

FRIDAY
6/24/2005

Session 1: Neuroreceptors

0900 - 1015

THE EFFECT OF P-GLYCOPROTEIN (Pgp) MODULATION ON SPECIFIC UPTAKE OF SUBSTITUTED [¹⁸F]MPPF DERIVATIVES S1

de Vries E.F.J., Brattinga N.S., Elsinga P.H., Passchier J., van Waarde A.
University Medical Center Groningen, Groningen, Netherlands; ACCI Addenbrooke's Hospital, Cambridge, United Kingdom

DEVELOPMENT OF RADIOTRACERS FOR MEASURING THE FUNCTION OF MULTIDRUG RESISTANCE-ASSOCIATED PROTEIN IN THE BRAIN *IN VIVO* S2

Okamura T., Kikuchi T., Fukushi K., Arano Y., Irie T.
National Institute of Radiological Sciences, Chiba, Japan; Graduate School of Pharmaceutical Sciences, Chiba University, Chiba, Japan

SYNTHESIS AND *IN VIVO* EVALUATION OF A NOVEL PET RADIOLIGAND FOR IMAGING THE PERIPHERAL BENZODIAZEPINE RECEPTOR S3

James M., Fulton R., Henderson D., Eberl S., Fulham M., Allan R., Thompson S., Dolle F., Kassiou M.
University of Sydney, Sydney, NSW, Australia; Royal Prince Alfred Hospital, Sydney, NSW, Australia; CEA/DSV, Orsay, France

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Briard E., Shah J., Musachio J.L., Zoghbi S.S., Fujita M., Imaizumi M., Cropley V., Innis R.B., Pike V.W.
National Institute of Mental Health, NIH, Bethesda, MD, USA

RADIOSYNTHESIS AND EVALUATION OF (+)[¹¹C]PHNO AS RADIOTRACER FOR *IN VIVO* IMAGING OF THE DOPAMINE D2 HIGH AFFINITY STATE WITH POSITRON EMISSION TOMOGRAPHY (PET) S5

Wilson A.A., Kapur S., McCormick P., Garcia A., Hussey D., Willeit M., Houle S., Ginovart N.
University of Toronto, Toronto, ON, Canada

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Raffel D.M., Jung Y.-W., Gildersleeve D.L., Chen W.
University of Michigan, Ann Arbor, MI, USA

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GlaxoSmithKline Pharmaceuticals, Cambridge, United Kingdom; GlaxoSmithKline Pharmaceuticals, Harlow, United Kingdom; Aarhus University Hospital, Aarhus, Denmark
- AN INDIUM-LABELED DO3A CONJUGATE OF NALTRINDOLE HIGH WITH AFFINITY AND SELECTIVITY FOR DELTA OPIOID RECEPTORS: SYNTHESIS, BINDING STUDIES AND BIODISTRIBUTION** S8
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University of Missouri - Columbia, Columbia, MO, USA; Harry S. Truman Veterans' Hospital, Columbia, MO, USA
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University of California, Irvine, CA, USA; Kettering Medical Center, Wright State University, Dayton, OH, USA
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University of Missouri, Columbia, MO, USA; Harry S Truman Veterans Hospital, Columbia, MO, USA
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 Li W.P., Meyer L.A., Sherman C.D., Anderson C.J.
Washington University School of Medicine, St. Louis, MO, USA

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Universitätsklinikum Ulm, Ulm, Germany

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Smith S.V., Kennedy S.J., Fuchs A.
ANSTO, Menai, NSW, Australia; ANSTO, Sydney, NSW, Australia

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Hur M.G., Kim S.W., Hong B.H., Chai J.S., Park J.H., Yang S.D., Yu K.H.,
Oh H.S.
*Korea Institute of Radiological and Medical Science, Seoul, Republic of Korea;
Dongguk University, Seoul, Republic of Korea; Kyunghee University, Yongin,
Kyeonggi-do, Republic of Korea*

**PREPARATION OF CYCLOTRON Re-186 AND COMPARISON
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Ehrhardt G.J., Moustapha M.E., Smith C.J., Szajek L., Eckelmann W.C.,
Jurisson S.S.
*University of Missouri, Columbia, MO, USA; Harry S. Truman Veterans'
Hospital, Columbia, MO, USA; National Institutes of Health, Bethesda, MD,
USA*

