

# UK PET CHEMISTRY MEETING

## 4<sup>th</sup> May 2016

### Final Program

Wednesday 4 <sup>th</sup> May 2016	
09:00 am to 10:00 am	Registration & Poster Set-Up Tea / Coffee
10:00 am to 10:05 am	<b>Welcome</b> <i>Prof Edwin Van Beek, University of Edinburgh</i>
<b>Session 1 &amp; 2</b> 10:05am-11:30am 6 x 10min talks (2 min qs)	<b>Fluorine-18 &amp; Carbon-11</b> <b>Chairs: Sajinder Luthra &amp; Franklin Aigbirhio</b>
T01	[ <sup>18</sup> F]fluorosulfate for PET imaging of sodium-iodide symporter expression <i>Alex Khoshnevisan, Kings College London</i>
T02	Fully Automated SPE Purified Radiosynthesis of [ <sup>18</sup> F]GE-179 on FASTlab Using a New More Stable Precursor <i>Anna Kirjavainen, Kings College London</i>
T03	Development of B-F...P pincer containing <sup>18</sup> F-fluorine radiolabelled TPP derivatives for mitochondrial imaging by positron emission tomography (PET) <i>Juozas Domarkas, University of Hull</i>
T04	Last Step <sup>18</sup> F-Labeling of Peptides in Aqueous Condition Catalyzed by Fluorinase <i>Qingzhi Zhang, University of St Andrews</i>
T05	The Use of Aryl Boronic Ester Precursors in Providing Facile Access towards <sup>123</sup> I and <sup>18</sup> F Radiolabelled Targets for SPECT and PET Imaging <i>Thomas Wilson, University of Oxford</i>
T06	From [ <sup>11</sup> C]CO <sub>2</sub> to [ <sup>11</sup> C]Amides and [ <sup>11</sup> C]Ureas: A Rapid One-Pot Mitsunobu Reaction <i>Salvatore Bongarzone, Kings College London</i>
11:30 am to 11:50am	Coffee & Posters
<b>Session 3</b> 11:50am-12:50pm	
11:50am to 12:50pm	<b>POSTER PRESENTATIONS – 2 min pitches</b> <i>Chairs: Sally Pimlott &amp; Christophe Lucatelli</i>

12:50 pm to 2:00pm	Lunch & Poster Session <b>Poster presenters please stand by your posters during this session</b>
2:00pm to 2:30pm	<b>Invited Talk: Cardiovascular Calcification: Chalk and Cheese</b> <i>Prof David Newby, University of Edinburgh</i> <i>Chair: John Clark</i>
<b>Session 4 &amp; 5</b> <b>2:30pm -4:05pm</b> 7x 10min talks (2 min qs)	<b>Other Positron Emitters &amp; New Technology</b> <b>Chairs: Tony Gee &amp; Gavin Brown</b>
T07	Improved tris(hydroxypyridinone) Chelators for <sup>68</sup> Ga Imaging <i>Cinzia Imberti, Kings College London</i>
T08	Scaling-down of Zirconium-89 Antibody Radiolabeling Reactions <i>Stephen Paisey, Cardiff University</i>
T09	Monolith-based microfluidic device for <sup>68</sup> Ga processing and direct radiolabelling <i>Ping He, University of Hull</i>
T10	One step kit labelling for PET imaging of prostate cancer using <sup>68</sup> Ga-tris(hydroxypyridinone)-PSMA, <i>Jennifer Young, Kings College London</i>
T11	Copper-64 PET imaging of CXCR4: optimised small molecule bis-tetraazamacrocyclic chemokine receptor antagonists <i>Benjamin Burke, University of Hull</i>
T12	Extremely rapid, kit-based biomolecule labelling and molecular imaging with gallium-68: tris(hydroxypyridinone) chelators, <i>Michelle Mahindra, Kings College London</i>
T13	A New GMP-compatible Radiolabelling Method Enables Long Term in vivo PET Tracking of Preformed Liposomal Nanomedicines <i>Rafael T.M. De Rosales, Kings College London</i>
4:05pm to 4:20pm	Coffee & Posters
<b>Session 6</b> <b>4:20pm-5:00pm</b>	
4:20 pm to 4:50 pm	<b>Invited Talk:</b> <i>Prof Paul Matthews, Imperial College London</i> <i>Chair: Mike Carroll</i>
4:50 pm to 5:00 pm	<b>Summary, Prize Awards and Goodbye</b>

