

# XIV INTERNATIONAL SYMPOSIUM ON FUNCTIONAL NEURORECEPTOR MAPPING OF THE LIVING BRAIN

18 - 21 MAY 2024 | CENTRE- MONT ROYAL

## **Local Organising Committee**

**Faculty Members** 

**Non - Faculty Members** 

Dr. Romina Mizrahi

Dr. Pablo Rusjan

Dr. Pedro Rosa-Neto

Dr. Jean-Paul Soucy

Dr. Alexey Kostikov

Dr. Udunna Anazado

<u>Alexandra Triantafillopoulos (Coordinator)</u>

Sara Arghavani (Research assistant)

Silvana Aguzzi (Finance)

Jianxin You (IT support)

Ranjini Garani (student representative)

#### **International Scientific Committee**

Anazodo, Udunna — Montréal, Canada

Boileau, Isabelle — Toronto, Canada

Borg, Jacqueline — Stockholm, Sweden

Carson, Richard — New Haven, USA

Comley, Robert - North Chicago, USA

Cosgrove, Kelly — New Haven, USA

Coughlin, Jennifer — Baltimore, USA Delorenzo, Christine - New York, USA

Doudet, Doris — Vancouver, Canada

Esterlis, Irina - New Haven, USA

Gunn, Roger — London, UK

Gjedde, Albert — Aarhus, Denmark

Ginovart, Nathalie — Geneva, Switzerland Girgis, Ragy — New York, USA Halldin, Christer — Stockholm, Sweden

Herscovitch, Peter — Bethesda, USA

Hostetler, Eric — West Point, PA, USA

Houle, Sylvain — Toronto, Canada

Huang, Henry — New Haven, USA

Innis, Robert — Bethesda, USA

Kimura, Yasuyuki — Obu City, Japen

Knudsen, Gitte Moos — Copenhagen, Denmark

Kostikov, Alexey — Montréal, Canada

Lammertsma, Adriaan — Amsterdam, Netherlands

Leyton, Marco — Montréal, Canada

Mann, J John — New York, USA

Mizrahi, Romina — Montréal, Canada Morris, Evan — New Haven, USA

Narendran, Raj — Pittsburgh, USA Parsey, Ramin — New York, USA

Pike, Victor—Bethesda, USA

Price, Julie — Boston, USA

Rosa-Neto, Pedro — Montréal, Canada

Rusjan, Pablo — Montréal, Canada

Rabiner, Ilan — London, UK

Slifstein, Mark — New York, USA Smith, Gwenn — Baltimore, USA

Sossi, Vesna — Vancouver, Canada

Soucy, Jean-Paul — Montréal, Canada Tuominen, Lauri — Ottawa, Canada

Turkheimer, Federico - London, UK

Willeit, Matthäus — Vienna, Austria

Wilson, Alan — Toronto, Canada

Wong, Dean F — St Louis, USA

Zanotti Fregonara, Paolo — Bethesda, USA

## Saturday May 18, 2024

12:10 - 14:00 Registration and Posters Set-Up
14:00 - 14:30 Welcome and Opening Remarks

14:30 - 15:30 Opening Plenary Lecture : The psychedelic renaissance and the science behind it

Gitte Moos Knudsen

Copenhagen University Hospital, Rigshospitalet

Chaired by Romina Mizrah

15:30 - 16:00 Break

#### 16:00 - 17:00 Semi Plenary: Next Gen PET instrumentation — Auditorium

Chaired by Sylvain Houle and Peter Herscovitch

16:00 - 16:20 O1 : First Human Brain PET Images on the NeuroEXPLORER with Targeted Radiopharmaceuticals

Richard Carson Yale University

16:20 - 16:40 O2 : Microliter Resolution Brain Molecular PET Imaging with Next-Generation Ultra-High-Resolution

**(UHR) Scanner** Roger Lecomte Université de Sherbrooke

16:40 - 17:00 Discussion

17:00 - 19:00 Opening Reception — Foyer Mont-Royal

#### **Sunday May 19, 2024**

7:30 - 8:30 Breakfast — Foyer 3rd Floor

#### 8:30 - 10:10 Session 1 : Novel Radiotracers — Auditorium

Chaired by Victor Pike and Alan A Wilson

8:30 - 8:50 O3 : Synthesis and Evaluation of Novel PARP1 PET Tracers for Neuroimaging

Jason Cai

Yale School of Medicine

 $8:50-9:10 \\ O4:[^{11}C] MODAG-005-A~High-Affinity~PET~Tracer~For~Imaging~Alpha-Synuclein~Aggregates~in~the~Brain~Tracer~For~Imaging~Alpha-Synuclein~Alpha-Synu$ 