**IMPROVEMENT AND QUALITY CONTROL OF ⁶²Zn/⁶²Cu
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Fukumura T., Okada K., Nakao R., Suzuki H., Mukai K., Szelecsenyi F.,
Kovacs Z., Suzuki K.
*National Insitute of Radiological Sciences, Chiba, Japan; Japan Steel Works,
Muroran, Japan; Institute of Nuclear Research of the Hungarian Academy of
Sciences, Debrecen, Hungary*

**ACHIEVEING HIGH (APPARENT) SPECIFIC ACTIVITY
FORMULATIONS USING FLUOROUS-PHASE CHEMISTRY** **S18**

Donovan A.C., Forbes J., Babich J.W., Valliant J.F.
*McMaster University, Hamilton, ON, Canada; Molecular Insight
Pharmaceuticals Inc., Cambridge, MA, USA*

**SATURDAY
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Session 3: Radiotherapy/Pharmacy

0900 - 1015

**POTENTIAL USE OF ¹⁰⁵Rh-S2P-Cx_BBN S19
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Ballard B.D., Kannan R., Katti K.V., Hoffman T., Engelbrecht H.P.,
Cutler C.S., Jurisson S.S.
*University of Missouri, Columbia, MO, USA; H.S. Truman VA Hospital,
Columbia, MO, USA*

**DEVELOPMENT OF NOVEL ORGANOMETALLIC Tc-99m S20
AND Re-188 FOLATE AND PTEROATE DERIVATIVES FOR TARGETED
RADIONUCLIDE DIAGNOSIS AND THERAPY**

Mueller C., Schibli R., Schubiger A.P.
Paul Scherrer Institute, Villigen, Switzerland; ETH, Zurich, Switzerland

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Athey P.S., Simon J., Frank R.K., Theodore L.J., Axworthy D.B.,
Jurisson S.S., Lewis M.R.
*University of Missouri-Columbia, Columbia, MO, USA; The DOW Chemical
Company, Freeport, TX, USA; Altheon Pharmaceuticals, Seattle, WA, USA*

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Vallabhajosula S., Kothari P.J., Goldsmith S.J.
Weill Medical College of Cornell University, New York, NY, USA

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Steel C., Turton D., Liow E., Crosby P., O'Brien A., Luthra S.
GE Healthcare, London, United Kingdom

Session 4: PET Chemistry

1030 - 1200

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CROSS COUPLING OF ALKENYLZIRCONOCENES WITH
[¹¹C]METHYL IODIDE**

Wuest F., Berndt M.
Forschungszentrum Rossendorf, Dresden, Germany

- LABELLING VIA FREE RADICAL CARBONYLATION USING ^{14}C** **S25**
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Uppsala University, Uppsala, Sweden; Uppsala Imanet AB, Uppsala, Sweden
- SYNTHESIS OF [^{11}C]OXAZOLIDONE IN AN ISOCYANATE INTERMEDIATE RHODIUM-MEDIATED CARBONYLATION REACTION USING [^{11}C]CARBON MONOXIDE** **S26**
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Uppsala University, Uppsala, Sweden; Uppsala Imanet AB, Uppsala, Sweden; Gifu University Graduate School of Medicine, Gifu, Japan
- A NEW CARBON-11 LABELLING METHOD USING [^{11}C]-MONOORGANOTIN REAGENT** **S27**
 Huiban M., Sobrio F., Fouqout E., Barre L., Perrio C.
Centre Cyceron, Caen, France; Universite de Bordeaux I, Talence, France
- PRELIMINARY STUDIES OF CONDUCTING HIGH LEVEL PRODUCTION RADIOSYNTHESSES USING MICROFLUIDIC DEVICES** **S28**
 Liow E., O'Brien A., Luthra S., Brady F., Steel C.
GE Healthcare, Hammersmith Hospital, London, United Kingdom
- MICRO-FLUIDIC RADIOCHEMISTRY FOR PET AND SPECT TRACER DEVELOPMENT** **S29**
 Gillies J.M., Prenant C., Zweit J.
Paterson Institute for Cancer Research, Manchester, Greater Manchester, United Kingdom; University of Manchester, Manchester, Greater Manchester, United Kingdom

