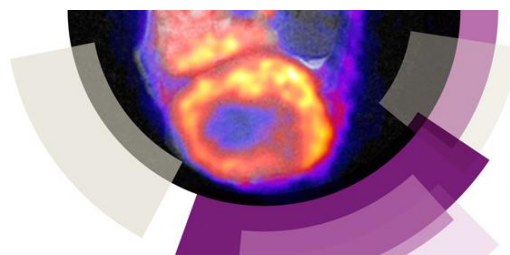


Metal ions in medical imaging:  
optical, radiopharmaceutical  
and MRI contrast  
Dalton Discussion 15



8-10 September 2014  
York, UK

## Programme

8 - 10 September 2014  
University of York, UK

### Monday 8 September

10.45	Registration
11.45	Welcome and Introduction by Stephen Archibald & Raphael Tripier
12.00	<b>Title - TBC</b> Jon Dilworth <i>University of Oxford, UK</i>
13.00	Lunch
<b>Session 1</b>	<b>Optical Imaging</b> Session Chair: Loïc Charbonnière
14:00 <b>I1</b>	<b>Phosphorescent biscyclometallated iridium(III) ethylenediamine complexes functionalised with polar ester or carboxylate groups as bioimaging and visualisation reagents</b> Tommy Siu-Ming Tang, Kam-Keung Leung, Man-Wai Louie, Hua-Wei Liu, Shuk Han Cheng and Kenneth Kam-Wing Lo* <i>City University of Hong Kong, China</i>
14:10 <b>C1</b>	<b>Two-photon multiplexing bio-imaging using a combination of Eu- and Tb-bioprobes</b> Virginie Placide, Anh Thy Bui, Alexei Grichine, Alain Duperray, Delphine Pitrat, Chantal Andraud, and Olivier Maury* <i>ENS Lyon, France</i>
14:15 <b>C2</b>	<b>Confocal and fluorescence lifetime imaging sheds light on the fate of a pyrene-tagged carbon monoxide-releasing Fischer carbene chromium complex</b> Rory L. Arrowsmith, Anthony J. Atkin, Stanley W. Botchway, Ian J. S. Fairlamb, Jason M. Lynam*, James W. B. Moir, Sofia I. Pascu, Jonathan S. Ward, and Wei-Qiang Zhang <i>University of York, UK</i>
14:20	Discussion
15:30	Afternoon Tea

16.00	<b>2011 Ludwig Mond Award presentation</b>
16:05 <b>K1</b>	<b>EuroTracker® Dyes: design, synthesis, structure and photophysical properties of very bright europium complexes and their use in bioassays and cellular optical imaging</b> Stephen J Butler, Martina Delbianco, Laurent Lamarque, Brian K McMahon, Emily R Neil <sup>a</sup> , Robert Pal, David Parker*, James W Walton and Jurriaan M. Zwier <i>Durham University, UK</i>
16:50 <b>C3</b>	<b>Towards the elaboration of new gold-based optical theranostics</b> Pierre-Emmanuel Doulain, Richard Decréau, Cindy Racœur, Victor Goncalves, Ali Bettaieb, Pierre Le Gendre, Franck Denat, Catherine Paul, Christine Goze,* and Ewen Bodio <i>CNRS, France</i>
16:55 <b>C4</b>	<b>UiO-66 nanoparticles loaded with near infrared emitting Yb(III) cations: tuning the photophysical properties by modifying the pore functionality</b> Emi Evangelio, Svetlana V. Eliseeva, Alexandra Foucault-Collet, Mathieu Allix, Emmanuel Veron, Arnau Carné, Inhar Imaz, Nathaniel L Rosi, Daniel Maspoch, Stéphane Petoud* <i>CNRS, France</i>
17:00	Discussion
17:50	Close of Session
17:50 – 19:00	Poster Session and Wine Reception
20.00	Buffet dinner (Vanbrugh College) Tickets only

## Tuesday 9 September

<b>Session 2</b>	<b>MR Imaging Probes</b> Session Chair: Eva Toth
09:00 <b>K2</b>	<b>MR imaging probes: design and applications</b> Eszter Boros, Eric M. Gale and Peter Caravan* <i>Martinos Imaging Centre, Harvard University, USA</i>
09:45 <b>C5</b>	<b>Syntheses of Gadolinium-complexed <math>\beta</math>-Amyloid binding peptides as Contrast Agents for MRI diagnosis of Alzheimer's Disease</b> B.Matharu, N Spencer, F.Howe, E Chang and B.Austen* <i>St George University of London, UK</i>
09:50 <b>C6</b>	<b>Stable <math>Mn^{2+}</math>, <math>Cu^{2+}</math> and <math>Ln^{3+}</math> complexes with cyclen-based ligands functionalized with picolinate pendant arms. Unexpected self-aggregation of the <math>La^{3+}</math> complex in solution</b> Aurora Rodríguez-Rodríguez, Zoltan Garda, Erika Ruscsák, David Esteban-Gómez, Andrés de Blas, Teresa Rodríguez-Blas, Luís M. P. Lima, Maryline Beyler, Raphaël Tripiet, Gyula Tircsó* and Carlos Platas-Iglesias* <i>University of Debrecen, Hungary</i>
09:55	Discussion
10:45	Morning Coffee
11:20 <b>I2</b>	<b>Optimizing the high-field relaxivity by self-assembling of macrocyclic Gd(III) complexes</b> Dale Lawson, Alessandro Barge, Enzo Terreno, David Parker, Silvio Aime, Mauro Botta* <i>University Piemonte Oriental, Italy</i>
11:30 <b>C7</b>	<b>Towards Understanding the Design of Dual-modal MR/fluorescent Probes to Sense Zinc Ions</b> C. Rivas*, G. J. Stasiuk, M. Sae-Heng, and N. J. Long <i>Imperial College of London, UK</i>
11:35 <b>C8</b>	<b>Characterisation and Application of Ultra-High Spin Clusters as Magnetic Resonance Relaxation Agents</b> G. Guthausen*, J. R. Machado, B. Luy, A. Baniodeh, A. K. Powell, S. Krämer, F. Ranzinger, M. P. Herrling, S. Lackner, H. Horn <i>KIT, Germany</i>
11:40	Discussion
12:50	Lunch/Posters
<b>Session 3</b>	<b>Radiopharmaceuticals</b> Session Chair: Nicholas Long
14:10 <b>K3</b>	<b>A nuclear chocolate box: the periodic table of nuclear medicine</b> Phil Blower <i>Kings College London, UK</i>



