropropoxyindoleacetamides for imaging the TSPO 18kDa (PBR) with PET**  
Annelaure Damont (Service Hospitalier Frédéric Joliot, Orsay, France)
- O-035 **Preclinical studies with [<sup>18</sup>F]AZAN, an  $\alpha$ 4 $\beta$ 2-nAChR PET radioligand with optimal brain kinetics**  
Andrew G. Horti (Johns Hopkins University School of Medicine, Baltimore, USA)
- O-036 **In vitro and in vivo evaluation of [<sup>18</sup>F]-FDEGPECO as a potential PET tracer for imaging mGluR5 in rats and mice**  
Cindy A. Wanger-Baumann (Animal Imaging Center-PET, Radiopharmaceutical Sciences of ETHZ, Zürich, Switzerland)
- O-037 **3-Oxazolinyphenyl N-Alkylcarbamates as Promising Radiotracers for Imaging Fatty Acid Amide Hydrolase (FAAH)**  
Alan Wilson (Centre for Addiction and Mental Health, Toronto, Canada)
- O-038 **The Discovery and Characterization of [<sup>11</sup>C]MK-3168, A Novel PET Tracer for Imaging Fatty Acid Amide Hydrolase (FAAH)**  
Terence Hamill (Merck Research Laboratories, West Point PA, USA)
- O-039 **Synthesis of [<sup>11</sup>C]phenytoin using [<sup>11</sup>C]CO**  
Joost Verbeek (VU University Medical Center, Amsterdam, The Netherlands)

14:45-15:15 *Exhibition area* *Coffee & tea*

- 15:15-16:05** **Aula** **New radiopharmaceuticals CNS I, continued**  
Chairs: Antony Gee and Frederic Chin
- O-040 **Development of an improved radioiodinated phenyl-imidazo[1,2-*a*]pyridine for non-invasive imaging of amyloid plaques**  
Behrooz H. Yousefi (Klinikum rechts der Isar, Munich, Germany)
- O-041 **<sup>18</sup>F]AZD4694 - a new <sup>18</sup>F-labeled  $\beta$ -amyloid probe with rapid brain wash-out**  
Magnus Schou (AstraZeneca R&D, Södertälje & Karolinska Institutet, Stockholm, Sweden)
- O-042 **<sup>18</sup>F-labelled tracers for imaging of Multidrug Resistance associated Protein 1 (MRP1) with PET**  
Eva Galante (University College London, London, UK)
- O-043 **Synthesis and evaluation of new PET ligands for imaging of the metabotropic glutamate receptor type 1 in brain**  
Masayuki Fujinaga (Molecular Imaging Center / National Institute of Radiological Sciences, Chiba, Japan)

**16:05-17:55** **Poster area** **Poster session II (P-162 – P-322)**  
*with coffee, tea & drinks*

## Wednesday, August 31

08:00-14:00 *Reg. desk* *Registration desk open*

**08:45-09:30** **Aula** **Keynote Lecture**  
K-003 **Radiopharmaceutical Chemistry and Medicinal Chemistry: Where Do They Meet and How Can Mutual Benefit be Obtained**  
John Katzenellenbogen (University of Illinois at Urbana-Champaign, Illinois, USA)

**09:30-10:30** **Aula** **Microfluidics**  
Chairs: Philip Elsinga and Arkadij Elizarov

O-044 **Electrowetting on dielectric digital microfluidic chips for multistep radiosynthesis of PET tracers**  
Pei Yuin Keng (Crump Institute for Molecular Imaging / David Geffen School of Medicine, Los Angeles, USA)

O-045 **A customized automated microfluidic platform for radiosynthesis of multiple  $^{18}\text{F}$  pet compounds using electrochemically concentrated [ $^{18}\text{F}$ ]fluoride**  
Rebecca Wong (Cyclotron and Radioisotope Center / Tohoku University, Sendai, Japan)

O-046 **Microfluidic modules for the preconcentration of [ $^{18}\text{F}$ ]-fluoride for PET radiotracer synthesis, and its subsequent removal during product purification**  
Francesco de Leonardis (University of Hull, Hull, UK)

O-047 **Development of microfluidic based “click chemistry” via three different approaches**  
David Ranganathan (Mallinckrodt Institute of Radiology / Washington University, St. Louis, USA)

