



PostDoc Job Opportunity



DUBLIN CITY UNIVERSITY	First Name	Last Name	email	Institute	Address
PI name & contact details:	Sandra	O'Neill	sandra.oneill@dcu.ie	DUBLIN CITY UNIVERSITY	Glasnevin, Dublin 9, Ireland.
School:	Biotechnology				
Research Centre/ group affiliation:					
Research group/ centre website:	http://dcu.ie/info/staff_member.php?id_no=4793				

Brief summary of research group/ centre activity:

Research led by Dr Sandra O'Neill, is focused upon understanding the mechanisms that occur in the interactions between infectious and non-communicable diseases. In particular understanding how helminth infections prevent the initiation and perpetuation of inflammatory diseases. The major focus of our investigation is to identify novel helminth molecules or pathways that are involved in the suppression of Th1/Th17 pathways. These studies will enable scientist to identify molecules and/or pathways that could be exploited as novel therapeutics for inflammatory diseases.

Description of postdoctoral project on offer:

The project is to identify mechanisms of cellular crosstalk between novel innate immune cell populations. For many years we have studied the anti-inflammatory properties of parasitic worms to identify novel pathways that could be exploited as therapeutics for a number of inflammatory disorders. We have identified a novel mast cell and dendritic cell population that suppress inflammatory responses in T-cells. However, it is not known how these novel innate cell populations interact and if this interaction is important in suppressing inflammatory response. As part of your placement with our research group you will induce these novel cell population's either in vitro or in vivo and will examine the interaction of these cells populations and their subsequent influence upon T-cell responses. You will first characterize these interactions by examining changes in cellular phenotype as measure by cytokine secretion and cell surface marker expression by flow cytometry. You will determine the factors that are key to cellular cross talk by blocking these interactions using a number of different mechanisms. By the end of the project you should identify novel mechanisms of cellular crosstalk.

Please indicate the core skills or disciplines that are required for this position:

The post-doctoral scientist should have a background in cell biology, immunology or parasitology and be proficient in cells culturing and have experience in basic immunological techniques.