Tuesday, March 10 2015

08:30 Registration, welcome coffee

Welcoming words

09:30 - 09:45 Pr Françoise Kraeber-Bodéré (ICO/CHU Nantes, CRCNA, France)

Session 1: Innovative tracers in neurology: from bench to bedside
   Chairs: Pr Pierre Payoux, Dr F Le Jeune

09:45 Pr Hank Kung (University of Pennsylvania School of Medicine, Philadelphia, USA)
   “Developing Abeta specific imaging agents for Alzheimer’s disease: Seeing is believing”

10:30 JDTic-based Radioligands for PET Imaging of Kappa Opioid Receptors: Design, Synthesis, Pharmacology, Molecular Modeling Studies, Radiolabelling with Carbon-11 or Fluorine-18, and in vivo Characterization
   Schmitt S, Delamare J, Dhilly M, Tirel O, Fillesoye F, Barré L, Colloc’h N, Perrio C

10:45 Design of fluorinated COX-2 ligands to visualize and quantify neuroinflammation by PET

11:00 - 11:15 Coffee break and posters

11:15 Recent Insights in Development of Alpha 7 nAchR Tracers: Ligand Synthesis and Evaluation in 18F PET Imaging

11:30 Synthesis and preclinical evaluation of a new radiotracer for imaging activated NMDA receptors: The 18[F]-FMN (Fluoroethynormemantine)
   Salabert AS, Fonta C, Fontan C, Alonso M, Adel D, Payoux P

11:45 Research of tau aggregates in brain marmoset by autoradiography with 18F-AV1451

12:00 Assessment of the protection of dopaminergic neurons by an α7 nicotinic receptor agonist using [18F]LBT-999 in a Parkinson’s disease rat model

12:15 - 13:45 Lunch break and posters
Session 2: Multimodality imaging  
Chairs: Dr Jacques Barbet, Dr Myriam Bernaudin

13:45 Dr Claire Tabouret-Viaud (University Hospital of Geneva, Switzerland)  
“Multimodality imaging in Oncology and Neurology”

14:30 Generator and cyclotron produced 99mTc: a SPECT-CT imaging study of 99mTc-pertechnetate, 99mTc-HMPAO and 99mTc-MYOVIEW  

14:45 Characterization and radiolabelling of nanoparticles for multimodal imaging  
Leost L, N’tsiba E, Truillet C, Lux F, Tillement O, Alliot C, Huclier-Markai S

15:00 Bodipy based systems for optical/nuclear imaging  

15:15 Evaluation of the feasibility of copper-64 PET/CT using a monoclonal antibody anti-mCD138 for the detection of bone lesions in a multiple myeloma mouse model  

15:30 - 16:00 Coffee break and posters

16:00 Multimodal imaging reveals [18F]-FLT-PET as a specific and early readout of temozolomide combined with Bevacizumab response in a recurrent glioblastoma model  
Corroyer-Dulmont A, Pérès EA, Gerault AN4, Savina A, Toutain J, Divoux D, Barré L, Bernaudin M, Petit E, Valable S

16:15 Impact of time acquisition and delay on quantitative results of 68Ga-DOTANOC PET/CT in neuroendocrine tumors: A preliminary basic investigation  

16:30 Assessment of oxygenation in human gliomas - A multimodal study  
Chakhoyan A, Guillamo JS, Collet S, Kaufmann F, Delcroix N, Petit E, Barré L, Bernaudin M, Valable S

16:45 Assessment of lymph nodes and prostate status with early dynamic curves PET/CT 18F-choline (FCH) in prostate cancer  
Mathieu C, Ferrer L, Carlier T, Colombié M, Rusu D, Kraeber-Bodere F, Campion L, Rousseau C

17:00 Clinical impact and prognostic value of FDG PET/CT in suspected recurrence ovarian cancer patients. Results and clinical implications after 6 years follow-up  
Rusu D, Carlier T, Campion L, Colombié M, Goulon D, Kraeber-Bodéré F, Rousseau C

17:15 Impact of functional and/or phenotypic PET imaging on the determination of clinical target volumes of vertebral metastases before stereotactic body radiotherapy compared to MRI  
Workshop:
Imagys®: a multimodality Clinical Trial Imaging Management System
and its fully integrated reading workflow

17:45 Live demonstration - Questions/Practice exchange time

20:00 Symposium dinner
**Wednesday, March 11 2015**

**08:00 - 09:15** Poster presentations

**Session 3: Theranostics in nuclear medicine**  
**Chairs: Pr Françoise Kraeber-Bodéré, Dr Jean-François Gestin**

**09:30** Pr Otto Boerman (Radboud University Nijmegen Medical Centre, The Netherlands)  
“Translational pretargeted radionuclide imaging and therapy of cancer”

