Dr Elizabeth Gardiner

Dr Gardiner will be visiting the University of Birmingham 6 May – 5 June 2014, hosted by **Professor Steve Watson (http://www.birmingham.ac.uk/staff/profiles/cem/CVRS/Watson-Steve.aspx)** .

Dr Elizabeth Gardiner is an NHMRC Senior Research Fellow at the Australian Centre for Blood Diseases, Monash University, located at the Alfred Medical Research & Education Precinct (AMREP) in Melbourne, Australia. Her core expertise is in the biochemical and molecular analysis of immune-based platelet disorders. Platelets are critical for normal haemostatic responses however they play a primary role in thrombotic disorders.

Papers from Dr Gardiner's core research have demonstrated and characterised a novel mechanism of regulation of platelet adhesion receptor levels by metalloproteolysis. This shedding of platelet receptors is detected immediately following receptor engagement and signalling, or importantly, upon exposure to changes in vascular shear rates. Loss of the receptors has important functional outcomes for platelets, and for the stability of a thrombus.

Dr Gardiner has expanded her studies of platelet receptor regulation to examine how uncontrolled platelet activation as seen in human autoimmune-based diseases such as immunothrombocytopenia (ITP) and heparin-induced thrombocytopenia (HIT), influences surface levels of both platelet receptor GPVI and the related ITAM-containing FcγRIIa receptor levels.

Dr Gardiner will also present an IAS lecture as part of the UoB/BHF Cardiovascular Open Day and a specialist research lecture. Details of these will be available in April.

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