

**SUNDAY
10/08/2003**

Session 1: Oncology- Molecular Markers and Tumour Diagnosis I - Chemistry and Pharmacology

1600 - 1748

Synthesis of [¹⁸F]-ZD1839 as a PET Imaging Agent for Epidermal Growth Factor Receptors **S1**

DeJesus O., Murali D., Flores L., Converse A., Dick D., Oakes T., Roberts A., Nickles R.J.

University of Wisconsin Medical School, USA

Carbon-11 Labeling of 4-Dimethylamino-But-2-Enoic Acid [4-(phenylamino)-quinazolin-6-yl]-Amides, a New Class of EGFR Irreversible Inhibitors **S2**

Mishani E., Abourbeh G., Rozen Y., Laki D., Levitzki A.

Department of Nuclear Medicine Hadassah University Hospital, Israel

Radiosynthesis of [¹¹C]Docetaxel **S3**

Van Tilburg E.W., Franssen E.J.F., Van Der Hoeven J.J.M., Elshove D., Lammertsma A.A., Windhorst A.D.

Radionuclide Center / Vrije Universiteit, The Netherlands

Non-invasive Determination of $\alpha_v\beta_3$ Expression Using the Radiolabeled RGD-mimetic [F-18]GBHO-2 **S4**

Haubner R., Thumshirn G., Weber W., Herz M., Linke W.A., Bodenstein C., Wester H-J., Kessler H., Schwaiger M.

Technische Universität München, Germany

Radiolabeled Matrix Metalloproteinase Inhibitors with High Uptake in Mouse Tumor Models **S5**

Cheesman E.H., Rajopadhye M., Tran Y.S., Liu S., Ellars C., Onthank D., Silva P., Yalamanchili P., Kavosi M., Liu R.Q.

Bristol-Myers Squibb Medical Imaging, USA

Investigation of a New Sigma 2 Receptor Ligand for Detection of Breast Cancer **S6**

Rowland D.J., Tu Z., Mach R., Welch M.J.

Washington University In St. Louis, USA

Micropet Imaging and Biodistribution Studies of the Sigma-1 Receptor Radiotracer [¹⁸F]FPS in the MMTV Transgenic Mouse Breast Cancer Model **S7**

Waterhouse R.N., Fawwaz R., Atuahene N.F., Liu L., Schmidt A.M., Collier T.L.

Columbia University, USA

Synthesis of Rhenium/Technetium Labeled Estrogen Receptor Imaging Agents: Evaluation Using Micropet with Technetium-94m **S8**

Bigott H., Luyt L., Welch M., Katzenellenbogen J.

Washington University School of Medicine, USA

Ex Vivo Pharmacological Evaluation of the Peripheral Benzodiazepine Receptor Radioligand [¹²³I]-CIINDE in Animal Tumour Models S9

Mattner F., Papazian V., Chapman J., Katsifis A.
ANSTO, Radiopharmaceuticals Division, Australia

MONDAY
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Session 2: Oncology: Molecular Markers and Tumour Diagnosis II - Chemistry and Pharmacology

0930 - 1030

Imaging Oncogene mRNA with Tc-99m-PNA-Peptide Chimeras S10

Thakur M., Tian X., Aruva M., Qin W., Duffy K., Rao P., Sauter E., Wickstrom E.
Thomas Jefferson University, USA

[¹⁸F]FEAU as a Novel Radiotracer for Herpes Simplex Virus Thymidine Kinase S11

Buursma A. R., Vaalburg W., Nanninga D., Hospers G., Mulder N., De Vries E.
PET Center, Groningen University Hospital, The Netherland

A Fluorine-18 Labeled Oligonucleotide as PET Tracer for iNOS mRNA S12

Vroegh J., Dijkstra G., Moshage H., Moshage H., Elsinga P., Jansen P., Vaalburg W., De Vries E.
Groningen University Hospital, The Netherlands

Lymphoma Cell Uptake of Radiometal- and Fluorescent-Labelled Bcl-2 Antisense PNA Conjugates is Mediated by a Retro-Inverso Delivery Peptide S13

