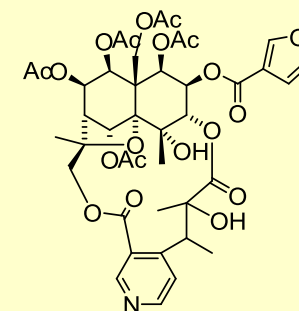
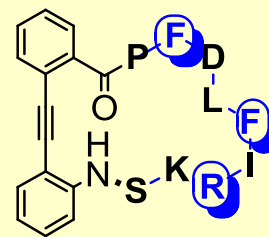
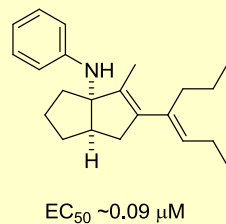
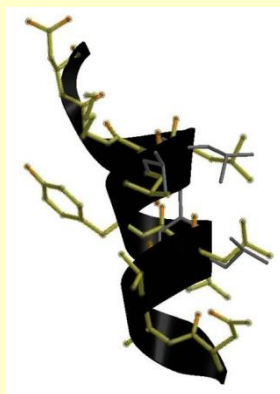
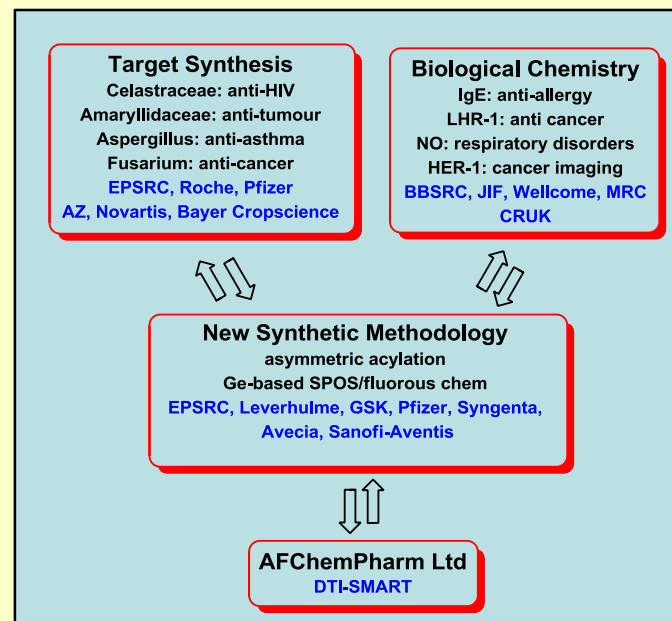
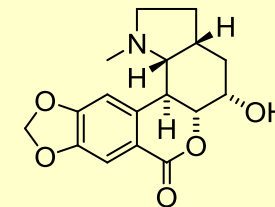
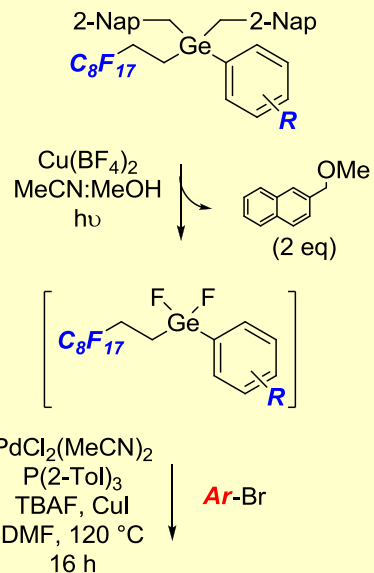
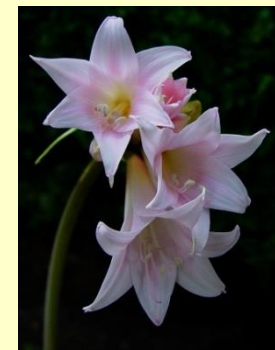
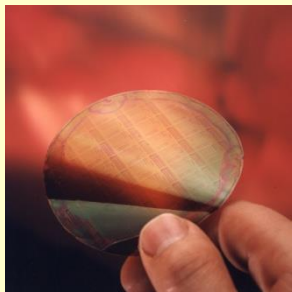


