

University Department of Pharmacology, Oxford
Publications by members of the Department 2013 – 2018

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Summary

In the years 2013-18 a total of 558 papers were published (excluding conference abstracts) – an average of 93 papers each year.

Citations: Scopus has recorded 5,905 citations (excluding self-citations). Three papers have been cited more than 100 times (one 209 times); 41 papers have been cited more than 40 times. On average each paper has been cited 10.6 times. The overall *h-index* for this period is 35. The publication record and the citation scores helped to place the Department in first place of the world rankings for the 301 different Departments of Pharmacology or Pharmacy in the world:

<https://www.topuniversities.com/university-rankings/university-subject-rankings/2019/pharmacy-pharmacology>

University Department of Pharmacology, Oxford

2013

In Vivo micro-PET Imaging Demonstrates Diminished Microglial Activation after FTY720 Treatment in an Animal Model of Multiple Sclerosis.

Airas, L., A. Dickens, M. Haaparanta-Solin, D. Anthony and J. Rinne. *Neurology* (2013) 80.

Nicotinic acid adenine dinucleotide phosphate (NAADP) is a second messenger in muscarinic receptor-induced contraction of guinea pig trachea.

Aley, P. K., N. Singh, G. C. Brailoiu, E. Brailoiu and G. C. Churchill. *J Biol Chem* (2013) 288: 10986-10993.

Special issue commentary: the changing face of inflammation in the brain.

Anthony, D. C. and F. J. Pitossi. *Molec Cell Neurosci* (2013) 53: 1-5.

BDNF-TrkB signaling in striatopallidal neurons controls inhibition of locomotor behavior.

Besusso, D., M. Geibel, D. Kramer, T. Schneider, V. Pendolino, B. Picconi, P. Calabresi, D. M. Bannerman and L. Minichiello. *Nat Commun* (2013) 4: 2031.

Fast measurement of sarcomere length and cell orientation in Langendorff-perfused hearts using remote focusing microscopy.

Botcherby, E. J., A. Corbett, R. A. Burton, C. W. Smith, C. Bollensdorff, M. J. Booth, P. Kohl, T. Wilson and G. Bub. *Circ Res* (2013) 113: 863-870.

Discovery by the Epistasis Project of an epistatic interaction between the GSTM3 gene and the HHEX/IDE/KIF11 locus in the risk of Alzheimer's disease.

Bullock, J. M., C. Medway, M. Cortina-Borja, J. C. Turton, J. A. Prince, C. A. Ibrahim-Verbaas, M. Schuur, M. M. Breteler, C. M. van Duijn, P. G. Kehoe, R. Barber, E. Coto, V. Alvarez, P. Deloukas, N. Hammond, O. Combarros, I. Mateo, D. R. Warden, M. G. Lehmann, O. Belbin, K. Brown, G. K. Wilcock, R. Heun, H. Kolsch, A. D. Smith, D. J. Lehmann and K. Morgan. *Neurobiol Aging* (2013) 34: 1309 e1301-1307.

Obesity and statins are both independent predictors of enhanced coronary arteriolar dilation in patients undergoing heart surgery.

Cassuto, J., A. Feher, L. Lan, V. S. Patel, V. Kamath, D. C. Anthony and Z. Bagi. *Journal of cardiothoracic surgery* (2013) 8: 117.

A safe lithium mimetic? The inositol depletion hypothesis rescues an experimental drug for bipolar disorder.

Churchill, G. C., N. Singh and S. Vasudevan. *Biochemist* (2013) 35: 16-19.

The yeast p5 type ATPase, spf1, regulates manganese transport into the endoplasmic reticulum.

Cohen, Y., M. Megyeri, O. C. Chen, G. Condomitti, I. Riezman, U. Loizides-Mangold, A. Abdul-Sada, N. Rimon, H. Riezman, F. M. Platt, A. H. Futerman and M. Schuldiner. *PLoS One* (2013) 8: e85519.

Selective permeabilization of the blood-brain barrier at sites of metastasis.

Connell, J. J., G. Chatain, B. Cornelissen, K. A. Vallis, A. Hamilton, L. Seymour, D. C. Anthony and N. R. Sibson. *J Natl Cancer Inst* (2013) 105: 1634-1643.

Microglial activation, increased TNF and SERT expression in the prefrontal cortex define stress-altered behaviour in mice susceptible to anhedonia.

Couch, Y., D. C. Anthony, O. Dolgov, A. Revischin, B. Festoff, A. I. Santos, H. W. Steinbusch and T. Strekalova. *Brain Behav Immun* (2013) 29: 136-146.

Systemic inflammation alters central 5-HT function as determined by pharmacological MRI.