Lewis M.R., Jia F., Gallazzi F., Landon L.A., Shenoy N., Sivaguru G., Hannink M., Lever S.Z.
University of Missouri-Columbia, USA

Basis of Non-Invasive Visualization of Transplanted Living Functional Cells by Using PET Tracer S14

Takamatsu S., Furukawa T., Yonekura Y., Fujibayashi Y.
Biomedical Imaging Research Center, Fukui Medical University, Japan

Session 3: Radiopharmaceutical Chemistry-Halogens I

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Dolle F., Hinnen F., Lagnel L., Boisgard R., Sanson A., Russo-Marie F., Tavitian B.
Service Hospitalier Frédéric Joliot – CEA, France

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Glaser M., Solbakken M., Karlsen H., Arukwe J., Cuthbertson A., Brady F., Luthra S. K.
Imaging Research Solutions, United Kingdom

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Technical University Munich, Department of Nuclear Medicine, Germany
- [¹⁸F]-Fluoroalkylation Using the 'Loop' System** S18
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Bioscan, Inc., USA
- Synthesis of ¹⁸F-Fluorinated α -Amino Acids Via Stereoselective Alkylation Catalyzed by (S)- Nobin** S19
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Paul Scherrer Institute, Switzerland
- Polymer-Supported Radiopharmaceutical Precursors: Benzamides and N-Succinimidylbenzoates** S20
Hunter D.H., Janabi M., Chacko A.M., Babich J.W., Smith M.P.
The University of Western Ontario, Canada
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- 1400 - 1515**
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McMaster University, Canada
- Synthesis and Substitution Behavior of ^{99m}Tc and Rhenium Carbonyl-Nitrosyl Complexes for Potential Use in Radiopharmacy** S22
Schibli R., Marti N., Spingler B., Schubiger P.A.
Center For Radiopharmaceutical Science, Paul Scherrer Institute, Switzerland
- Novel Site-specific Enzymatic Radiolabeling of Proteins and Peptides with the ^{99m}Tc-Tricarbonyl Complex Using Transglutaminase** S23
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- Selection of Radiolabeling Sites by Site-Directed Mutagenesis** S24
Knight L., Romano J., Gabriel J.
Temple University Hospital And School of Medicine, USA
- Tricarbonyl Complexes of Re and Tc with a Bifunctional Tridentate NNO Ligand Carrying the 2-Phenylbenzothiazole Moiety** S25
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National Institute For Scientific Research, Greece
- ^{99m}Tc Labeling of Pegylated PN2S Ligand in Presence or Absence of TIN(II)** S26
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University of Padova, Italy

Session 5: Neuroscience I Receptors, Proteins-Chemistry and Pharmacology**1630 - 1745****Comparison of [¹¹C]clorgyline and [¹¹C]L-Deprenyl for Quantifying MAO A and B Subtype Activities in Peripheral Organs in Humans S27**

Fowler J., Logan J., Wang G.J., Volkow N., Ding Y.S., Shea C., Garza V.,
Ouwen Xu, Alexoff D., Telang F.
Brookhaven National Laboratory, USA

Synthesis and Preliminary Evaluation of a C-11 Labelled Noncompetitive Antagonist for AMPA Receptor Imaging S28

Haradahira T., Arai T., Igarashi N., Okauchi T., Maeda J., Nagai Y., Suzuki K.,
Suhara T.
National Institute of Radiological Sciences, Japan

Synthesis of Fluorine-18 Labelled Substance P S29

Vroegh-Veenstra J., De Vries E.F.J., Maas B., Vaalburg W., Elsinga P.H.
Groningen University Hospital, PET-Center, The Netherlands

Synthesis and Evaluation of [¹⁸F]-5-tert-butyl-2-[4-(3'-fluoroprop-1'-ynyl)phenyl-2-methyl-1,1,3,3-Tetraoxo-1,3-Dithiane as GABA_A Gated Chloride Ion Channel Markers S30

Jung Y-W., Snyder S.E., Sherman P.S., Kilbourn M.R.
University of Michigan, USA

The Preparation and Biological Evaluation of I-125-7alpha-O-IA-DPN for Potential Spect Imaging of Opioid Receptors S31