Spivey group

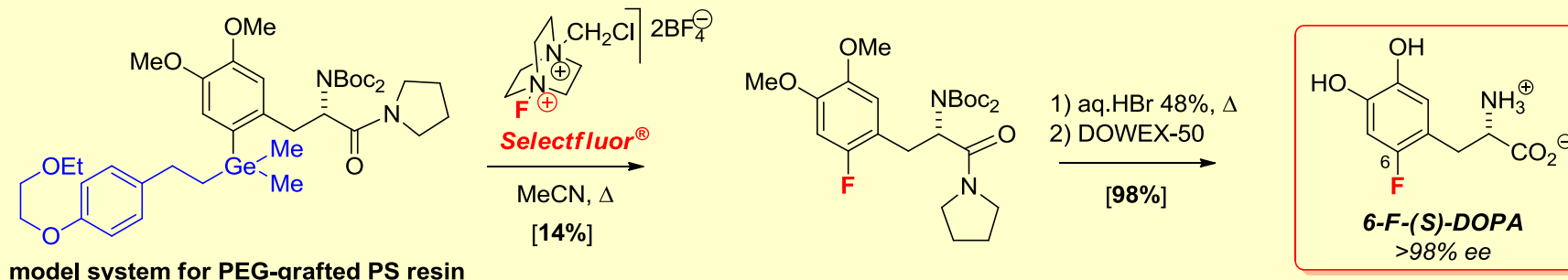
e-mail: a.c.spivey@imperial.ac.uk web: <http://www.ch.ic.ac.uk/spivey/>

methodology ↔ total synthesis ↔ biological chemistry



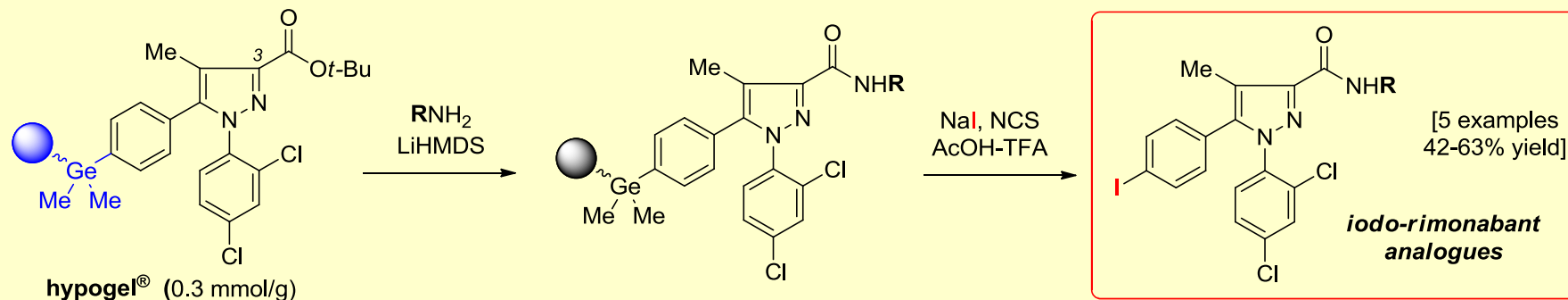
Arylgermane-based PET/SPECT Imaging Precursors

- **[¹⁸F]-6-Fluoro-DOPA** – dopamine receptor antagonist (*Parkinson's Disease*) – PET