Session 5: PET Chemistry**1300 - 1445**

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 Kech C., Lemaire C., Brichard L., Plenevaux A., Luxen A.
Liege University, Liege, Belgium
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 Martarello L., Deng H., Gee A.D., Lockhart A., O'Hagan D.
GlaxoSmithKline Pharmaceuticals, Cambridge, United Kingdom; School of Chemistry, University of St Andrews, St Andrews, United Kingdom
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CEA/DSV, Orsay, France; CNRS/Institut Curie, Paris, France; Bionexis Pharmaceuticals, Paris, France

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 Gourand F., Foucrot L., Levacher V., Perrio C., Dupas G., Barre L.
Centre Cyceron, Caen, France; IRCOF - INSA de Rouen, Mont-Saint-Aignan, France
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Emory University, Atlanta, GA, USA
- SMALL ANIMAL PET IMAGING OF MCF-7 TUMORS IN** **S35**
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 Welch M.J.
Washington University School of Medicine, St. Louis, MO, USA; Washington University, St. Louis, MO, USA

SUNDAY
6/26/2005

Session 6: PET Chemistry

0900 - 1015

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Karolinska Institute, Stockholm, Sweden; Karolinska Pharmacy, Stockholm, Sweden
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FOR PET
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Forschungszentrum Julich GmbH, Julich, Germany

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*University of Pennsylvania, Philadelphia, PA, USA***SYNTHESIS AND EVALUATION OF ¹⁸F-LABELED FIMPYD AS A PET IMAGING AGENT FOR β -AMYLOID PLAQUES** S41Zeng F., Southerland J.A., Voll R.J., Votaw J.R., Williams L., Ciliax B.J.,
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*Emory University, Atlanta, GA, USA***AN *IN VITRO* ASSAY TO EVALUATE β -AMYLOID LIGANDS USING ISOLATED HUMAN AMYLOID PLAQUES OF ALZHEIMER'S DISEASE BRAIN** S42Cai L., Nichols L., Temme S., Park K., Herman M.M., Pike V.W.,
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*National Institute of Mental Health, Bethesda, MD, USA***VISUALIZATION OF β -AMYLOID DEPOSITS IN THE LIVING BRAIN OF A TRIPLE TRANSGENIC RAT MODEL OF β -AMYLOID DEPOSITION USING [¹⁸F] FDDNP-MICROPET IMAGING** S43Kepe V., Cole G.M., Liu J., Flood D.G., Trusko S.P., Satyamurthy N.,
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*UCLA, Los Angeles, CA, USA; VA Medical Center, Sepulveda, CA, USA; Cephalon Inc., West Chester, PA, USA; University of Ljubljana, Ljubljana, Slovenia***MONDAY
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*McMaster University, Hamilton, ON, Canada; Syracuse University, Syracuse, NY, USA; Molecular Insight Pharmaceuticals Inc., Cambridge, MA, USA***CARBORANE DERIVATIVES FOR TARGETING ^{99m}Tc TO NEURORECEPTORS** S45Louie A.S., Sogbein O.O., Schaffer P., Valliant J.F.
McMaster University, Hamilton, ON, Canada

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University of Missouri-Columbia School of Medicine, Columbia, MO, USA;
University of Missouri-Columbia, Columbia, MO, USA; Harry S. Truman
Memorial Veterans' Hospital, Columbia, MO, USA; Instituto Tecnológico e
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 Veronese F.M., Moschini G., Mazzi U.
University of Padova, Padova, Italy

ABSTRACT HAS BEEN MOVED TO A POSTER PRESENTATION S48
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Session 9: Technetium

1030 - 1200

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FOR POTENTIAL USE IN SUICIDE GENE THERAPY AND
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Desbouis D., Stichelberger M., Spiwok V., Scapozza L., Schibli R.
ETH Zurich, Zurich, Switzerland; Paul Scherrer Institute, Villigen, Switzerland;
University of Geneva, Geneva, Switzerland

A NEW STRATEGY FOR LABELING BIOMOLECULES THAT S50
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McMaster University, Hamilton, ON, Canada; Hamilton Health Sciences
Centre, Hamilton, ON, Canada; Syracuse University, Syracuse, NY, USA;
Molecular Insight Pharmaceuticals, Cambridge, MA, USA