Wang R.F., He X.K., Zhang C.L.
Peking University First Hospital, P.R. China

Radiosynthesis of [¹¹C]Emd-95885 : A High Affinity Ligand for NR2B-Containing NMDA Receptors S32

Kassiou M., Roger G., Liu X., Lagnel B., Besret L., Bramouille Y., Coulon C.,
Ottaviani M., Valette H., Bottlaender M., Dolle F.
Royal Prince Alfred Hospital, Australia

TUESDAY**12/08/2003****PL4 – Plenary Lecture 4****0830 - 0920****Tracer for Angiogenesis Imaging: Potential Targets and Recent Progress S33**

Haubner, R
Technische Universität München, Germany

Session 6: Neuroscience II Receptors- Chemistry and Pharmacology**0930 - 1030****The Synthesis and in Vivo Characterization of [¹⁸F]FESPARQ, a Neurokinin-1 (NK1) Receptor PET Ligand S35**

Hamill T., Ryan C., Krause S., Eng W., Sanabria S., Francis B., Hargreaves R., Burns D.

*Merck Research Laboratories, USA***Synthesis and Binding Studies of Ligands Selective for Delta Opioid Receptors: Radioiodinated (E)- and (Z)-N-1'-(3-Iodoallyl) Naltrindole S36**

Lever J.R., Mathews W.B., Allmon R.L., Kinter C.M., Raueo P.A., Scheffel U.

*University of Missouri – Columbia, USA***[¹¹C] KR31173, a Novel Radioligand for Imaging the AT1 Angiotensin Receptor with PET S37**

Mathews W.B., Yoo S.E., Lee S.H., Scheffel U., Raueo P.A., Zober T.G., Sandberg K., Ravert H.T., Dannals R.F., Szabo Z.

*Johns Hopkins Medical Institutions, USA***[¹¹C]TMSX: An Adenosine A_{2A} Receptor Ligand for Myocardial Imaging by PET S38**

Ishiwata K., Kawamura K., Kimura Y., Oda K., Ishii K.

*PET Center, Tokyo Metropolitan Institute of Gerontology, Japan***N.C.A. Radioselenation of an Adenosine-A₁ Receptor Ligand S39**

Ermer J., Blum T., Wutz W., Bier D., Coenen H.H.

*Institut Für Nuklearchemie, Germany***Session 7: Radionuclide Chemistry and Targetry****1100 - 1215****Formation Cross Sections and Yields of ⁸²Sr and ¹²⁴I in Intermediate Energy Reactions S40**

Qaim S., Hohn A., Spellerberg S., Van Der Walt T. N., Nortier F. M., Hanekom J., Scholten B., Coenen H. H.

*Institut Für Nuklearchemie, Germany***A Solid Target for the Simultaneous Production of Co-57 and Cd-109 with High Intensity Proton Beam S41**

Mausner L., Bars E., Hock J., Carty J.

*Brookhaven National Laboratory, USA***Macroscopic Syntheses of Arsenoorganic Precursors and First No-Carrier-Added Radioarsenic Labelling S42**

Jennewein M., Schirmmacher R., Maus S., Rosch F.

*Institute of Nuclear Chemistry At The University of Mainz, Germany***Cross Section Data and Technological Development for Production of ⁶⁴Cu and ⁶⁷Cu via Novel Routes S43**

Hilgers K., Qaim S. M., Skakun Y., Spahn I., Stoll T., Coenen H. H.

Institut Für Nuklearchemie, Germany

Production of Carrier Free Radioisotopes for Radiotherapy S44
 Cutler C.S., Engelbrecht H., Embree M.F., Bailey K.D., Clark J.M.,
 Moustapha M., Jurisson S., Ketring A.K.
University of Missouri Columbia, USA

Novel Separation of Ultra Pure High Specific Activity Cu-64 S45
 Smith S., Waters D., Di Bartolo N., Di Bartolo N., Hocking R.
Radiopharmaceuticals, ANSTO, Australia

Session 8 - Radiopharmaceutical Chemistry-Halogens II

1400 - 1515

Automated Production of [¹⁸F]FECH and [¹⁸F]FCH: Preparation and Use of [¹⁸F]Fluoroalkane Sulfonates as Fluoroalkylation Agents S46
 Lim J.L., Dorma E.T., Cabral C.L.
The Queen's Medical Center, USA