Kristina Herfert

Werner Siemens Imaging Center, University of Tübingen

9:10 - 9:30 O5: Radiosynthesis of [11C]Daridorexant and [18F]Daridorexant, two promising PET tracers for imaging

orexin 1 and 2 receptors

Dean Wong

Washington University in St. Louis

9:30 - 9:50 O6 : Successful development of radiotracers for imaging brain sigma-2 receptor: A comparative study in

non-human primates

Yiyun Huang

Yale University

9:50 - 10:10 O7 : Comparative evaluation of three novel radiotracers for imaging monoacylglycerol lipase (MAGL) in

the brain of nonhuman primates

MingQiang Zheng Yale University

10:10 - 10:40 Morning Coffee Break — Cartier 1 & 2

10:40 - 11:20 HBHL EDI Plenary : Stress and synapses: does sex matter? — Auditorium

Irina Esterlis Yale University Chaired by Alan Evans

#### 11:20 - 12:30 Session 2: Innovations in PET — Auditorium

Chaired by Dean Wong and Paolo Zanotti Fregonara

11:30 - 11:50 O8 : Image-Derived Input Functions from Ultra-High Performance Brain PET: Are We There Yet?

Tommaso Volpi Yale University

11:50 - 12:10 O9 : Brain perfusion imaging in total-body PET with <sup>15</sup>O using automated parametric analysis

Anna Åhlström Uppsala University 12:10 - 12:30 O10: Distribution of insulin in primate brain following nose-to-brain transport

Michigan State University

12:30 - 14:00 Lunch - International 1 & 2, Floyer 3rd

### 14:00 - 15:50 Session 3 : PET in Neurology — Auditorium

Chaired by Gwenn Smith and Julie Price

O11: In vivo association between mitochondrial dysfunction and neuroinflammation in Alzheimer's disease 14:10 - 14:30

Tatsuhiro Terada

Hamamatsu University School of Medicine

14:30 - 14:50 O12: Brain and peripheral inflammation predict cognitive status in Parkinson's disease: a PET study

Shu-Ying Liu

Xuanwu Hospital Capital Medical University

14:50 - 13:10 013 : [<sup>18</sup>F]XTRA PET of cortical and hippocampal α4β2-nicotinic acetylcholine receptors in Parkinson's

disease and mild cognitive impairment.

Kelly Mills

Johns Hopkins University

O14: A [11C]PiB PET Comparison of Beta-Amyloid accumulation rates between down syndrome and 15:10 - 15:30

neurotypical populations

University of Wisconsin - Madison

O15: [11C]Metoclopramide PET can detect a seizure-induced upregulation of cerebral P-glycoprotein in 15:30 - 15:50

epilepsy patients

Medical university of Vienna

15:50 - 16:30 Afternoon Coffee Break/Posters — Cartier 1 & 2

16:00-17:00 Posters (Session 1)

17:00-18:00 Posters (Session 2)

18:00 - 20:00 Social Activity: Walk to the Kondiaronk Belvedere

Short Hike to the Kondiaronk Belvedere: Bus (15 minutes) from the NRM2024 conference centre, followed by a 550 m trail on flat terrain.

Long Hike to the Kondiaronk Belvedere: Starting in the NRM2024 conference centre. 1.5 km in length, with a 154 m uphill climb on a

timber staircase

## **Monday May 20, 2024**

7:30 - 8:30 Breakfast — Foyer 3rd Floor

#### 8:30 - 10:10 Session 4: Multimodal & New Methods — Auditorium

Chaired by Vesna Sossi and Christine Delorenzo

8:30 - 8:50 O16: Can [11C]ABP688 - PET Quantify In Vivo Glutamate Release?

McGill University; The Royal Ottawa Mental Health Centre

8:50 - 9:10 O17: Bridging timescales of trimodal imaging to assess sleep-related brain activity and dopamine receptor

dynamics

Harrison Fisher

Boston University, Department of Biomedical Engineering

9:10 - 9:30 O18: Temporally coupled functional PET-FDG and fMRI dynamics across task and naturalistic arousal

The Athinoula A. Martinos Center for Biomedical Imaging

O19: Modulation of SV2A PET and microRNA regulation by Deep Brain Stimulation of the subthalamic 9:30 - 9:50

nucleus in the unilateral 6-OHDA minipig model of Parkinson's disease

Karina Henrique Binda

Translational Neuropsychiatry Unit, Aarhus University

9:50 - 10:10 O20: Hierarchical multivariate bayesian reference tissue modelling of PET data