Couch, Y., C. J. Martin, C. Howarth, J. Raley, A. A. Khrapitchev, M. Stratford, T. Sharp, N. R. Sibson and D. C. Anthony. *Neuroimage* (2013) 75: 177-186.

Glycomimetic affinity-enrichment proteomics identifies partners for a clinically-utilized iminosugar.

Cruz, I. N., C. S. Barry, H. B. Kramer, C. C. Chuang, S. Lloyd, A. C. van der Spoel, F. M. Platt, M. Yang and B. G. Davis. *Chem Sci* (2013) 4: 3442-3446.

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D'Angelo, G., T. Uemura, C. C. Chuang, E. Polishchuk, M. Santoro, H. Ohvo-Rekila, T. Sato, G. Di Tullio, A. Varriale, S. D'Auria, T. Daniele, F. Capuani, L. Johannes, P. Mattjus, M. Monti, P. Pucci, R. L. Williams, J. E. Burke, F. M. Platt, A. Harada and M. A. De Matteis. *Nature* (2013) 501: 116-120.

Cytolytic granules supply Ca(2+) for their own exocytosis via NAADP and resident two-pore channels.

Davis, L. C. and A. Galione. *Commun Integr Biol* (2013) 6: e24175.

STX2171, a 17beta-hydroxysteroid dehydrogenase type 3 inhibitor, is efficacious in vivo in a novel hormone-dependent prostate cancer model.

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Interactions between plasma concentrations of folate and markers of vitamin B12 status with cognitive performance in elderly people not exposed to folic acid fortification: the Hordaland Health Study.

Doets, E. L., P. M. Ueland, G. S. Tell, S. E. Vollset, O. K. Nygard, P. Van't Veer, L. C. de Groot, E. Nurk, H. Refsum, A. D. Smith and S. J. Eussen. *Br J Nutr* (2013): 1-11.

Linking hyperpolarization to endothelial cell calcium events in arterioles.

Dora, K. A. and C. J. Garland. *Microcirculation* (2013) 20: 248-256.

Measurement of changes in endothelial and smooth muscle Ca²⁺(+) in pressurized arteries.

Dora, K. A. and M. A. Hill. *Methods Mol Biol* (2013) 937: 229-238.

Preventing Alzheimer's disease-related gray matter atrophy by B-vitamin treatment.

Douaud, G., H. Refsum, C. A. de Jager, R. Jacoby, T. E. Nichols, S. M. Smith and A. D. Smith. *Proc Natl Acad Sci U S A* (2013) 110: 9523-9528.

Serum sphingolipids level as a novel potential marker for early detection of human myocardial ischaemic injury.

Egom, E. E., M. A. Mamas, S. Chacko, S. E. Stringer, V. Charlton-Menys, M. El-Omar, D. Chirico, B. Clarke, L. Neyses, J. K. Cruickshank, M. Lei and F. Fath-Ordoubadi. *Front Physiol* (2013) 4: 130.

Heterogeneous properties of central lateral and parafascicular thalamic synapses in the striatum.

Ellender, T. J., J. Harwood, P. Kosillo, M. Capogna and J. P. Bolam. *J Physiol* (2013) 591: 257-272.

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Elshorbagy, A. K., G. Nijpels, M. Valdivia-Garcia, C. D. Stehouwer, M. Ocke, H. Refsum and J. M. Dekker. *J Nutr* (2013) 143: 1982-1988.

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Elshorbagy, A. K., M. Valdivia-Garcia, D. A. Mattocks, J. D. Plummer, D. S. Orentreich, N. Orentreich, H. Refsum and C. E. Perrone. *Metabolism* (2013) 62: 509-517.

Human hippocampal energy metabolism is impaired during cognitive activity in a lipid infusion model of insulin resistance.

Emmanuel, Y., L. E. Cochlin, D. J. Tyler, C. A. de Jager, A. D. Smith and K. Clarke. *Brain Behav* (2013) 3: 134-144.

Design, synthesis and structure-activity relationships of 3,5-diaryl-1H-pyrazoles as inhibitors of arylamine N-acetyltransferase.

Fullam, E., J. Talbot, A. Abuhammed, I. Westwood, S. G. Davies, A. J. Russell and E. Sim. *Bioorg Med Chem Lett* (2013) 23: 2759-2764.

The male reproductive tract and spermatogenesis

Gadea, J., J. Parrington, J. Kashir and K. Coward. In: **Textbook of Clinical Embryology** (2013). K. Coward and D. Wells. Cambridge, CUP: 18-26.

Regioselective opening of myo-inositol orthoesters: mechanism and synthetic utility.

Godage, H. Y., A. M. Riley, T. J. Woodman, M. P. Thomas, M. F. Mahon and B. V. Potter. *J Org Chem* (2013) 78: 2275-2288.