# Posters

## Fluorine-18

- P01 The first automated synthesis of N-succinimidyl 4- $^{18}\text{F}$ fluorobenzoate ( $^{18}\text{F}$ SFB) on the Eckert & Zeigler Modular Lab, *Amit Mahindra, Newcastle University*
- P02 Performance Nucleophilic  $^{18}\text{F}$ -FluoroDOPA synthesis with TRASIS ALL in one system one year on, *Stephen Paisey, Cardiff University*
- P03 Development of  $\alpha_v\beta_6$ -targeted Cyclic RXD Peptides for Positron Emission Tomography Imaging of Idiopathic Pulmonary Fibrosis, *James Thompson, University of Hull*
- P04 Microfluidic devices for electro-trapping of  $^{18}\text{F}$ fluoride from  $^{18}\text{O}$ water and radiosynthesis of  $^{18}\text{F}$ FLT, *Ping He, University of Hull*
- P05 Radiochemical Synthesis of  $^{18}\text{F}$ -ProTides for PET, *Alessandra Cavaliere, Cardiff University*
- P06 Development of an Automated F-18 Radiosynthesis of 5-Aminolevulinic Acid Amides, *Amaia Carrascal Minino, University of Manchester*
- P07 Preparation of Fluorine-18 Radiolabelled Thia-Fatty Acid Tracers for Imaging Cardiac Metabolism by Positron Emission Tomography (PET), *Zainab Al-Ali, University of Hull*
- P08 Optimising the specific activity of  $^{18}\text{F}$ sodium tetrafluoroborate, *Alex Khoshnevisan, Kings College London*

## Carbon-11

- P09 Improved automated radiosynthesis and purification of the organic anion-transporting polypeptide (OATP) substrate  $^{11}\text{C}$ rosuvastatin by a captive solvent synthesis method, *Michael Fairclough, University of Manchester*

## Other Positron Emitters

- P10 The Development of a Plant Virus Capsid as a  $^{68}\text{Ga}$  PET Imaging Agent, *Rebecca Ullah, University of Hull*
- P11 Rapid Chelation of Gallium-68 at Neutral pH, *Thomas Price, University of Hull*
- P12 Gallium-68 PET imaging of CXCR4 expression: optimised small molecule azamacrocyclic chemokine receptor antagonists, *Rhiannon Lee, University of Hull*
- P13 Design Synthesis and Characterisation of New Multimodal Composites for PET Imaging Based on  $\text{Fe}_3\text{O}_4$  Nanoparticles Thiosemicarbazones and DFO, *Marina Lledos, University of Bath*
- P14 Synthesis Of Multimodal PET And SPECT Imaging Agents - Towards Hypoxia Selective Inhibitors, *Sophia Sarpaki, University of Bath*
- P15 Development of  $^{89}\text{Zr}$  Chelators for Use in Positron Emission Tomography (PET) Imaging, *Boon-Uma Jowanaridhi, University of Hull*

### ***New Technology***

- P16 Gallium-68 Radiolabelling of Macrocyclic Chelators Using Microreactor Technology for Use in Positron Emission Tomography Imaging, *Hayley Bignell, University of Hull*
- P17 A New Solid Phase Radioiodination Method for the Preparation of PET and SPECT Imaging Agents, *Nikki Sloan, University of Glasgow*
- P18 Multimodal Bacterial Detection Probes, *Nina Svensen, Edinburgh Molecular Imaging Ltd*