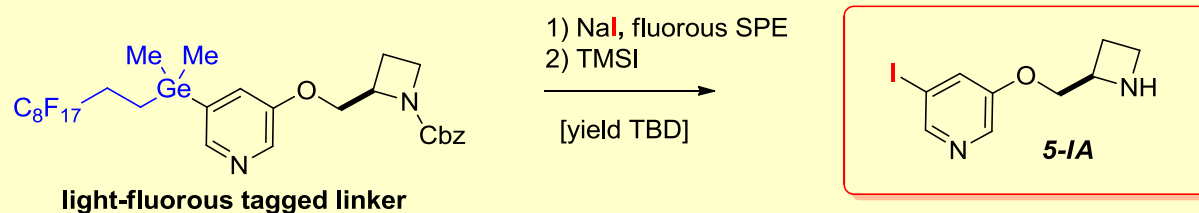


- **[¹²⁴I]-Iodo-rimonabant** – CB₁ receptor antagonist (*Obesity*) - SPECT

– Spivey et al. *Org. Lett.* **2009**, 11, 2760



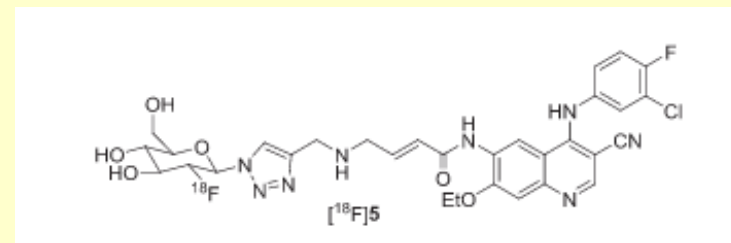
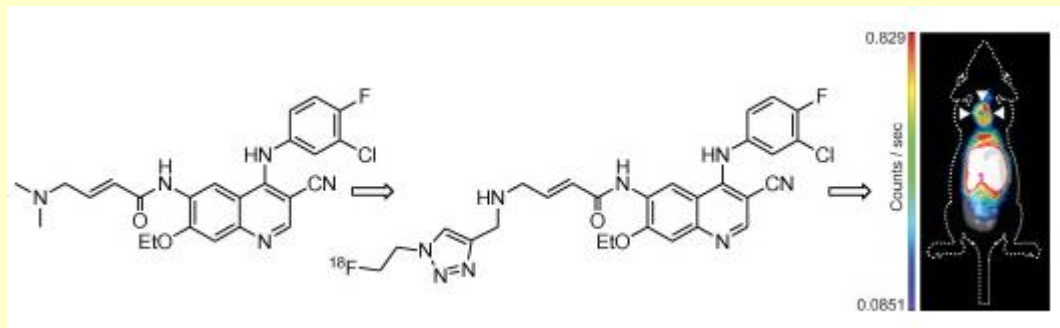
- **[¹²⁴I]-5-IA** - nicotinic acetylcholine receptor antagonist (*Alzheimer's Disease*) - SPECT



Other PET Imaging Projects

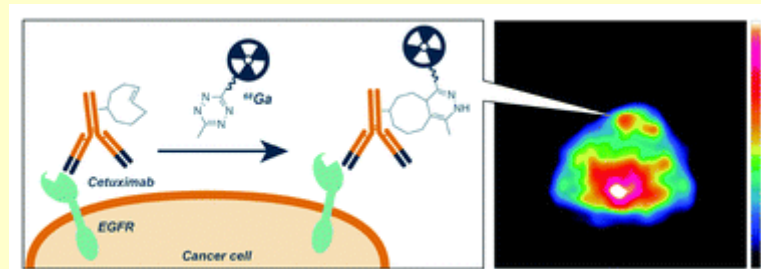
- **[¹⁸F] EGFR receptor antagonist (Breast cancer) → PET**

- Eric Aboayge (IC, Oncology Hammersmith)
- *Bioorg. Med. Chem.* **2010**, *18*, 6634-6645, *J. Lab. Cpd. Radiopharm.* **2014**, *57*, 92-96.



- **[⁶⁸Ga]-bioorthogonal Cetuximab (mAb) labelling via a pretargeting strategy → PET**

- Laurence Carroll & Eric Aboayge (IC, Oncology Hammersmith)
- *Chem. Commun.* **2014**, 9557-9560.



- **Mn-salen catalysed benzylic C–H activation for the synthesis of aryl [¹⁸F]CF₃ probes → PET**

- Laurence Carroll & Eric Aboayge (IC, Oncology Hammersmith)
- *Chem. Comm.* **2015**, *51*, 8439-8441.