Columbia University / Karolinska Institutet

10:10 - 10:40 Morning Coffee Break — Cartier 1 & 2

#### 10:50 - 12:30 Session 5 : PET in Mental Health — Auditorium

Chaired by Ramin Parsey and Jennifer Coughlin

10:50 - 11:10	O21 : Translocator protein (TSPO) binding assessed with [\$^{11}\$C]ER176 PET in major depression and healthy volunteers  Elizabeth Bartlett  Columbia University & New York State Psychiatric Institute
11:10 - 11:30	O22 : In vivo evidence for mGluR5 dysregulation in borderline personality disorder and relationship to suicide behavior.  Margaret T.Davis (Emily Weiss) University of Science
11:30 - 11:50	O23 : Kappa Opioid Receptor Imaging in Schizophrenia Mark Slifstein Stony Brook University
11:50 - 12:10	O24: Investigating synaptic terminal density and mitochondrial complex I in schizophrenia using [\begin{subarray}{c} \begin{subarray}{c} \lambda \text{IIC} \end{subarray} \text{UCB-J and } \begin{subarray}{c} \begin{subarray}{c} \lambda \text{SIST} \text{POSITION} \text{POSITION} \text{POSITION} \text{Exatrina Shatalina} \text{King's College London} \text{Viscollege London} Viscollege Lo
12:10 - 12:30	O25 : Impact of sleep deprivation on synaptic density in human brains David Elmenhorst Forschungszentrum Jülich GmbH
12:30 - 14:00	Lunch — International 1 & 2, Floyer 3rd
14:10 - 15:50 Sessi Chaired by Raj Narendran a	ion 6 : PET in Substance Use Disorders — Auditorium and Kirk Frey
14:10 - 14:30	O26: Utilizing [ <sup>18</sup> F]Flubatine Independent Component Analysis to Differentiate β2*-Nicotinic Acetylcholine Receptor Patterns in People Who Smoke Tobacco: Validation with Nicotine Blocking Scan Nakul Raval Yale University
14:30 - 14:50	O27: PET Imaging of Phosphodiesterase-4B as an Indirect Biomarker of cAMP Turnover in Rat Brain after Acute and Chronic Alcohol Exposure Robert Innis National Institutes of Mental Health, Molecular Imaging Branch
14:50 - 13:10	O28: Measurement of pig brain occupancy of psychedelic drugs with fast and slow pharmacokinetics using [\frac{11}{C} Cimbi-36 PET Clara Madsen Neurobiology Research Unit (NRU), Copenhagen University Hospital and University of Copenhagen
15:10 - 15:30	O29 : Dopaminergic function in patients with an Internet Gaming Disorder and its relationships with impulsivity and compulsivity  Nathalie Ginovart  University of Geneva
15:30 - 15:50	O30 : Clinical characteristics and endocannabinoid metabolism in opioid treated chronic pain patients with and without opioid use disorder: A PET study with radioligand [ ^11C]CURB Claire Shyu CAMH, Centre for Addiction and Mental Health
15:50 - 16:30	Afternoon Coffee Break/Posters — Cartier 1 & 2
16:00 - 17:00	Posters (Session 3)
17:00 - 18:00	Posters (Session 4)
18:00 - 19:20	Gala Dinner

## **Tuesday May 21, 2024**

7:30 - 8:30 Breakfast — Foyer 3rd Floor

### 8:30 - 11:10 Session 7 : Occupancy and New Methods — Auditorium

Chaired by Ilan Rabiner and Ronald Boellaard

8:30 - 8:50  $O31:[^{11}C]PS13 \ shows \ pharmacologically \ selective \ binding \ to \ cyclooxygen as e-1 \ (COX-1) \ in \ the \ human$ 

brain

Robert Innis National Institutes of Mental Health, Molecular Imaging Branch

8:50 - 9:10  $\mathrm{O32}:\mathrm{EC}_{50}$  and Maximum Occupancy images from a PET receptor occupancy study with a 5HT-6 selective

drug are consistent with prevalence of 5HT-2A receptors in caudate

Sujin Kim Yale University

9:10 - 9:30	O33 : Measurement of Enzyme Occupancy using a Novel GCSi PET Tracer to Support GCS Therapeutic Development  Daniel Rubins  Merck and Co. Inc.
9:30 - 9:50	O34 : Development of novel radiotracers for GABA transporter-1: Kinetic modeling for selection to human translation Paul Gravel Yale University
9:50 - 11:10	O35 : Automated classification of PE2I-PET images using multivariate modelling machine learning Mark Lubberink Uppsala University
10:40 - 11:30	Panel OpenNeuroPET Chaired by Robert Innis
11:30 - 12:30	Vote for next organizer Chaired by Romina Mizrahi
12:30 - 12:50	Wrap-Up and Farewell
12:50 - 14:00	Lunch on the run & Poster removal