¹⁸F-Glycosylation of Fmoc-Protected Amino Acids Using Tetra-Acetylated FDG S47
 Maschauer S., Prante O., Kuwert T.
University Erlangen-Nuernberg, Germany

A Combinatorial Strategy for the Design and Synthesis of ¹⁸F-Labeled Quinoline Derivatives as Kinase Imaging Agents S48
 Walsh J.C., Maclean D., Northrop J., Padgett H., Ysaguirre T.
PETNET Pharmaceuticals, Inc., USA

Remote Separation Procedure for Halogen Production S49
 Tang L., Rowland D.J., Sultan D.H., Welch M.J.
Washington University School of Medicine, USA

In-Target Production of ¹⁸F-Labelled Gases: Specific Radioactivity of [¹⁸F]F₂ S50
 Bergman J., Johansson S., Eskola O., Savisto N., Solin O.
Turku PET Centre, Finland

Synthesis of 4-[¹⁸F]Fluoriodobenzene and its Application in Sonogashira Cross-Coupling Reactions S51
 Wüst F., Kniess T.
PET-Centre, Research Centre Rossendorf, Germany

Session 9: Neuroscience III Transporters-Chemistry and Pharmacology

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Technetium-99m Labeled Fluorobenzylpiperidine and Iodine-123 Metaiodobenzylguanidine for Mapping Myocardial Adrenergic Function: A Comparison of Uptake Characteristics in Vascular Smooth Muscle Cells and Neonatal Cardiac Myocytes, and Biodistribution Study in Rats S52
 Samnick S., Scheuer C., Schaefer A., Richter S., Menger M.D., Kirsch C-M.
Department of Nuclear Medicine, Saarland University Medical Center, Germany

- New Promising Radiofluorinated Dopamine Transporter Ligands: Synthesis, N.C.A Radiofluorination and Preliminary Evaluation** S53
Krebs B., Bier D., Sihver W., Holschbach M., Coenen H.H.
Institut Für Nuklearchemie, Germany
- Comparison of [¹¹C](+)-McN5652 and S-(¹⁸F)Fluoromethyl-(+)-McN5652 for PET Imaging of the Serotonin Transporter** S54
Brust P., Zessin J., Solin O., Steinbach J.
Institut für Interdisziplinäre Isotopenforschung, Germany
- Sex Differences in the Uptake of [¹⁸F]FMe-McN in Rat Brain** S55
Marjamäki P., Eskola O., Haaparanta M., Grönroos T., Agerholm V., Bergman J., Lehtikoinen P., Savisto N., Zessin J., Solin O.
Turku PET Centre, Finland
- [¹¹C]SB207145, the First Selective PET Ligand for Delineation of 5-HT₄ Receptors in the Brain** S56
Gee A.D., Passchier J., Martarello L., Bender D., Parker C.A., Matthews J.C., Ashworth S., Knibb S., Brown J.
GlaxoSmithKline, United Kingdom
- Comparison of Three F-18 Labeled PET Ligands for the Serotonin Transporter: Radiosynthesis and *in Vivo* Imaging Studies in Baboon** S57
Huang Y., Zhu Z., Bae S.A., Hwang D.R., Narendran R., Phan V., Erritzoe D., Talbot P.S., Laruelle M.
Columbia University/NYSPI, USA
- Synthesis and Evaluation of a New Norepinephrine Transporter PET Ligand in Non-Human Primates** S58
Lin K.S., Ding Y.S.
Brookhaven National Laboratory, USA
- Preparation and PET Evaluation of [¹⁸F]FMPBM-D2 - a Promising Brain Norepinephrine Transporter (NET) Radioligand** S59
Schou M., Halldin C., Pike V.W., Sovago J., Gulyas B., Mozley D., Dobson D., Johnson D.P., Innis R.B., Farde L.
Karolinska Institutet, Dept. of Clinical Neuroscience, Sweden

WEDNESDAY
13/08/2003

PL5 – Plenary Lecture 5

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- New Approaches to Monitoring Gene/Cell Therapy** S60
Fujibayashi Y.
Fukui Medical University, Japan

Session 10: Neuroscience IV, Receptors, Proteins-Chemistry and Pharmacology**0930 - 1030****Radiosynthesis and Evaluation of Potential β -Amyloid Imaging Radiotracers for PET** **S61**

Wilson A.A., Nobrega J., Houle S., Westaway D., Verhoeff P., Zhuang Z-P., Kung M-P., Kung H.

