

Dr Craig Hughes

Research Fellow

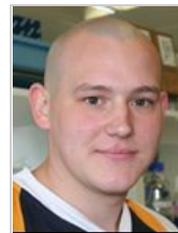
Cardiovascular and Respiratory Sciences

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About

Craig is a post-doctoral researcher investigating tyrosine kinase-based signal transduction in platelets. He is also interested in the role of platelets in development and disease.

Qualifications

- PhD Cardiovascular Medicine 2010
- BSc (Hons) Medical Biochemistry 1st Class 2004

Research

Craig's research focuses on the platelet receptor CLEC-2 and the novel signalling motif through which it couples to the platelet signalling machinery. He is comparing the signalling mechanism of this hemITAM motif (CLEC-2) to the more established ITAM pathway (e.g. GPVI/FcR-g chain, FcγRIIA, TCR, BCR) to understand how each receptor type utilise similar signalling pathways.

Craig is also interested in novel ITAM and hemITAM receptors, particularly on platelets, and also in snake venoms which activate platelets either through GPVI or CLEC-2 or through novel receptors

Publications

Hughes CE, Sinha U, Pandey A, Eble JA, O'Callaghan CA, **Watson SP** (2013) **Critical Role for an Acidic Amino Acid Region in Platelet Signaling by the HemITAM (Hemi-immunoreceptor Tyrosine-based Activation Motif) Containing Receptor CLEC-2 (C-type Lectin Receptor-2).** (<http://www.ncbi.nlm.nih.gov/pubmed/23264619>) J Biol Chem. 2013 Feb 15;288(7):5127-35. doi: 10.1074/jbc.M112.411462. Epub 2012 Dec 21.

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Hughes CE, Navarro-Núñez L, Finney BA, Mourão-Sá D, Pollitt AY, Watson SP; (2010) CLEC-2 is not required for platelet aggregation at arteriolar shear. **JTH**; 8(10) 2328-32

Hughes CE, Pollitt AY, Mori J, Eble JA, Tomlinson MG, Hartwig JH, O'Callaghan CA, Fütterer K, Watson SP; (2010) CLEC-2 activates Syk through dimerisation. **Blood**; 115(14) 2947-55

Spalton JC, Mori J, Pollitt AY, Hughes CE, Eble JA, Watson SP; (2009) The novel Syk inhibitor R406 reveals mechanistic differences in the initiation of GPVI and CLEC-2 signalling in platelets. **JTH**; 7(7) 1192-9

Grygielska B, Hughes CE, Watson SP ; (2009) Molecular basis of platelet activation by an $\alpha_{IIb}\beta_3$ -CHAMPS peptide. **JTH**; 7(2) 339-46

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