14:55 <b>C9</b>	<b>Synthesis of Sulfonamide Conjugates of Complexes of Cu, Ga, In, Re and Zn: Carbonic Anhydrase Inhibition Studies and the Synthesis of <sup>99m</sup>Tc(V) and <sup>64</sup>Cu(II) analogues</b> Jonathan R. Dilworth, Sofia I. Pascu*, Philip A. Waghorn, Claudiu T. Supuran, Simon R. Bayly, Martin Christlieb, Jérôme M. Declerck, Robert C. King, Alessio Innocenti, Xin Sun and Daniela Vullo <i>University of Bath, UK</i>
15:00 <b>C10</b>	<b>Tripodal tris(hydroxypyridinone) ligands for immunoconjugate PET imaging with <sup>89</sup>Zr<sup>4+</sup>: comparison with desferrioxamine-B</b> Michelle T. Ma, * Levente K. Meszaros, Brett M. Paterson, David J. Berry, Maggie S. Cooper, Yongmin Ma, <sup>c</sup> Robert C. Hider and Philip J. Blower <i>King's College London, UK</i>
15:05	Discussion
15:55	Afternoon Tea
16:30 <b>I3</b>	<b>Rhenium and Technetium Complexes for Diagnostic Imaging of Amyloid-β Plaques in Alzheimer's Disease</b> David J. Hayne, Andrea J. North, Michelle Fodero-Tavoletti, Jonathan M. White, Lin W. Hung, Paul A. Adlard, Uwe Ackermann, Henri Tochon-Danguy, Victor L. Villemagne, Kevin J. Barnham and Paul S. Donnelly* <i>Melbourne University, Australia</i>
16:40 <b>C13</b>	<b>New AMD3100 derivatives for CXCR4 chemokine receptor targeted molecular imaging studies: synthesis, anti-HIV evaluation and binding affinities</b> Sophie Poty*, Pauline Désogère, Christine Goze, Frédéric Boschetti, Thomas D'huys, Dominique Schols, Chris Cawthorne, Stephen J. Archibald, Helmut R. Maecke, and Franck Denat, <i>ICMUB, France</i>
16:45 <b>C12</b>	<b>PET/PDT Theranostics: Synthesis and Biological Evaluation of a Peptide-Targeted Gallium Porphyrin</b> F. Bryden*, H. Savoie, E.V. Rosca, R.W. Boyle <i>University of Hull, UK</i>
16:50	Discussion
18:00	Close of Session
19:30	Pre-dinner drinks (Vanbrugh College) Tickets only
20:00	Conference dinner (Vanbrugh College) Tickets only

### Wednesday 10 September

<b>Session 4</b>	<b>Translational Applications</b> Session Chair: Peter Edwards
08:50	Poster Prize
09:00 <b>K4</b>	<b>Tumor diagnosis and targeted therapy (theranostics) with peptide &amp; protein based nuclear probes: from bench to patient</b> Helmut Mäcke

	<i>University Hospital Freiburg, Germany</i>
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09:45 <b>C11</b>	<b>Technetium-99m complexes with one and two pendant bisphosphonate groups for imaging arterial calcification</b> Jayanta Kumar Bordoloi*, David Berry, Kavitha Sunassee, Rafael T.M. de Rosales, Catherine Shanahan, Philip J. Blower <i>King's College London, UK</i>
09:50 <b>C14</b>	<b>Bifunctional <sup>64</sup>Cu-labelled macrobicyclic cage amine isothiocyanates for immuno-positron emission tomography</b> B. M. Paterson,* G. Buncic, L. E. McInnes, P. Roselt <sup>b</sup> C. Cullinane, D. Binns, C. M. Jeffery, R. I. Price, R. J. Hicks and P. S. Donnelly <i>University of Melbourne, Australia</i>
09:55	Discussion
10:45	Morning Coffee
11:20 <b>I4</b>	<b>Radiometals: Towards a New Success Story in Nuclear Imaging?</b> David Brasse* and Aline Nonat <i>CNRS, France</i>
11:30 <b>C15</b>	<b>Terbium-Based Time-Gated Förster Resonance Energy Transfer Imaging for Evaluating Protein-Protein Interactions on Cell Membranes</b> Stina Lindén*, Manish Kumar Singh, Marie Regairaz, François Dautry, François Treussart, and Niko Hildebrandt <i>Univesrité de Paris Sud, France</i>
11:35 <b>C16</b>	<sup>99m</sup> Tc SPECT imaging agent based on cFLFLFK for the detection of FPR1 in inflammation Graeme J. Stasiuk*, Paul M. Holloway, William Trigg, Sajinder Kaur Luthra, Veronique Morisson Iveson, Felicity N. E. Gavins and Nicholas J. Long <i>Imperial College London, UK</i>
11:40	Discussion
12:50	Acknowledgements
13:00	Close of meeting & lunch