

Dr Paul Evans, PhD



BIOGRAPHY: Dr Evans is a Reader (Associate Professor) within the BHF Cardiovascular Sciences Unit, Imperial College London. He heads the Intracellular Signalling Laboratory within the Unit and has a long-standing interest in the signalling mechanisms that regulate vascular inflammation, especially MAP kinase and NF- κ B signalling. Since joining Imperial College in 2004, Dr Evans has focussed his research on the effects of shear stress (a mechanical force exerted by flowing blood) on pro-inflammatory and pro-apoptotic signalling pathways in vascular endothelial cells. These studies are relevant to vascular injury and atherosclerosis which develop predominantly at branches and bends in the arterial tree that are exposed to low or oscillatory shear stress. The cross-disciplinary nature of his work has led to interactions with molecular and cellular biologists, vascular physiologists and bioengineers. The research program will improve our understanding of the molecular mechanisms that give rise to the spatial distribution of atherosclerotic plaques. In addition, they will inform novel therapeutic approaches to prevent or treat atherosclerosis by inducing protective molecules at atherosusceptible regions.

Dr Evans' group has also developed an active interest in the influence of dietary consumption of green vegetables on cardiovascular health. They recently demonstrated that sulforaphane, a compound derived from green vegetables, can reduce inflammation of arteries and they are now testing whether dietary manipulation using green vegetables can influence atherosclerosis in rodent models and in patients.

Since 2004, Dr Evans has raised more than £1m research funding as PI through grants from the British Heart Foundation, Kidney Research UK, European Union and others, and has published in *Circulation*, *Circ. Res.*, *ATVB*, *FASEB J.*, *J. Biol. Chem.* and other journals. His personal website can be found here <http://www1.imperial.ac.uk/medicine/people/paul.evans/>.