O-048 **Evaporation Microfluidic Chip for Producing PET Radiopharmaceuticals**  
Katsuhiko Ohsaki (JFE Technos, Yokohama, Japan)

10:30-11:00 *Exhibition area* *Coffee & tea*

**11:00-12:30** **Aula** **Automation and targetry**  
Chairs: Ren Iwata and Michael Adam

O-049 **Online dilution and high flow trapping of PET-tracers on solid phase extraction columns**  
Martinus P.J. Mooijer (VU University Medical Center, Amsterdam, The Netherlands)

O-050 **Flexible radiosynthesizer capable of multi-pot high temperature and pressure reactions**  
Michael R. van Dam (Crump Institute for Molecular Imaging, Los Angeles, USA)

O-051 **Fast n.c.a. nucleophilic synthesis of multi curies of aromatic amino acids such 2- [ $^{18}\text{F}$ ]fluoro-L-tyrosine and 6- [ $^{18}\text{F}$ ]fluoro-L-dopa with a FASTlab synthesizer**  
André Luxen (Université de Liège / Cyclotron Research Center, Liège, Belgium)

O-052 **Production and Purification of Silver-111**  
Suzanne Lapi (Washington University, St. Louis, USA)

O-053 **Cyclotron production of  $^{44}\text{Sc}$  - new radionuclide for PET technique**  
Aleksander Bilewicz (Institute of Nuclear Chemistry and Technology, Warsaw, Poland)

O-054 **Target preparation and recycling of molybdenum for the cyclotron production of  $^{99\text{m}}\text{Tc}$**   
Katherine Gagnon (University of Alberta, Edmonton, Canada)

O-055    **Production of high specific activity  $^{67}\text{Cu}$  with a large enriched  $^{68}\text{Zn}$  target**  
Leonard F. Mausner (Brookhaven National Laboratory, Upton, USA)

12:30-13:30    *Exhibition area*    *Lunch*

**13:30-17:30**

**Excursions**

- 1    City tour Amsterdam with a visit to the Van Gogh or Rijksmuseum
- 2    Bike & Beer tour - Visit Amsterdam by bike with a visit to the Heineken Experience
- 3    Walking tour in the historical part of Amsterdam
- 4    Visit to Zaanse Schans and Edam
- 5    Visit to Marken and Volendam

## Thursday, September 1

08:00-18:00 Reg. desk Registration desk open

**08:45-09:30** **Aula** **Keynote lecture**  
K-004 **GMP and radiochemistry, what we must do, what we could do without, what should be improved**  
Gerrit Westera (Retired from University Hospital Zürich, Zürich, Switzerland)

**09:30-10:30** **Aula** **New developments: multi modality approaches**  
Chairs: Yasuhisa Fujibayashi and Yearn Seong Choe

O-056 **<sup>125</sup>I-Labeled Gold Nanorods for Arthritis Imaging**  
Xia Shao (University of Michigan, Ann Arbor, USA)

O-057 **One-pot Formation of a <sup>125</sup>I-labeled Trifunctional Reagent for Multiscale Imaging with Optical and Nuclear Techniques**  
Ran Yan (Cancer Institute / University College London, London, UK)

O-058 **Multimodal molecular imaging of tumor margins and distant metastases guided by  $\alpha_v\beta_3$  integrin expression**  
Anton Bunschoten (NKI-AvL, Amsterdam, The Netherlands)

O-059 **Fluorescent copper(II), gallium(III) and indium(III) bis(thiosemicarbazones): radiolabeling, cellular confocal fluorescence and PET imaging studies**  
Rory L. Arrowsmith (University of Bath, Bath, UK)

O-060 **Synthesis of Phosphine and Antibody-azide Probes and their Suitability for in vivo Staudinger Ligation in Pretargeted Multi-Modality Imaging and Therapy**  
Danielle Vugts (VU University Medical Center, Amsterdam, The Netherlands)

10:30-11:00 Exhibition area Coffee & tea

**11:00-12:30** **Aula** **Radiopharmacy-radiopharmacology and therapy**  
Chairs: Cathy Cutler and Maria Cecilia Giron

O-061 **Carbon nanotubes constructs as drug delivery systems for tumor targeting and imaging**  
Simone Alidori (Memorial Sloan-Kettering Cancer Center, New York, USA)