Session 10: Other

1030 - 1200

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Affibody AB, Bromma, Sweden; Uppsala Univeristy, Uppsala, Sweden;
Uppsala University Hospital, Uppsala, Sweden

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University of Missouri-Columbia, Columbia, MO, USA; Harry S. Truman Memorial Veterans' Hospital, Columbia, MO, USA

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Thomas Jefferson University, Philadelphia, PA, USA

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Herscheid J.D.M., Verbeek J., Booij J.
VU University Medical Center, Amsterdam, Netherlands; Academic Medical Center, Amsterdam, Netherlands

Session 11: Other

1300 - 1445

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Paul Scherrer Institut, Villigen, Switzerland; Merck Eprova AG, Schaffhausen, Switzerland

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Radboud University Nijmegen Medical Center, Nijmegen, Netherlands

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Johannes-Gutenberg Universitaet Mainz, Mainz, Germany; University of Texas Southwestern Medical Center, Dallas, TX, USA; University of Brussels, Brussels, Belgium

TARGETING PEPT1 FOR DETECTING PANCREAS CANCER WITH [¹¹C]GLY-SAR: MICROPET IMAGING OF NUDE MICE BEARING ASPC-1, CAPAN-2, and MPANC-96 XENOGRAFTS S58

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The University of Michigan School of Medicine, Ann Arbor, MI, USA; The University of Michigan College of Pharmacy, Ann Arbor, MI, USA

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Vavere A.L., Lewis J.S.
Washington University School of Medicine, St. Louis, MO, USA

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Technische Universitaet Muenchen, Munich, Germany; Technische Universitaet Muenchen, Garching, Germany

**TUESDAY
 6/28/2005**

Session 12: Miscellaneous

0900 - 1015

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Logan J., Fowler J.S.
Brookhaven National Laboratory, Upton, NY, USA

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University of Missouri; University of Missouri, Columbia, MO, USA; Washington University, St. Louis, MO, USA

THE HUMAN NOREPINEPHRINE TRANSPORTER (hNET) IN COMBINATION WITH [¹¹C]m-HYDROXYEPHEDRINE ([¹¹C]mHED) AS REPORTER GENE/PROBE FOR GENE THERAPY S63

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University Medical Center Groningen, Groningen, Netherlands; University of Groningen, Groningen, Netherlands

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University of Ulsan College of Medicine, Seoul, Korea; Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea; Korea Institute of Science and Technology, Seoul, Korea; School of Medicine, Kyungpook National University, Daegu, Korea

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Liu G., Dou S., He J., Liu X., Rusckowski M., Hnatowich D.J.

University of Massachusetts Medical School, Worcester, MA, USA

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van Waarde A., Elsinga P.H.

University Medical Center Groningen, Groningen, Netherlands

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Miao Y., Gallazzi F., Quinn T.P.

University of Missouri-Columbia, Columbia, MO, USA

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SUNY Buffalo, Buffalo, NY, USA

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DeGrado T.R., Mock B.H., Corbin L., Hutchins G.D.

Indiana University School of Medicine, Indianapolis, IN, USA

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Technical University of Munich, Munich, Germany
- P01-02** **SYNTHESIS AND EVALUATION OF TWO CANDIDATE ^{11}C -LABELED RADIOLIGANDS FOR BRAIN PERIPHERAL BENZODIAZEPINE RECEPTORS** **S71**
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National Institute of Mental Health, NIH, Bethesda, MD, USA
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National Institute of Mental Health, NIH, Bethesda, MD, USA; Warren Grant Magnuson Clinical Center, NIH, Bethesda, MD, USA; University of Groningen, Groningen, Netherlands
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NIMH, NIH, Bethesda, MD, USA; University of Groningen, Groningen, Netherlands, Warron G Magnuson Clinical Center, NIH, Bethesda, MD, USA
- P01-05** **EVALUATION OF [^{18}F]FPWAY AND [^{18}F]FBWAY, 5-HT_{1A} RECEPTOR PET LIGANDS, FOR SENSITIVITY TO ENDOGENOUS 5-HT IN RAT** **S74**
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