

Professor Jonathan B Cooper

Qualifications

BA (Hons) Biochemistry (Merton College, University of Oxford) 1985 (2.1).

PhD Crystallography (Birkbeck College, University of London) 1989.

Positions

- 1) *Emeritus Professor of Structural Biology*, UCL Division of Medicine and *Honorary Research Fellow*, Department of Biological Sciences, Birkbeck, University of London, 2015 - present, .
- 2) *Professor of Structural Biology*, 2007-2015, UCL Division of Medicine (Royal Free Campus).
- 3) *Lecturer, Senior Lecturer, Reader*, 1996-2007, School of Biological Sciences, University of Southampton.
- 4) *Lecturer*, 1991-1996, Department of Crystallography, Birkbeck College London.
- 5) *Research Fellow*, 1989-1991, ICRF Unit, Birkbeck College London.
- 6) *Research Assistant*, 1988-1989, Department of Crystallography, Birkbeck College London.

Selected and Recent Publications

'High resolution X-ray analyses of renin inhibitor aspartic proteinase complexes'. S. I. Foundling, J. B. Cooper, F. E. Watson, A. Cleasby, L. H. Pearl, B. L. Sibanda, A. M. Hemmings, S. P. Wood, T. L. Blundell, M. J. Valler, C. G. Norey, J. Kay, J. Boger, B. Dunn, B. J. Leckie, D. M. Jones, B. Atrash, A. Hallett, M. Szelke (1987). *Nature* 327, 349-352.

'X-ray Analyses of Aspartic Proteinases II. Three dimensional structure of the hexagonal crystal form of porcine pepsin at 2.3 Å resolution'. (1990). J. B. Cooper, G. Khan, G. Taylor, I. J. Tickle and T. L. Blundell (1990). *J. Molec. Biol.* 214, 199-222.

'X-ray analyses of peptide inhibitor complexes define the structural basis of specificity for human and mouse renins'. V. Dhanaraj, C. G. Dealwis, C. Frazao, M. Badasso, B. L. Sibanda, I. J. Tickle, J. B. Cooper, H. P. C. Driessens, M. Newman, C. Aguilar, S. P. Wood, T. L. Blundell, P. M. Hobart, K. F. Geohegan, M. J. Amirati, D. E. Danley, B. A. O'Connor and D. J. Hoover (1992). *Nature* 357, 466-472.

'Structure of porphobilinogen deaminase reveals a flexible multidomain polymerase with a single catalytic site'. G. V. Louie, P. D. Brownlie, R. Lambert, J. B. Cooper, T. L. Blundell, S. P. Wood, M. J. Warren, S. C. Woodcock and P. M. Jordan (1992). *Nature* 359, 33-39.

'X-ray structure analysis of the iron-dependent superoxide dismutase from *Mycobacterium tuberculosis* at 2.0 Ångstroms resolution reveals novel dimer-dimer interactions'. J. B. Cooper, K. McIntyre, M. O. Badasso, S. P. Wood, Y. Zhang, T. R. Garbe and D. B. Young (1995). *J.Mol.Biol.* 246, 531-544.

'X-ray structure analysis of 5-aminolaevulinate dehydratase, a hybrid aldolase'. P. T. Erskine, N. Senior, S. Awan, R. Lambert, G. Lewis, I. J. Tickle, M. Sarwar, P. Spencer, P. Thomas, M. J. Warren, P. M. Shoolingin-Jordan, S.P. Wood, and J. B. Cooper (1997). *Nat. Struct. Biol.* 4, 1025-1031.

'A neutron Laue diffraction study of endothiapepsin: implications for the aspartic proteinase mechanism.' L. Coates, P. T. Erskine, S. P. Wood, D. A. A. Myles and J. B. Cooper (2001). *Biochemistry* 40, 13149-13157.

'Structure of the neuronal protein calexcitin suggests a mode of interaction in signalling pathways of learning and memory.' P. T. Erskine, G. D. E. Beaven, R. Hagan, I. S. Findlow, J. M. Werner, S. P. Wood, J. Vernon, K. P. Giese, G. Fox and J. B. Cooper. (2006). *J. Molec. Biol.* 357, 1536-1547.

'High resolution structure of BipD: An invasion protein associated with the type III secretion system of *Burkholderia pseudomallei*.' P. T. Erskine, M. J. Knight, A. Ruaux, H. Mikolajek, N. Wong Fat Sang, J. Withers, R. Gill, S. P. Wood, M. Wood, G. C. Fox and J. B. Cooper (2006). *J. Molec. Biol.* 363,125-136.

In crystallo-screening for discovery of human norovirus 3C-like protease inhibitors. Guo, J., Douangamath, A., Song, W., Coker, A. R., Chan, A., Wood, S. P., Cooper, J. B., Resnick, E., London, N. and von Delft, F. (2020). *J. Struct. Biol.* X, 4, article number 100031.