O-062 **Systematic alteration of PEGylation grade of <sup>68</sup>Ga- and <sup>64</sup>Cu-labeled L-oligonucleotides for tailored pharmacokinetics as prerequisite for tumor pretargeting technologies**  
Christian Förster (Helmholtz Zentrum Dresden-Rossendorf, Dresden, Germany)

O-063 **Click-Peptides: A novel Strategy for the Design of Stabilized Radiopeptides for Tumor Targeting**  
Ibai Valverde (University Hospital Basel / University of Basel, Basel, Switzerland)

O-064 **A tin precursor of SGMIB potentially useful in the direct modification of peptides and proteins before radiohalogenation**  
Ganesan Vaidyanathan (Duke University Medical Center, Durham, USA)

O-065 **Preclinical evaluation of <sup>86</sup>Y-Labeled inhibitors of prostate specific membrane antigen**  
Sangeeta R. Banerjee (Johns Hopkins University, Baltimore, USA)

O-066 **Synthesis and evaluation of a carbon-11 labeled radioligand for in vivo visualization of the TRPV1 receptor with positron emission tomography**  
Daisy van Veghel (Katholieke Universiteit Leuven, Leuven, Belgium)

O-067 **Implementation of an in vitro assay for phase 1 metabolism of PET radiotracers**  
Yit Wooi Goh (Austin Health, Heidelberg, Australia)

- 12:30-13:30 *Exhibition area* *Lunch*
- 13:30-14:45** **Aula** **Fluorine-18 chemistry: methods**  
 Chairs: Frédéric Dollé and Dae-Yoon Chi
- O-068 **All-in-one polymer-supported precursor for [<sup>18</sup>F]fluoride capture and on-cartridge [<sup>18</sup>F]fluorination**  
 Byoung Se Lee (Research Institute of Labeling, FutureChem Co., Ltd, Seoul, Korea)
- O-069 **Tailor-made Hexaethylene Glycolic Ionic Liquids as Organic Catalysts for Nucleophilic [<sup>18</sup>F]Radiofluorination**  
 Dong Wook Kim (Cyclotron Research Center/Chonbuk National University Medical School, Jeonbuk, South-Korea)
- O-070 **No-carrier-added radiosyntheses of [<sup>18</sup>F]fluoroarenes from diaryl sulfoxides and [<sup>18</sup>F]fluoride ion**  
 Joong-Hyun Chun (Molecular Imaging Branch/NIMH, Bethesda, USA)
- O-071 **<sup>18</sup>F-labeling of unactivated aromatic compounds using triarylsulfonium salts**  
 Cindy Fischer (Center for Radiopharmaceutical Sciences of ETH, PSI and USZ, Zurich, Switzerland)
- O-072 **Photoclick chemistry: Applications to <sup>18</sup>F radiotracers preparation**  
**David Thonon** (Cyclotron Research Center / Université de Liège, Liège, Belgium)
- O-073 **McMurry cyclization in <sup>18</sup>F-labeling - radiosynthesis of a 2,3-diarylsubstituted COX-2 inhibitor**  
 Markus Laube (Helmholtz-Zentrum Dresden-Rossendorf, Dresden, Germany)
- 14:45-15:15 *Exhibition area* *Coffee & tea*
- 15:15-16:05** **Aula** **Fluorine-18 chemistry: methods, continued**  
 Chairs: Frédéric Dollé and Dae-Yoon Chi
- O-074 **Development of a Traceless Staudinger Reagent for Preparing [F-18]-labeled N-alkyl amides**  
 Umesh Gangadharmath (Siemens Biomarker Research, Culver City, USA)
- O-075 **Assessing the potential of sulfonyl fluorides as <sup>18</sup>F-bearing prosthetic molecules**  
 James A.H. Inkster (TRIUMF, Vancouver & Simon Fraser University, Burnaby, Canada)
- O-076 **<sup>18</sup>F-labeled glycosides for the convenient radiosynthesis of <sup>18</sup>F-glycoconjugates by click chemistry**  
 Olaf Prante (Friedrich-Alexander University, Erlangen, Germany)
- O-077 **[<sup>18</sup>F]YF<sub>3</sub> nanoprobe: a novel synthetic strategy for <sup>18</sup>F-labeled imaging agents**  
 Liqin Xiong (Molecular Imaging Program at Stanford (MIPS) / Stanford University School of Medicine, Stanford, USA)
- 16:05-17:55** **Poster Area** **Poster session III (P-323 – P-487)**  
*with coffee, tea & drinks*
- 19:30-24:00 *Symposium dinner*