Poster sess	sion 1 — 16:00 - 1	17:00 Sunday May 19, 2024
P001	Aji, K.	Monoamine Oxidase B in Early Psychosis: A Positron Emission Tomography study with [11C]SL25.1188
P131	Asch, R.	Evaluation of an image-derived input function and population-based metabolite correction for quantification of synaptic density with [18F]SynVesT-1 and PET in rats
P149	Bortolus, M.	Development of a fluorine-18 labeled radiotracer for rho-associated protein kinase 2
P057	Cai, L.	PET imaging of the rat brain GluN2B subunit of the NMDA receptor with [11C](R)-NR2B-Me and [11C](S)-NR2B-Me: homogeneity of binding site across brain
P085	Chang, Z.	lem:machine learning to identify suitable boundaries for bandpass spectral analysis of dynamic~[11C] Ro15-4513~data
P061	d'Orchymont, F.	$Bolus-infusion\ protocol\ for\ imaging\ of\ [18F] BCPP-EF\ for\ mitochondrial\ respiratory\ chain\ complex\ 1\ in\ rodents$
P005	Diendorfer, C.	The influence of sex hormones and hormonal contraception on d-amphetamine-induced dopamine release: A [11C]-(+)-PHNO study in healthy female subjects
P133	DuBois, J.	An analytical pipeline to characterize PET imaging of a labelled antisense oligonucleotide in the living non-human primate brain
P089	Emvalomenos, G.	Sensitivity analysis for parametric imaging of subtle dopamine release using time-varying models: Proof-of-concept in human smoking Positron Emission Tomography data.
P009	Giacomel, A.	Multisite Presynaptic Dopamine PET Neuroimaging Normative Modelling Highlights Extrastriatal Dysfunctions in Psychosis
P141	Gjedde, A.	Peering into the Brain's Estrogen Receptors in Alzheimer's disease
P093	Golla, S.	Quantification of Neuroinflammation using [18F]DPA714 PET in post-COVID individuals
P013	Holze, F.	Ketanserin exhibits dose-proportional serotonin 2A receptor occupancy in healthy individuals
P033	Ibrahim, W. (David Matuskey)	Seasonal variation in serotonin 5-HT1B receptor availability in healthy individuals
P097	Jee, J.	Two simple in vitro radioligand binding assays to measure the affinity of inhibitors to the soluble enzymes COX-1 and COX-2 tethered to a membrane-bound receptor or coated to 96 well plates
P041	Johansson, J.	Sex Differences in Dopamine D1-type Receptors and Episodic Memory in Aging: a Positron Emission Tomography Study Across the Adult Lifespan
P110	Khattar, N.	Assessing visual activation in the human brain with ultra-high performance FDG functional PET using the NeuroEXPLORER, a next-generation brain PET imaging system.
P129	Li, E.	Thalamic mu-opioid receptor (MOR) PET imaging: impact of partial volume correction on kinetic modeling
P069	Lin, Y.	Acute Caffeine Administration Enhanced Dopamine D2/D3 Receptor Availability in Nonhuman Primates
P103	Maccioni, L.	A novel blood-free analytical framework for the quantification of neuroinflammatory load from TSPO Positron Emission Tomography imaging