*Centre For Addiction And Mental Health, Canada***Development of ^{18}F -Labelled Thioflavin-T Analogues as Amyloid Plaque Imaging Agents** **S62**

Mathis C.A., Wang Y., Holt D.P., Huang G-F., Shao L., Debnath M.L., Klunk W.E.

*University of Pittsburgh, USA***NIDA 52189 and NIDA 522131: Promising New Radioligands for Imaging Extrathalamic High Affinity Nicotinic Receptors with PET** **S63**

Chefer S.I., Pavlova O.A., Zhang Y., Vaupel D.B., Kimes A.S., Kurian V., Horti A.G., Mukhin A.G.

*National Institute On Drug Abuse, National Institute On Health, USA***PET Radioligands with Potential for Imaging Extrathalamic High Affinity Nicotinic Acetylcholine Receptor (nAChR)** **S64**

Horti A., Zhang Y., Pavlova O., Chefer S., Vaupel B., Brown L., Hall A., Kimes A., Mukhin A.

*National Institute on Drug Abuse, National Institutes of Health, USA***Fluorine-18 Labelled N-Fluoroethyl Piperidinemethanol Esters for Cerebral AChE and BCHE Mapping by PET** **S65**

Kikuchi T., Zhang M-R., Ikota N., Fukushi K., Okamura T., Suzuki K., Arano Y., Irie T.

*Graduate School of Pharmaceutical Sciences, Chiba University, Japan***Session 11 - Radiopharmacology-Basic Science****1100 - 1215*****In Vivo* Behavior of Copper-64 Labeled Y3-Octreotate Using a Cross-Bridged Cyclam Ligand** **S66**

Sprague J.E., Sun X., Chang C.-H., Weisman G.R., Wong E.H., Meyer L., Achilefu S., Anderson C.J.

*Washington University School of Medicine, USA****In Vivo* Stability of Cu-64-Azamacrocyclic Complexes: Comparison of Teta and DOTA with Cross-Bridged Chelators** **S67**

Boswell C.A., Sun X., Weisman G.R., Wong E.H., Anderson C.J.

*Washington University School of Medicine, USA***Micropet Imaging of Radiopharmaceuticals Labeled with Three Copper Radionuclides** **S68**

Laforest R., Ruangma A., Lewis J., Sun X., Welch M.J., Bai B., Leahy R.

Washington University, Medical School, USA

- A New Bioclearance Agent with Antioxidant Properties for Potential Use in Radiopharmaceutical Applications** S69
Katti K.V., Kannan R., Katti K.K., Quinn T., Yubin M., Casteel S.
University of Missouri-Columbia, USA
- Regioselectively N-Substituted Cyclens: Synthesis, Biodistribution, Log P and Modeling** S70
Yoo J., Reichert D.E., Wolohan P., Welch M.J.
Washington University School of Medicine, USA
- Synthesis and Evaluation of C-Terminally Modified Derivatives of TYR3-Octreotate** S71
Graham K., Mier W., Eisenhut M., Haberkorn U., Wang Q.
Universitätsklinikum Heidelberg, Germany
- Session 12 - Basic Radiochemistry**
- 1400 - 1515**
- Studies of the Mechanism of the in-Loop Synthesis of Radiopharmaceuticals** S72
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TRIUMF, Canada
- High Yield Reductive N-Alkylation of Secondary Amines with [¹¹C]Acetone** S73
Van Der Meij M., Carruthers N.I., Herscheid J.D.M., Jablonowski J.A., Leysen J.E., Windhorst A.D.
Radionuclide Center, Vrije Universiteit, The Netherlands
- Simple Device for the Radiosynthesis of [Carbonyl-¹¹C]Amides, Esters and Ketones Using Carbon-11 Monoxide** S74
Brichard L., Del Fiore G., Lemaire C., Plenevaux A., Luxen A.
Cyclotron Research Center, Liege University, Belgium
- An Improved Synthesis of Substituted [C-11]Toluenes via Suzuki Coupling with [C-11]Methyl Iodide** S75
Hostetler E., Burns D.
Merck Research Laboratories, USA
- Experience from Two Systems for Recirculating Production of [¹¹C]Methyl Iodide from Target Produced [¹¹C]Methane** S76
Någren K., Truong P., Helin S., Amir A., Halldin C.
Turku PET Centre, Finland
- A New Method for Trapping [¹¹C]Carbon Monoxide and its Application for the Synthesis of PET Radiopharmaceuticals** S77
Audrain H., Martarello L., Gee A., Bender D.
PET-Center, Denmark