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Jagannath, A., R. Butler, S. I. H. Godinho, Y. Couch, L. A. Brown, S. R. Vasudevan, K. C. Flanagan, D. Anthony, G. C. Churchill, M. J. A. Wood, G. Steiner, M. Ebeling, M. Hossbach, J. G. Wettstein, G. E. Duffield, S. Gatti, M. W. Hankins, R. G. Foster and S. N. Peirson. *Cell* (2013) 154: 1100-1111.

Automatic detection and spatial clustering of interictal discharges in invasive recordings.

Janca, R., P. Jezdik, R. Cmejla, P. Krsek, J. G. R. Jefferys, P. Marusic and P. Jiruska (2013). *IEEE Int. Symp. Med. Meas. Appl., MeMeA, Proc.* 219-223

Automatic detection of high-frequency oscillations in invasive recordings.

Janca, R., P. Jezdik, R. Cmejla, P. Krsek, J. G. R. Jefferys, P. Marusic and P. Jiruska (2013). *MeMeA - IEEE Int. Symp. Med. Meas. Appl., MeMeA, Proc.* 228-232.

Synchronization and desynchronization in epilepsy: controversies and hypotheses.

Jiruska, P., M. de Curtis, J. G. Jefferys, C. A. Schevon, S. J. Schiff and K. Schindler. *J Physiol* (2013) 591: 787-797.

Neuronal and network dynamics preceding experimental seizures

Jiruska, P., F. Mormann and J. G. R. Jefferys. *Recent Advance in Predicting and Preventing Epileptic Seizures* (2013). Ed., World Scientific Publishing Co.: 16-29.

Dentate gyrus progenitor cell proliferation after the onset of spontaneous seizures in the tetanus toxin model of temporal lobe epilepsy.

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Kashir, J., C. Jones, J. Parrington and K. Coward. In: **Textbook of Clinical Embryology** (2013). K. Coward and D. Wells. Cambridge, CUP: 98-109.

Unique catalytic activities and scaffolding of p21 activated kinase-1 in cardiovascular signaling.

Ke, Y., M. Lei, X. Wang and R. J. Solaro. *Front Pharmacol* (2013) 4: 116.

Subtype-selective regulation of IP(3) receptors by thimerosal via cysteine residues within the IP(3)-binding core and suppressor domain.

Khan, S. A., A. M. Rossi, A. M. Riley, B. V. Potter and C. W. Taylor. *Biochem J* (2013) 451: 177-184.

Atrial arrhythmia, triggering events and conduction abnormalities in isolated murine RyR2-P2328S hearts.

King, J. H., Y. Zhang, M. Lei, A. A. Grace, C. L. Huang and J. A. Fraser. *Acta Physiol (Oxf)* (2013) 207: 308-323.

Sexually dimorphic effects of catechol-O-methyltransferase (COMT) inhibition on dopamine metabolism in multiple brain regions.

Laatikainen, L. M., T. Sharp, P. J. Harrison and E. M. Tunbridge. *PLoS One* (2013) 8: e61839.

The endoplasmic reticulum and junctional membrane communication during calcium signaling.

Lam, A. K. and A. Galione. *Biochim Biophys Acta* (2013) 1833: 2542-2559.

Hax-1 identified as a two-pore channel (TPC)-binding protein.

Lam, A. K., A. Galione, F. A. Lai and S. Zissimopoulos. *FEBS Lett* (2013) 587: 3782-3786.

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Lambert, J. C., C. A. Ibrahim-Verbaas, D. Harold, A. C. Naj, R. Sims, et al. *Nat Genet* (2013) 45: 1452-1458.

Decreased striatal dopamine in group II metabotropic glutamate receptor (mGlu2/mGlu3) double knockout mice.

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A novel color change mechanism for breast cancer biomarker detection: naphthoquinones as specific ligands of human arylamine N-acetyltransferase 1.

Laurieri, N., J. E. Egleton, A. Varney, C. C. Thinnis, C. E. Quevedo, P. T. Seden, S. Thompson, F. Rodrigues-Lima, J. Dairou, J. M. Dupret, A. J. Russell and E. Sim. *PLoS One* (2013) 8: e70600.

A novel immunomodulator, FTY-720 reverses existing cardiac hypertrophy and fibrosis from pressure overload by targeting NFAT (nuclear factor of activated T-cells) signaling and periostin.

Liu, W., M. Zi, H. Tsui, S. K. Chowdhury, L. Zeef, Q. J. Meng, M. Travis, S. Prehar, A. Berry, N. A. Hanley, L. Neyses, R. P. Xiao, D. Oceandy, Y. Ke, R. J. Solaro, E. J. Cartwright, M. Lei and X. Wang. *Circ Heart Fail* (2013) 6: 833-844.

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