	P104	Maccioni, L.	Validation of a novel blood-free methodological framework for the estimation of the blood-to-brain tracer delivery rate in TSPO Positron Emission Tomography imaging
	P107	Mérida, I.	Selective agonist PET radioligand [18F]F13640 for functional 5-HT1A receptor imaging in humans: modeling study and static acquisitions
	P108	Mérida, I.	Non-invasive methods for FDG quantification in patients with disorders of consciousness
	P017	Milz, C.	Exploring serotonin 1A receptor binding in treatment resistant depression: a positron emission tomography study during psychopharmacotherapy
	P113	Oh, M. (Praveen Honhar)	Improving SUVR quantification by correcting for radiotracer clearance in tissue: a validation study with 18F-FE-PE2I PET in cross-sectional, test-retest and longitudinal cohorts
	P081	Parcon, P.	Novel PET radioligand [18F]PF-06445974 uptake is rapidly increased by LPS-induced neuroinflammation compared to TSPO radioligand [11C]ER176
	P145	Pees, A.	Synthesis, in vitro and in vivo Evaluation of Pyridothiophene Radiotracers for Imaging $\alpha$ -Synuclein
	P125	Ramos Jimenez, C.	Kinetic modeling in human brain of [18F]TRACK, a radioligand for Tropomyosin Receptor Kinases
	P045	Rikken, R.	PET imaging and quantification of P2X7 Receptor-Mediated Pro-inflammatory Microglia Activation in Parkinson's disease
	P021	Rodriguez, L.	Data-Driven Independent Component Analysis To Isolate Dopamine Receptor Subtype-Specific Binding Sources of [11C]-(+)-PHNO During An Amphetamine-Challenge Study of Tobacco Smokers and Nonsmokers
	P049	Schalbroeck, R.	Chronic Social Stressors and Striatal Dopamine Functioning in Humans: A Systematic Review of SPECT and PET Studies
	P075	Schroeder, F.	Rationale, Radiolabeling and Evaluation of a Novel, Non-Hydroxamic Acid Histone Deacetylase 6- Selective Inhibitor Tool for Positron Emission Tomography Imaging of the Brain
	P117	Shpunarska, Y.	$Computational \ simulations \ for \ the \ optimization \ of \ a \ bolus \ plus \ infusion \ administration \ schedule \ for \ monoamine \ oxidase \ B \ radioligand \ [11C]SL25.1188$
	P123	Uribe, C. (Kimberly Desmond)	18F-SynVesT-1 PET imaging of presynaptic terminal integrity: Implementation of non-invasive quantification in the Toronto Adolescent & Youth (TAY) Cohort
	P077	Varlow, C.	In Vitro Evaluation of [3H]PI-2620 and Structural Derivatives in Non-Alzheimer's Tauopathies
	P137	Volpi, T.	A Novel Approach to Modeling Enzyme Turnover Rates after Irreversible Inhibition: a Proof-Of-Concept Brain PET Study in Non-Human Primates
	P025	Walsh, M.	Applying Neuromaps to fMRI Statistical Maps to Explore Molecular Target Engagement in Pharmacological Research: A Test Case Examining Estradiol Treatment for Perimenopausal-Onset Major Depression
	P124	Wong, D.	Effect of antipsychotics of PET quantification of alpha7 nicotinic receptors with F-18 ASEM in primate brain
	P029	Y00, C.	Investigating Epigenetic Alterations in Opioid-treated Chronic Low Back Pain Patients with Positron Emission Tomography
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## P082 Bäck, E. Impact of Image Reconstruction Method on Cerebral Blood Flow Measurements with 15O-water Positron Emission Tomography P054 Balayeva, T. Evaluation of radio-thin-layer chromatography as an alternative to radio-HPLC for [18F]SynVes metabolism analysis in rats.

Poster session 2 — 17:00 - 18:00 Sunday May 19, 2024

P054	Balayeva, T.	Evaluation of radio-thin-layer chromatography as an alternative to radio-HPLC for [18F]SynVesT-1 metabolism analysis in rats.
P127	Bartlett, E.	Dual input function modeling of nonbrain 11C-ER176 signal for comparison of translocator protein (TSPO) PET binding in brain and nonbrain
P002	Blasco, M.	Lower synaptic density in early psychosis and its risk states: An in-vivo [18F]SynVesT-1 Positron Emission Tomography (PET) study
P058	Caillé, F.	Translational development of [18F]FC0324, a PET radiotracer for CB2 receptors imaging
P051	Cassa Macedo, A.	Phosphorylated tau biomarkers and cognitive impairment are more closely associated with the spatial extent of tauopathy than with tau load
P052	Cassa Macedo, A.	Comparison of tau-PET tracers for in vivo Braak staging: the HEAD Study
P150	Chassé, M.	Development of Carbon-11 and Fluorine-18 Labeled Radiotracers for Imaging Diffuse Intrinsic Pontine Glioma
P086	Dajic, I.	Metabolic influences on [11C]-(+)-4-propyl-9-hydroxynaphthoxazine kinetics