**10:15** Lymphoma Imaging: Radiolabelling rituximab with technetium 99 metastable in one step procedure  
Fontan C, Salabert AS, Tafani M, Payoux P

**10:30** A theranostic tool for Hepatocellular carcinoma: the Starch-Based Microparticles  

**10:45 - 11:00 Coffee break and posters**

**11:00** Comparative analysis between [18F]Fludarabine- and [18F]FDG-PET in a murine model of inflammation  
Dhilly M, Hovhannisyan N, Maiza A, Fillesoye F, Guillouet S, Leporrier M, Barré L

**11:15** Labelling with radiocobalt improves biodistribution of DOTA-conjugated anti-EGFR affibody molecules  
Tolmachev V, Garousi J, Andersson K, Ståhl S, Orlova A

**11:30** Imaging of HER3-Expression in Tumours Using a 68Ga-Labeled PET tracer based on Affibody Molecule  
Orlova A, Rosesteed M, Andersson K, Löfblo J, Mitran B, Ståhl S, Tolmachev V

**11:45** Evaluation of 111In/177Lu Cetuximab F(ab’)2 for diagnostic and therapeutic purposes  

**12:00** Sensitivity of pretargeted 68Ga PET-CT to detect colorectal carcinoma liver metastases in a mouse model: comparison with 18FDG PET-CT  

**12:15** Pharmacokinetic modelling and optimization of pretargeting using anti-carcinoembryonic antigen (CEA) bispecific antibody and 68Ga-, 111In- or 177Lu-labeled peptide in CEA-positive tumour patients  

**12:30** 111In-labelled images predict 177Lu-IMP288 distribution and estimate absorbed doses in patients with CEA-expressing relapsing lung cancer included in a prospective pretargeted radioimmunotherapy (PRAIT) phase I/II optimization study using anti-CEA x anti-HSG TF2 Bispecific Antibody (bsMAb) and 177Lu-IMP-288 peptide: Preliminary results of the dosimetric study  
C. Bodet-Milin, L Ferrer (co-first author), A Rauscher, T Carlier, A Faivre-Chauvet, C Rousseau, J Hureaux, O Couturier, PY Salaun, D.M. Goldenberg, RM. Sharkey, J. Barbet, F. Kraeber-Bodéré

**12:45 - 13:45** Lunch break and posters
Session 4: Targeted radionuclide therapy
Chairs: Pr Michel Chérel, Dr François Hindré
Session sponsored by DHU Oncogreffe

13:45 Dr Tom Bäck (University of Gothenburg, Sweden)
“Steps on the way: Experiences on the translation from preclinic to the clinic of Targeted Alpha Therapy with At-211”

14:30 Improving chemistry of astatinated radiopharmaceuticals - automation and labeling
Aneheim E, Jensen H, Lindegren S

14:45 In vitro stability comparison of 211At-(MeATE, SPEMS and SGM1B) precursors conjugated to anti-PSMA Humanized J591 antibody

15:00 Involvement of cell membrane mediated–non targeted effects in the efficacy of radioimmunotherapy using Auger electron emitters-labeled-monoclonal antibodies

15:15 Optimization of CD138 targeting for radioimmunotherapy (RIT) and imaging: reduction of healthy tissues irradiation by the use of a pre-dose of cold antibodies
Diab M, Maurel C, Berthaud M, Davodeau F, Chérel M

15:30 - 15:45 Coffee break

15:45 Dr Frank Bruchertseifer (Institute for Transuranium Elements, Karlsruhe, Germany)
“Targeted alpha therapy with 225Ac / 213Bi: clinical experience in the treatment of glioblastoma”

16:30 Effect of Targeted Alpha-Therapy using 213Bi-anti-mCD138 versus Heated Intraoperative Intraperitoneal Chemotherapy in peritoneal carcinomatosis mice model
Derrien A, Gouard S, Maurel C, Bruchertseifer F, Morgenstern A, Classe JM, Chérel M

16:45 Direct evidence of the biological impact of non-uniform dose distribution within bone marrow

17:00 Comparison of Alpha and Beta-Radioimmunotherapy for Multiple Myeloma

17:15 Evaluation of the therapeutic potential of alpha-radioimmunotherapy in combination with the adoptive transfer of tumor-specific T cells

17:30 - 17:45 Poster and oral presentation awards ceremony

18:00 End of the meeting