## Friday, September 2

08:00-14:00 Reg. desk Registration desk open

- 09:00-10:30 Aula New radiopharmaceuticals CNS II**  
Chairs: Michael Kassiou and Simon Ametamey
- O-078 **Synthesis, *in vitro*, and *in vivo* characterization of [<sup>18</sup>F]MK-0911, a PET tracer for imaging Opioid Receptor-Like 1 (ORL1), in rhesus monkey**  
Eric Hostetler (Merck Research Laboratories, West Point, USA)
- O-079 **Validation of the  $\alpha_{2C}$ -adrenoceptor tracer [<sup>11</sup>C]ORM-13070 in wild type,  $\alpha_{2AC}$ -KO and  $\alpha_{2A}$ -KO mice**  
Eveliina Arponen (University of Turku / Turku PET Centre, Turku, Finland)
- O-080 **Synthesis of [<sup>11</sup>C-carbonyl]-AR-A014418 for imaging glycogen synthase kinase-3 $\beta$**   
Justin Hicks (University of Toronto, Toronto, Canada)
- O-081 **[<sup>11</sup>C]quinidine: a new tracer for PET studies of P-glycoprotein upregulation**  
Stina Syvänen (LACDR / Leiden University, Leiden, The Netherlands)
- O-082 **[<sup>18</sup>F]JNJ42259152 as potential radioligand for positron emission tomography imaging of phosphodiesterase-10A in the brain**  
Guy Bormans (Laboratory for Radiopharmacy & IMIR, KULeuven, Leuven, Belgium)
- O-083 **Radiolabeling and evaluation of [<sup>18</sup>F]XB-1 in monkey as a prospective histamine subtype 3 receptor PET radioligand**  
Shuiyu Lu (Molecular Imaging Branch / NIMH, Bethesda, USA)
- O-084 **PET-CT imaging for assessment of transporter-mediated drug-drug interactions at the blood-brain-barrier**  
Tilman Lappchen (Philips Research Europe, Eindhoven, The Netherlands)

10:30-11:00 Exhibition area Coffee & tea

- 11:00-12:00 Aula New radiopharmaceuticals Oncology II**  
Chairs: Henry van Brocklin and Neil Vasdev
- O-085 **Two approaches for the synthesis of [<sup>11</sup>C]sorafenib, a tyrosine kinase inhibitor PET tracer to be used in cancer therapy**  
Alex J. Poot (VU University Medical Center, Amsterdam, The Netherlands)
- O-086 **Development of Cu-64 Folic Acid for Early Detection of Ovarian Cancer**  
Oluwatayo Ikotun (Mallinkrodt Institute of Radiology / Washington University School of Medicine, Saint Louis, USA)
- O-087 **Induction of  $\beta$ -glucuronidase secretion in small tumors evaluated with [<sup>18</sup>F]FEAnGA PET**  
Inês F. Antunes (University Medical Center Groningen / University of Groningen, Groningen, The Netherlands)
- O-088 **Comparison study of [<sup>18</sup>F]FAI-NOTA-PRGD2, [<sup>18</sup>F]-FPPRDG2 and [<sup>68</sup>Ga]-NOTA-PRGD2 for PET imaging of U87MG xenograft model**  
Lixin Lang (National Institute of Biomedical Imaging and Bioengineering / National Institutes of Health, Bethesda, USA)
- O-089 **Clinical translation of radioactive gold nanoparticle-based nanocetucal (EGCG-<sup>198</sup>AuNP) for prostate tumor therapy**  
Kattesh V. Katti (University of Missouri, Columbia, USA)

**12:00-12:30 Aula Closing ceremony**

12:30-13:30 Exhibition area Lunch