**Session 13 - Radiopharmacology Oncology, Molecular Markers and Tumour
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1545 - 1700

- Establishment of an in Vivo Model of Human Pancreatic Tumor for Preclinical Studies and Evaluation of Radioiodinated Phenylalanine-Analogues as Radiopharmaceuticals to Image Pancreatic Carcinomas** S78
Samnick S., Hellwig D., Romeike B.F., Schneider G., Menger M., Kirsch C-M.
Saarland University Medical Center, Germany
- Multi-Modality Imaging Studies on Osteolytic Bone Metastasis** S79
Sun X., Bakewell S.J., Garbow J.R., Gauvain K.M., Lewis J.S., Rutlin J.R.,
Weilbaeher K.N., Anderson C.J., Welch M.J.
Washington University School of Medicine, USA
- Micropet Imaging of the Effects of Tumorcidal 2-Deoxyglucose** S80
Lewis J.S., Aft R.L., Zhang F., Kim J., Welch M.J.
Washington University School of Medicine, USA
- Oranometallic Re- and ^{99m}Tc-Tricarbonyl-Complexes of Thymidine Analogues: Synthesis, Structure-Activity Relationships, and Biological Evaluation** S81
Netter M., Schibli R., Scapozza L., Schubiger A.
Center For Radiopharmaceutical Sciences, Switzerland
- Stereospecific Synthesis and Biological Evaluation of S/R-[¹²³I]IVAIB for Brain Tumor Imaging** S82
Yu W., McConathy J., Williams L., Malveaux E., Camp V.M., Zhang Z.,
Olson J., Goodman M.M.
Emory University, USA
- Synthesis of F-18 Labeled Glyburide Analogs as Beta-Cell Imaging Agents** S83
Schmitz A., Feng Q., Shiue C-Y., Alavi A.A., Wolf B.A., Schirrmacher R.,
Rosch F.
University of Pennsylvania, USA

**THURSDAY
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PL6 – Plenary Lecture 6

0830 - 0920

- The Importance of Lymphoscintigraphy in Sentinel Node Biopsy for Melanoma and Breast Cancer** S84
Uren R.
Nuclear Medicine And Diagnostic Ultrasound, RPAH Medical Centre, The Sydney Melanoma Unit, Royal Prince Alfred Hospital, Australia

