Paul Brennan

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Summary
I am an industry trained, innovative and successful medicinal chemistry with diverse experience, a history of clinical candidate delivery and a strong background in synthetic organic and medicinal chemistry. I have led and delivered advanced compounds in projects targeting major disease targets: kinase inhibitors, GPCR agonists and antagonists, metabolic enzymes, ion channels and chromatin modifiers.

As the principal investigator of medicinal chemistry at the Structural Genomics Consortium in Oxford University, I lead the chemistry team dedicated to designing and synthesizing open-access small molecule probes for epigenetic proteins in order to elucidate the mechanism of epigenetic regulation, one of the most exciting new areas of human biology. In the University of Oxfofd's newly established Target Discovery Institute, my research is focused on the use of small molecules and chemoproteomics in target elucidation.

Experience

2011 – present	**SGC and Target Discovery Institute, Nuffield Department of Medicine** **University of Oxford** Principal Investigator in Medicinal Chemistry leading a group of doctoral and post-doctoral researchers. **Research projects:** Small molecule epigenetic probes for bromodomains, tudor domains and histone demethylases.
2005 – 2011	**Pfizer,** Sandwich, UK. Senior Principal Scientist and chemistry team leader in Urology, Allergy and Respiratory, Epigenetics. **Research projects:** CNS GPCR agonists and antagonists for incontinence and obesity**,** peripheral GPCR antagonists for respiratory disease**,** ion channel antagonists for pain**, e**nzyme inhibitors for respiratory disease
2003 – 2005	**Amgen,** Thousand Oaks, California. Research Scientist and chemistry team leader; **Research projects:** PLK Serine/threonine kinase inhibitor for oncology, tyrosine kinase inhibitor for oncology
1998	**Pharmacopeia**, Princeton, New Jersey. Summer Intern. **Responsibilities:** Multi-step organic synthesis Solid-Phase combinatorial chemistry
1989 – 1991	**Genta** (now **Promega**), San Luis Obispo, California. Research Associate. **Responsibilities:** Synthesis and HPLC purification of anti-sense oligonucleotides Synthesis of modified nucleosides

Education

2000 – 2003	U**niversity of Cambridge, Department of Chemistry** Post-doctoral Researcher and chemistry team leader Advisor: Professor Steven V. Ley **Research projects:** The Total Synthesis of Rapamycin Synthesis of Oligosaccharides Using Clean Chemistry Suzuki Cross Coupling with Pd-containing Perovskites.
1995 – 2000	**University of California, Berkeley** *PhD in Organic Chemistry*; awarded April 2000 Advisor: Professor Paul A. Bartlett, Ph.D. Thesis title: 1. *Phosphinate Inhibitors of Peptidoglycan Biosynthesis;* 2. *Development of a New Ring System for Combinatorial Chemistry*
1991 – 1995	**University of California, Davis** *Bachelor of Science in Chemistry*, *with high honors*; awarded June 1995. Awarded *Most Outstanding Student in Organic Chemistry.* Advisor: Professor Mark J. Kurth Senior thesis title: Site Isolation Studies on Solid Support

Professional Associations

2011 – present	**Medical Research Council** Development Pathway Funding Scheme review panel.
2011 - present	**3D-Fragment Library Consortium** Steering Committee

Recent Publications

1. Fedorov, O.; Lingard, H.; Wells, C.; Monteiro, O. P.; Picaud, S.; Keates, T.; Yapp, C.; Philpott, M.; Martin, S. J.; Felletar, I.; Marsden, B. D.; Filippakopoulos, P.; Müller, S.; Knapp, S.; Brennan, P. E., [1,2,4]Triazolo[4,3-a]phthalazines: Inhibitors of Diverse Bromodomains. *J. Med. Chem.* **2014**, *57* (2) 462–476.

2. Morley, A. D.; Pugliese, A.; Birchall, K.; Bower, J.; Brennan, P.; Brown, N.; Chapman, T.; Drysdale, M.; Gilbert, I. H.; Hoelder, S.; Jordan, A.; Ley, S. V.; Merritt, A.; Miller, D.; Swarbrick, M. E.; Wyatt, P. G., Fragment-based hit identification: thinking in 3D. *Drug Discovery Today* **2013,** *18* (23–24), 1221-1227.

3. Hopkinson, R. J.; Tumber, A.; Yapp, C.; Chowdhury, R.; Aik, W.; Che, K. H.; Li, X. S.; Kristensen, J. B. L.; King, O. N. F.; Chan, M. C.; Yeoh, K. K.; Choi, H.; Walport, L. J.; Thinnes, C. C.; Bush, J. T.; Lejeune, C.; Rydzik, A. M.; Rose, N. R.; Bagg, E. A.; McDonough, M. A.; Krojer, T. J.; Yue, W. W.; Ng, S. S.; Olsen, L.; Brennan, P. E.; Oppermann, U.; Muller, S.; Klose, R. J.; Ratcliffe, P. J.; Schofield, C. J.; Kawamura, A., 5-Carboxy-8-hydroxyquinoline is a broad spectrum 2-oxoglutarate oxygenase inhibitor which causes iron translocation. *Chemical Science* **2013,** *4* (8), 3110-3117.

4. Hewings, D. S.; Fedorov, O.; Filippakopoulos, P.; Martin, S.; Picaud, S.; Tumber, A.; Wells, C.; Olcina, M. M.; Freeman, K.; Gill, A.; Ritchie, A. J.; Sheppard, D. W.; Russell, A. J.; Hammond, E. M.; Knapp, S.; Brennan, P. E.; Conway, S. J., Optimization of 3,5-Dimethylisoxazole Derivatives as Potent Bromodomain Ligands. *J. Med. Chem.* **2013,** *56* (8), 3217-3227.

5. Hay, D.; Fedorov, O.; Filippakopoulos, P.; Martin, S.; Philpott, M.; Picaud, S.; Hewings, D. S.; Uttakar, S.; Heightman, T. D.; Conway, S. J.; Knapp, S.; Brennan, P. E., The design and synthesis of 5- and 6-isoxazolylbenzimidazoles as selective inhibitors of the BET bromodomains. *MedChemComm* **2013,** *4* (1), 140-144.