P038	Dhaynaut, M.	Investigating the association between Cerebral Perfusion and Alzheimer's Disease Progression using the early Phase of [18F]-MK6240 Dynamic Tau Positron Emission Tomography Imaging in Unimpaired Individuals
P062	DiFilippo, A.	Imaging hippocampus synaptic density in the presence of atrophy across the AD continuum
P006	Donnelly, B. (Christine DeLorenzo)	Examining the Neurobiology of Social Anhedonia in Major Depressive Disorder: Orbitofrontal and Striatal Metabolism, Volume, and Structural Connectivity
P090	Fu, J.	Estimation of [18F]MK6240 extracerebral off-target contribution to target and reference regions using compartmental modeling
P010	Goldstein, S.	Neurobiology of Childhood Trauma and Social Support in Unmedicated Adults with Major Depressive Disorder
P094	Grouza, V.	Regional uptake of 18-F-TRACK, a TrKB/C ligand in the healthy brain
P138	Hosseini, S.	Utilizing T1 Magnetic Resonance Imaging to Predict Amyloid Status in Varied Cognitive Status through Advanced Deep Learning Models.
P026	Johansen, A.	Effects of psilocybin on synaptic plasticity in the human brain
P042	Khasayeva, N. (Martin Norgard)	Revealing Alzheimer's Patterns in [18F]Florbetapir PET with Independent Component Analysis
P066	Kim, M.	$The potential\ utility\ of\ (2S,4R)-4-[18F] fluoro-L-glutamine\ as\ a\ novel\ metabolic\ imaging\ marker\ for\ inflammation\ explored\ by\ rat\ models\ of\ arthritis\ and\ paw\ edema$
P034	Kovbasyuk, Z.	Increased 11C-ER176 TSPO Uptake in Lesional Temporal Lobe Epilepsy
P101	Laurell, G.	Estimating occupancy from a single PET displacement scan: Validation of a displacement model in pig and human $[11C]UCB$ -J data.
P102	Laurell, G.	Blood-free quantification with Source-to-Target Automatic Rotating Estimation: validation on PET 18F-FDG data across multiple scanners and time-stability assessment
P014	Lepra, M.	Translocator Protein Distribution Volume, A Positron Emission Tomography Marker of Gliosis in Anorexia Nervosa
P070	Ma, J.	Synaptic Density change in Sleep Deprived Mice with [18F] SynVest-1 PET Imaging
P105	Matheson, G.	A Biologically-Informed Hierarchical Approach for Genotype Correction in Translocator Protein PET and its Application to [11C]ER176 Data
P106	Matheson, G.	Estimates of Radiotracer Plasma Free Fraction Derived using the Three-Tissue Compartment Model Fitted Using a Hierarchical Approach Are Correlated with Ultrafiltration Measurements, but Biased
P134	McLachlan, M.	[11C]PiB amyloid and [18F]FEPPA TSPO PET imaging in common marmosets
P018	Oliva, H. (Gustavo A. Angarita)	Preliminary Evidence for Lower Kappa Opioid Receptor Levels in People with Opioid Use Disorder: A Positron Emission Tomography Study with the Agonist Radiotracer [11C]EKAP
P114	Putkinen, V.	Music-induced metabolic changes in the brain: a functional PET/MRI study
P022	Saint-Georges, Z.	Investigating Cholinergic Innervation and its Association with Cognitive Performance in Schizophrenia using [18F]fluoroethoxybenzovesamicol Positron Emission Tomography
P030	Schmitz, C.	Neurovascular coupling of D2/D3 dopamine receptors using simultaneous PET/MR in humans
P073	Soyer, A.	Decreased opioid receptor availability and impaired neurometabolic coupling as a signature of morphine tolerance in rats: a PET study
P074	Soyer, A.	Brain [18F]FDG PET imaging predicts the long-term behavioral impact of sublethal exposure to organophosphates: a longitudinal study in mice exposed to NIMP, a sarin surrogate
P146	Stéen, J.	Development of fluorinated pyrazolidine-3,5-dione derivatives for positron emission tomography imaging of the P2Y12 receptor
P118	Tagare, H.	Bayesian Model Averaging for Subject-Specific Voxel-wise Denoising of Longitudinal DaTscan Images of Parkinson's Disease
P046	Uribe, C. (Kimberly Desmond)	Assessing Cortical Synaptic Density in Parkinson's Disease: A Surface-Based Analysis
P121	Volpi, T.	Revisiting Fick's Principle: A Whole-Brain Blood Flow Estimate from (Almost) Any PET Tracer?
P122	Volpi, T.	Kinetic Modeling and Ultra-High Performance PET Scanners: Can We Finally Trust the Microparameters?
P078	Wu, S.	Brain Image Data Structure (BIDS) for Sharing Nonhuman Primate Imaging Results on OpenNeuro PET
P130	Xiong, M.	Imaging synaptic density in humans using [11C]UCB-A