Session 14: Basic Radiochemistry II -Miscellaneous**0930 - 1030*****In Vivo* Evaluation of Copper-64-Labeled Core-Shell Nanoparticles Utilizing Micropet and Biodistribution** S86Sun X., Turner J.L., Becker M.L., Rutlin J.R., Wooley K.L., Welch M.J.
*Washington University School of Medicine, USA***[O-15] Activity Trapping at High Temperatures in the Production of [O-15] CO.** S87Clark J.C., Fryer T.D., Burke P., Nickles R.J.
*Wolfson Brain Imaging Centre, University of Cambridge, United Kingdom***Base-Promoted Dechlorination of (R)-[¹¹C]PK 11195** S88Cleij M., Aigbirhio F., Baron J.-C., Clark J.
*Wolfson Brain Imaging Centre, University of Cambridge, United Kingdom***New Polymer-Supported Ionic Liquid; Ionic Resin as a Catalyst for Nucleophilic Fluorination and [¹⁸F]Fluorination** S89Chi D.Y., Kim D.W., Choe Y.S.
*Inha University, Korea***Adiabatic Resonance Crossing for Accelerator Production of Neutron-Rich Activated Nanospheres for Brachytherapy** S90Buono S., Ber G., Dasse P., Fessi H., Kadi Y., Maciocco L., Mehier H., Zanini L.
*Advanced Accelerator Applications, France***Session 15: Radiopharmacology-Other Diseases****1100 - 1236****Micropet Imaging Studies of the Initiation and Progression of a Murine Model of Rheumatoid Arthritis** S91Wang Z., Wipke B.T., Reichert D.E., Nagengast W.B., Allen P.M.
*Washington University Medical School, USA***Evaluation of Cu-64-DOTA-CTT, a MMP-9 Inhibitor, as a Potential PET Lung Inflammation Imaging Agent** S92Anderson C.J., Li W.P., Kozlowski J., Zhou Z., Schuster D.P.
*Washington University School of Medicine, USA***Evaluation of a Radiolabelled PBR Ligand in an Animal Model of Experimental Autoimmune Encephalomyelitis: A Probe for Imaging 'Multiple Sclerosis'** S93Mattner F., Willenborg D., Katsifis A., Staykova M., Ballantyne P., Chapman J.
*Radiopharmaceuticals Division, ANSTO, Australia***[¹¹C]Loperamide as Highly Sensitive PET Probe for Measuring Changes in P-glycoprotein Functionality** S84Passchier J., Lawrie K.W.M., Bender D., Fellows I., Gee A.D.
*GlaxoSmithKline, United Kingdom***Synthesis and Evaluation of [¹⁸F]-Desbromo-Dup-697 as PET Tracer for Cyclooxygenase-2 Expression** S95De Vries E., Van Waarde A., Buursma A.R., Vaalburg W.
Groningen University Hospital, The Netherlands

Synthesis of [¹⁸F]Fluoroquinolone Antibiotics for Human PET Studies S96
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Kletter K., Mueller M.

Vienna University Medical School, Austria

Synthesis, Micropet Imaging, Biodistribution and Dosimetry Data of D- and L-3[¹¹C]Lactic Acid S97

Dence C.S., Lee H., Kim J-Y, Sun X., Laforest R., Welch M.J.

Washington University School of Medicine, USA

[¹¹C]PJ34: A PET Radiotracer for Imaging the Role of PARP-1 in Necrosis S98

Mach R.H., Chu W., Tu Z., Dence C., Welch M.J.

Washington University School of Medicine, USA

Session 16: Radiopharmacology, Oncology Therapy

1330 - 1506

Radioimmunotherapy with ²¹³Bi Synergizes with Prednisolone and Fludarabine in Inducing Apoptosis in B-CLL *in Vitro* S99

Vandenbulcke K., De Vos F., Nikula T.K., Apostolides C., Molinet R.,
Thierens H., Dierckx R.A., Slegers G., Philippé J., Offner F.

University Hospital Gent, Belgium

Selective Tumour Localisation of the Bone-Seeking Radiopharmaceutical ^{117m}Sn(II)-PEI-MP as Studied in Osteosarcoma Containing Mice S100

Zeevaart J.R., Louw W.K.A., Wagener J.M., Botelho M.F., Gomes C., Metello L.,
Abrunhosa A., Kolar Z.I., Dormehl I.C.

NECSA, South Africa

Selective *in Vitro* and *in Vivo* Targeting of Human E. Coli ST Peptide Analogs to Human Pancreatic Cancer Cells S101

Giblin M.F., Sieckman G.L., Gali H., Owen N.K., Hoffman T.J., Forte L.R.,
Volkert W.A.

University of Missouri, USA

⁶⁴Cu Labeling and Evaluation of the Metallopeptide, DOTA-ReCCMSH(Arg11), a Cyclized alpha-MSH Analogue S102

McQuade P., Lewis J.S., Quinn T.P., Welch M.J.

Washington University In St. Louis, USA

Micropet Imaging of a Titanium-45 Labeled Titanocene Complex to Delineate Biodistribution of Titanium Anti-Cancer Drugs S103

Vavere A.L., Welch M.J.

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