BTCURE PhD Studentship

"Identifying the molecular basis for impaired regulation of effector T cells in inflammatory arthritis"

A PhD studentship is available in the Centre for Molecular and Cellular Biology of Inflammation, aimed at identifying the molecular basis for impaired regulation of effector T cells in inflammatory arthritis. Immune regulation is a critical process in the prevention of chronic inflammation and in resolution of the immune response. Rheumatoid arthritis is a chronic inflammatory disease where immune regulation is thought to be disturbed. Many cells, factors and processes are involved in immune regulation, including regulatory T cells (Treg), both CD4 and CD8, which have been studied over the past two decades. However, Tregs are present at high numbers in the arthritic joint and are functionally suppressive.

The hypothesis of this project is that immune dysregulation in inflammatory arthritis is not a consequence of impaired Treg function, but rather due to resistance of the effector T cells to Treg-mediated suppression.

This 3-year PhD project will take place in the Centre for Molecular and Cellular Biology of Inflammation, Division of Immunology, Infection & Inflammatory Disease, King's College London. The project will be supervised by Dr Valerie Corrigall and Dr Leonie Taams, and involve close collaboration with the Rheumatology Department at Guy's & St Thomas' Hospital. The project is funded by EU IMI funded consortium BTCure and will combine a wide range of cellular and molecular techniques including human T cell isolation, cell culture, 8-colour flow cytometry, ELISA, quantitative RT-PCR, Western blotting, gene expression profiling and microarray analysis. A stipend of £24,491 will be paid.

The Centre for Molecular and Cellular Biology of Inflammation, located at Guy's Campus of King's College London, attracts students and staff from around the world. There are strong links with industry, as well as with clinical and other basic science departments across King's, in the UK and internationally. Work within the Centre spans the full spectrum of inflammation research from basic science to clinical trials. For further details and informal inquiries, please contact Dr Valerie Corrigall (valerie.corrigall@kcl.ac.uk) or Dr Leonie Taams (leonie.taams@kcl.ac.uk).

For further information on how to apply, please go to:
http://www.kcl.ac.uk/medicine/research/divisions/diiid/centres/cmcbi/study.aspx.

The closing date for this position is **10 May 2013**.