Poster sessi	on 3 — 16:00 -	17:00 Monday May 20, 2024
P083	Bartlett, E.	Quantification of 11C-ER176 TSPO distribution volume with one blood sample: optimization and validation of simultaneous estimation (SIME) of input function
P055	Bettcher, B.	[18F]-FE-DPN 6-O-(2-[18F]fluoroethyl)-6-O-desmethyl-diprenorphine with Dynamic PET Imaging for Brain μ-Opioid Receptors in Nonhuman Primate Models
P003	Braga, J.	Astrogliosis marker [11C]SL2511.88 After COVID-19 With Ongoing Depressive and Cognitive Symptoms
P142	Caillé, F.	$Carbon-11\ isotopic\ labeling\ of\ [11C] Serodolin\ to\ support\ drug\ development\ of\ this\ antinocic eptive\ drug\ targeting\ 5-HT7\ receptors$
P059	Cools, R.	Preclinical evaluation of [11C]HSP990 as novel Hsp90 PET brain probe for in vivo visualization of Hsp90 in healthy aging and neurodegeneration
P035	Crine, V.	Associations between inflammation and striatal dopamine D2-receptor availability in aging
P087	De Francisci, M.	Model-free quantification methods for Total-Body 18-fluorodeoxygluocose Positron Emission Tomography analysis
P037	Desmond, K.	$Comparison \ of \ non-invasive \ metrics \ for \ assessing \ difference \ between \ healthy \ controls \ and \ mild \ cognitive \ impairment \ with \ [18F]NAV4694 \ PET \ imaging$
P039	El Biali, M.	Pregnane X receptor activation with St. John's wort does not induce P-glycoprotein function at the human blood-brain barrier
P007	Fan, S. (Evan Mori	ris )Preliminary Evidence of Abnormal Striatal Functional Connectivity and Associations with Striatal Dopamine Release in Individuals with Nicotine Addiction - A Multimodal Study
P091	Funck, T.	High-resolution 3D mapping of neurotransmitter receptor distributions in the macaque cortex using 2D autoradiography
P011	Hahn, A.	Regionally distinct changes in serotonin synthesis during reward anticipation and feedback
P095	Hanania, J.	Improved Detection of Task-related Dopamine Release using Dynamic [11C]Raclopride PET: A Novel Hybrid Methodology
P065	Hernández-Martín	, N.Activation of astrocytes during epileptogenesis restores alterations in brain glucose metabolism
P053	Honhar, P.	Measuring alterations in synaptic and functional connectivity in Parkinson's disease: An exploratory [11C]UCB-J PET study
P098	Johansson, J.	Prospects of Ultra-low-dose PET for Neuroreceptor Growth-charting in Adolescence
P099	Jonasson, M.	Decreased striatal blood flow after dopamine transporter inhibition
P143	Kostikov, A.	Exploration of the PLX5622 scaffold as a PET tracer for imaging of CSF-1R: synthesis of precursors, radiochemistry and preliminary evaluation
P067	Larsen, K.	Neuromodulatory Characterization of 5-HT2AR Agonists with Simultaneous Positron Emission Tomography and pharmacological Magnetic Resonance Imaging
P015	Mahmood, R.	Investigating the Effects of Nabilone on Endocannabinoid Metabolism in the Human Brain
P151	Maqbool, M.	Evaluation of [18F]JHU94620-d8 for imaging brain cannabinoid type 2 receptors in rodents and non-human primates
P043	Martin, S.	Synaptic density in Parkinson's disease: A [18F]SynVesT-1 PET tracer study
P109	Matheson, G.	bloodstream: a BIDS App for Processing of Blood Data for Analysis of PET Data
P135	McVea, A.	Simulations Evaluating the Influence of Extra-Cerebral Binding on Alternative [F-18]MK6240 Reference Regions
P136	McVea, A.	Age Related Differences in human $\alpha 4\beta 2$ nicotinic acetylcholine receptor binding with [F-18]Nifene PET
P139	Murgaš, M.	Whole-brain cell-type distribution estimation using mRNA expression patterns
P071	Murrell, E.	Evaluation of Synaptic Vesicle Membrane Glycoprotein 2A and Purinergic P2X7 Receptors in Chronic Traumatic Encephalopathy
P111	Naganawa, M.	Test-retest reproducibility of 18F-Bavarostat
P019	praschak-rieder, n.	Dopamine release is predictive for one-year outcome in untreated patients with first episode psychosis

P023	Sauerzopf, U.	Likelyhood and certainty of believe in conditioned hallucinations ins impacted by D2/3 receptor availability
P119	Tissot, C.	Biological aspects impacting the association between [18F]MK6240 and [18F]FTP in target regions.
P120	Tissot, C.	$Head-to-head\ analysis\ of\ [18F]MK6240\ and\ [18F]Flort aucipir\ standardized\ uptake\ values\ (SUVs):\ the\ HEAD\ study$
P147	Verhoog, S.	Discovery of a Novel PET Tracer for Glucosylceramide Synthase (GCS)
P047	Woolsey, A.	Higher availability of the $\alpha 7$ nicotinic acetylcholine receptor in the brains of older healthy individuals
P027	Yan, X.	PET measurement of cyclooxygenase-2 (COX-2), a potential biomarker of neuroinflammation, in healthy human volunteers
P031	Yang, Y.	Synaptic density is lower in mood-related circuitry in Parkinson's disease depression
P032	Yang, Y.	Comparison of 18F-SynVestT-1 and 18F-FDG in Behavioral Variant Frontotemporal Dementia
P079	Y00, C.	Investigating Cannabinoid 1 Receptor Occupancies and Functional Response by agonist and antagonist drug challenges in Macaque Brains

