UK PET Chemistry Meeting 9th September 2019

Programme

9:00-10:00	***Registration, poster set-up & coffee***
10:00-10:05	***Welcome***
10:05-11:20	**Short Talks Session #1** 1. **Benjamin P Burke (Hull)**/ Using self-assembly cage structures to simplify theranostic radiopharmaceutical preparation 2. **George Keeling (KCL)**/[68Ga]Ga-THP-Pam: A bone-targeting PET agent with rapid radiolabelling 3. **Louis Allott (Imperial)**/An improved automated radiosynthesis of [18F]FET-βAG-TOCA 4. **Max Palmer (Hull)**/Configurationally rigid bis-tetraazamacrocyclic CXCR4 chemokine receptor antagonists: development of targeted PET imaging probes with copper-64 and gallium-68 5. **Truc Pham (KCL)**/Iodine-124 Based Dual Positron Emission Tomography and Fluorescent Labelling Reagent for *In vivo* Cell Tracking 6. **Jamil Gregory (Manchester)**/Radiolabelling cyclooctyne functionalised single-domain antibodies with an [18F]azide functionalised prosthetic group/
11:20-11:50	***Coffee break, networking and posters***
11:50-12:05	**Flash (1 min) Poster Presentations Session #1** 1. **Francesca Goudou** (KCL) Rapid One-step Carbon-11 Carboxylation of Terminal Alkynes using [11C]CO2 2. **Jouzas Domarkas** (Hull) Development of mitochondria targeted dual PET or SPECT/ optical imaging agents based on naphthalimide pharmacophore 3. **Selena Sephton** (Cambridge) Synthra RNPlus as a Platform for Automated Radiosynthesis of [11C]UCB-J 4. **George Firth** (KCL) [18F]AQA-F – Zinc Sensing in vivo with PET Imaging 5. **Isaline Renard** (Hull) CXCR4- and ACKR3-specific configurationally-restricted azamacrocyclic derivatives for targeted PET imaging and therapeutic applications in cancer 6. **Matthias Glaser** (UCL) Bespoke Tracers for Human Imaging 7. **Ruediger Exner** (Bath) Synthesis of Heptamethine Cyanine Dyes, as Multimodal Imaging Probes for Prostate Cancer 8. **Jarrad Plater** (Hull) Development of 68Ga and 18F labelled CXCR4 targeting Pentixafor derivatives: improving simplicity to increase widespread availability 9. **Marta Braga** (Imperial) Development and Evaluation of a 18F-Radiolabeled Monocyclam Derivative for Imaging CXCR4 Expression 10. **Salvatore Bongarzone** (KCL) Expanding the Scope of Carbon-11 Labelled Ureas: A Universal Method to Access Short-Lived Click Reagents for in vivo PET Imaging
12:05-13:30	***Lunch, networking and posters***
13:30-13:50	**Peter Horlock Awardees from the Last Meeting:** 1. **Teresa Sementa** (KCL) Radio-Metabolite Analysis 2. **David Roberts** (Hull) Visiting the University of Michigan PET Radiochemistry Facility: GMP & Synthesis Unit Experiences

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13:50-14:05	**Flash (1 min) Poster Presentations Session #2** 11. **Vincent Nail** (Hull) Gallium-68 Radiolabelling of DOTA Using a Staggered Herringbone Microreactor 12. **Jamil Gregory** (Manchester) One-pot radiosynthesis of an [18F]tetrazine for fast conjugation of fluorine-18 to biomolecules and cells 13. **Fraser Edgar** (KCL) Nanoscale microfluidic reactions: towards stoichiometric carbon-11 radiolabelling for PET 14. **Kirsty Hodgson** (PETIC) Development of an Automated F-18 Flumazenil Synthesis using Trasis AIO Module 15. **Federico Luzi** (KCL) Rapid, One-Pot Radiosynthesis of [*carbonyl*-^{11}C]Formamides from Primary Amines and [^{11}C]CO_2 16. **George Herbet** (Hull) Development of 68Ga and 18F radiolabelled peptide probes for PET imaging of αvβ6 integrin expression in cancers and fibrotic diseases 17. **Aishwarya Mishra** (KCL) A Tris(hydroxypyridinone)-phospholipid Conjugate for Pretargeted PET Imaging of Liposomal Nanomedicines 18. **Louis Allott** (Imperial) Solid-supported cyanoborohydride cartridges for automating reductive amination radiochemistry 19. **Igor Fontana** (KCL) Development of a Carbon-11 PET Pro-Radiotracer for Imaging the Astroglial Excitatory Amino Acid Transporter 2 20. **David Roberts** (Hull) Laponite® nanocrystal radiolabelling: characterisation of potential in drug delivery applications using PET and SPECT imaging probes
14:05-14:30	***Coffee break, networking and posters***
14:30-15:45	**Short talks sessions #2** 7. **Matthew Hird (Cambridge)**/Preclinical evaluation in rats and non-human primates of [18F]GE387, a novel 18 kDa translocator protein (TSPO) PET radioligand with low binding sensitivity to human polymorphism rs6971 8. **Holly McErlain (Glasgow)**/Synthesis of Novel PET Imaging Agents for PARP-1 Based on Olaparib-Derived Inhibitors 9. **Noemi Perujo Holland (Hull)**/Novel 18F Radiolabelled Tetraazamacrocyclic Antagonists for Positron Emission Tomography Imaging of Chemokine Receptor CXCR4 10. **Stephen Thompson (Cambridge)**/A novel imaging probe with selectivity for tau-oligomeric protein aggregates: In vitro evaluation and radiolabelling with fluorine-18 11. **Joseph Downey (KCL)**/A universal method for rapid 11C-radiolabeling of PSMA-targeted radioligands *via* [11C]CO2 fixation 12. **Jeroen Sap (Oxford)**/Synthesis of 18F-Difluoromethylarenes Using Aryl Boronic Acids, Ethyl bromofluoroacetate and [18F]Fluoride
15:45-17:00	**Parallel discussion groups (4 Topics)**
17:00-17:30	**Concluding remarks and prize awards – Next UK PET Chemistry Meeting**