

University of Birmingham Research Placements

Research Supervisor	Rachel Bruton, the research manager for the group
Description of laboratory or group	Professor Moss's research is focussed around the application of translational immunological research in the study of human disease. His current research group includes clinical and non-clinical research scientists working on a range of different projects: The immune response to cancer Immune control of chronic human viral infection Mechanisms of graft-versus-leukaemia following stem cell transplantation The Immunology of pregnancy Additional research is undertaken with Professor Stankovic on the genetics of Chronic Lymphocytic Leukaemia and with colleagues within UHBFT on research using Clinical Informatics.
Number of placements available	2
Project Title	Translational immunological research in the study of human disease
Start Date	June
Duration of placement	9-5, five days a week, but happy to be flexible, any dates over the summer can be accommodated
Project Description	<p>Professor Moss's research is focussed around the application of translational immunological research in the study of human disease. His current research group includes clinical and non-clinical research scientists working on a range of different projects:</p> <p>The immune response to cancer: The group study the innate, adaptive and stromal response in several human cancers including leukaemia & lymphoma as well as pancreatic, ovarian and testicular cancer. Important technologies include flow sorting, CyTOF and single cell RNA-Seq.</p> <p>Immune control of chronic human viral infection: With over 20 years of contribution within cytomegalovirus infection, the team continue to investigate the mechanisms and impact of chronic viral infection on human health.</p> <p>Mechanisms of graft-versus-leukaemia following stem cell transplantation: Stem cell (bone marrow) transplantation can cure chemo-resistant cancer and the team are working with colleagues within the</p> <p>Department of Haematology to uncover the mechanisms of this effect</p> <p>The Immunology of pregnancy: Pregnancy offers a major immunological challenge to the mother and several disorders of pregnancy may arise from a heightened fetal-specific 'rejection'. In collaboration with Professor Kilby, the team investigate the underlying mechanisms of immune homeostasis. Additional research is undertaken with Professor Stankovic on the genetics of Chronic Lymphocytic Leukaemia and with colleagues within UHBFT on research using Clinical Informatics.</p> <p>Depending on the students background a suitable project within an area listed above would be developed</p>
Person Requirements	Motivated, Enthusiastic
Academic Requirements	An individual following a biological science subject or a mathematical or computer scientist keen to develop their skills in a biological field.

Development Opportunities	Being involved in a research project during a UG degree is immensely helpful in determining whether a particular area is something that a student is keen to pursue as well as adding to their cv. All training and support will be given to enable the student to complete the given project
Funding	Students will be provided with a bursary to contribute to any costs or expenses for the duration of the internship
How to apply	Please complete a brief cover letter to demonstrate your interest, along with your CV at the link below. There is also space to submit any additional files i.e. poster presentations, publications. https://uobasops.formstack.com/forms/uobresearch2020