Division of Immunology and Inflammation, Department of Medicine

PhD studentship: The role of eosinophils in skin inflammation and carcinogenesis

Stipend: £18,000 (inclusive of London allowance) per annum + Tuition Fees (Home/EU rate) for 3 years.

We invite applications for a British Skin Foundation-funded PhD studentship to investigate the role of eosinophils in skin inflammation and cancer development in the laboratory of Dr Jessica Strid (j.strid@imperial.ac.uk).

The Strid laboratory studies immune surveillance at epithelial body surface tissues, such as the skin, and focus on understanding the role of tissue resident and infiltrating immune cells in regulating epithelial cell homeostasis, repair and cancer. The laboratory has a particular interest in the origins of Type 2 immunity and its role in immune stress-surveillance (1-3).

This project will focus on eosinophils in the skin. Eosinophils are potent immune cells which are found in both healthy and perturbed skin (4-5). Although eosinophilic skin diseases are well known, a comprehensive understanding of the function of eosinophils in healthy and diseased skin remains elusive. Throughout our work we have found that eosinophils are recruited to the skin during tissue inflammation and accumulate in large numbers in skin tumours. The project will investigate the role of eosinophils in skin inflammation and development of cutaneous squamous cell carcinomas (cSCC). While most cSCCs are easily treated, a substantial number may recur or metastasize. As cSCCs are extremely common, and on the rise, the number of 'high risk' tumours is increasing and a better understanding of what drives this disease is imperative. The central aim of this proposal is to identify and characterize mechanism(s) whereby eosinophils regulate skin inflammation and carcinogenesis. The work will be undertaken using both murine preclinical models and human tissue. The results will define the role of eosinophils in skin inflammation and tumour immunology and help to identify new immune therapeutic targets against epithelial tumours.

The project will provide training in cell culture, all core immunology techniques (advanced FACS, imaging, transcriptomics etc) and in vivo models of disease. Additional training will be provided where necessary.

Requirements:
Applicants must have/or expect to gain a first class or upper second class honours degree or overseas equivalent in a relevant subject area (immunology or closely related discipline) preferably with experience with in vivo immunology assays and models. A Master's Degree and/or some laboratory experience is preferable but not essential. We look for highly motivated applicants with excellent interpersonal, written and oral communication skills. Applicants must also meet Imperial College's English language requirements – further details can be found at http://www3.imperial.ac.uk/registry/admissions/pgenglish.

How to Apply:
Applicants are requested to send a full CV (including the names and email addresses of at least two academic referees), and personal statement (detailing why you are interested in the research project). Suitable candidates will then be asked to complete an electronic application form at Imperial College London in order for their qualifications to be addressed by College Registry.
Please submit your application or any informal enquiries directly to Jessica Strid (j.strid@imperial.ac.uk).

**Application deadline: 1st April 2019**

**Funding Notes:**
The PhD studentship is funded by the British Skin Foundation. Stipend: £18,000 (inclusive of London allowance) per annum + Tuition Fees (Home/EU rate) for 3 years.

A tax-free stipend and home UK/EU fees for 3 years will be awarded. Overseas students should be able to demonstrate adequate financial support to cover the difference between the home/EU fee and the overseas fee. Applicants are also required to meet Imperial College’s English language requirements. Please see the following link: [View Website]

**References:**