Poster session 4 — 17:00 - 18:00 Monday May 20, 2024		
P084	Bevington, C.	Exploring the interaction between exercise and brain energetics in PD: a multivariate pattern analysis of PET/MR data
P056	Bricault, S.	Longitudinal characterization of acute and chronic lipopolysaccharide rat models of neuroinflammation using [11C]PBR28 and [11C]BRD1158
P004	Chen, Y.	Association between epigenetic enzymes and emotion regulation in healthy adults
P060	Corvo, C.	Different dynamics of ketamine-induced synaptogenesis in a mouse model of anxiety/depression vs naive mice: a Synaptic Vesicle Glycoprotein 2A (SV2A) ) Positron emission tomography PET imaging study
P036	de Laat, B.	SIX MONTHS OF INTENSE EXERCISE INCREASES DOPAMINE TRANSPORTER DENSITY AND NEUROMELANIN CONCENTRATION IN THE SUBSTANTIA NIGRA IN PARKINSON'S DISEASE
P132	Deller, G.	Measuring Cerebral Oxygen Metabolism in Humans with a Non-invasive Hybrid PET/MRI Technique
P088	Eirud, C. (Martin Noergaard)	Neuromark PET: A fully automated ICA pipeline for positron emission tomography images
P050	Faranak, E. (David Matuskey)	Longitudinal synaptic density imaging in Parkinson's disease with 11C-UCB-J
P092	Galassi, A.	PET2BIDS: a Library for Converting Positron Emission Tomography (PET) data into the Brain Imaging Data Structure
P008	Garani, R.	Quantifying the endocannabinoid enzyme FAAH in those at risk for psychosis: A [11C]CURB study
P012	Hamati, R.	Striatal dopamine release as measured by $[11C]$ raclopride positron emission tomography during fear conditioning in humans
P040	Honhar, P.	Synaptic density and brain perfusion in the brainstem and parieto-occipital areas is associated with tremor in Parkinson's disease: A voxel-wise [11C]UCB-J PET study
P063	Hsieh, C.	Acute Blocking Effect of Mu-opioid Receptor Antagonist GSK1521498 with [11C]Carfentanil Imaging in Non-human Primates
P064	Hsieh, C.	Simulation of Dual-tracer PET Imaging for Dopamine D2 and Adenosine A2A Receptors in Non-human Primate
P096	Ibrahimy, A.	EC50 images reveal reproducible spatial variation in drug affinity in multiple PET occupancy studies
P128	Jackwerth, M.	First-in-human study with 6-bromo-7-[11C]methylpurine, a PET tracer to measure cellular detoxification capacity in the brain
P100	Joshy, M.	A hybrid PET/MRI study investigating disruptions in functional/metabolic coupling in behavioral variant frontotemporal dementia
P068	Leung, J.	PET imaging of astrogliosis following traumatic brain injury
P144	Lindberg, A.	lem:lem:lem:lem:lem:lem:lem:lem:lem:lem:
P016	Matheson, G.	Serotonin 1B Receptor Binding is Increased by both Ketamine and Electroconvulsive Therapy for Depression: A Multi-Centre PET Investigation
P112	Narciso, L.	A user-friendly, step-by-step graphical user interface to generate the arterial input function

P044	Niemi, K.	Monoaminergic function and anxiety, depression, rapid eye movement sleep behavior disorder and cognitive impairment in Parkinson's disease
P148	Oyeniran, O.	Optimizing [11C]butanol radiosynthesis for assessing blood-brain barrier integrity using hybrid PET/MR
P072	Pakula, R.	Validation and expansion of bispecific antibodies for brain PET
P020	Raeisi Makiani, F.	Targeting opioid neurotransmission in borderline personality disorder with self-harming behavior: Preliminary findings of a [11C]NOP-1A positron emission tomography study
P115	Reed, M.	Comparison of Metabolic Connectivity and Covariance techniques
P116	Reed, M.	Optimizing functional PET imaging: A Comprehensive Evaluation of Filtering Techniques
P024	Schifani, C.	Preliminary Data Indicating Lower Positron Emission Tomography Derived [18F]SynVesT-1 Binding in Autism versus Non-Autistic Mental Health Help Seeking Youth
P140	Schubert, J.	Exploring Central-Peripheral Immune Interactions in Depression through Extra-Axial Inflammatory Signals: A 11C-PK11195 PET Study
P076	Taylor, C.	Quantifying astrogliosis in the epileptic brain using novel PET radiotracer [18F]F-DED
P152	Terry, G.	A Novel Radioligand for PET Imaging of Brainz Alpha-1A Adrenoceptors
P028	Yang, Y.	Effects of Age and BMI on Histamine H3 Receptor Availability in Healthy Humans
P080	Zheng, C.	[18F]SynVesT-1 PET detects synaptic changes in a rat model of Alzheimer's disease
P048	Zheng, Y.	Correlation of Cerebrospinal Fluid tau N-terminal 224 with Amyloid-β, Tau tangles, and Neurodegeneration in Alzheimer's Disease

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