



MedImmune, Inc.

Job Description

Position #SWB22ONC

Job Title: Postdoctoral Fellow – Science without Borders program

Site: MedImmune, Cambridge, UK

Department: Research – Oncology

Duration: 2 years

We are seeking a highly motivated postdoctoral fellow to join the Oncology (ONC) department to lead an independent research project to investigate the impact of ageing on anti-tumour immunity. The research will be conducted in MedImmune's state-of-the-art laboratories in Cambridge (UK) and will help drive innovation in those scientific areas of particular interest to MedImmune in achieving our vision to advance science and medicine to help people live better lives. It is anticipated that the project will be run in collaboration with scientific leaders in the immunology of ageing at the BBSRC Babraham Institute. The successful candidate will benefit from daily interaction with highly accomplished scientists in a collaborative environment. The position offers a unique opportunity for a talented scientist to work in a dynamic and innovative environment and to develop their career at the interface of basic research and drug discovery.

Major Duties and Responsibilities:

The candidate will conduct experiments to examine the immune microenvironment of tumors implanted in old vs. young mice, using cutting edge technologies, as well as the impact of immune modulatory treatments. The candidate will independently design and execute experiments, summarize data and prepare publications.

Requirements/Qualifications:

Nationality: Brazilian citizenship or permanent residency

Education: PhD in Immunology, or related discipline

Experience: Doctoral and/or Post-Doctoral research

Special Skills/Abilities:

The successful candidate must have a strong background in or good knowledge of immunology. Experience of *in vivo* modeling is highly desirable. Strong flow cytometry skills are essential. Experience of cell culture, in particular of primary cells, ELISA and immunohistochemistry are strongly preferred. Experience of gene expression analysis and quantitative rtPCR along with bioinformatics analysis techniques would be beneficial. Must be motivated and capable of working independently and collaboratively. All applicants must have strong written and verbal communication skills with publication(s) in the fields of immunology or vascular biology. Demonstrated ability to conduct a complex research project and pursue multiple lines of investigation at the same time.

Project Summary:

Tumours adopt immunosuppressive mechanisms and sculpt their microenvironment to evade immune monitoring and rejection. Recent clinical success has also increased the interest in

immunomodulatory approaches to cancer treatment. Pre-clinical testing of immunotherapies requires the use of syngeneic, immunocompetent mouse models to evaluate the impact of immune intervention on anti-tumour efficacy. These models are almost universally conducted in young (6-8 week old) mice. In contrast, human cancer patients are often elderly. There is a growing field of research investigating the impact of ageing on the human and murine immune system, which has primarily focused on responses to infectious disease and vaccination. This project will focus on characterization of the differences between immune responses to tumours in young and old mice, and evaluate the impact on anti-tumour efficacy of immunotherapy. The immune phenotype of spontaneously arising tumours in elderly (18-22 month old) mice will be analysed, in collaboration with the BBSRC Babraham Institute, and compared to the phenotype of the implanted tumours. The data generated in this project will advance our understanding of the impact of ageing on the tumour immune microenvironment, and will support development of hypotheses for potential testing of anti-cancer immune therapies.

Application Instructions:

Please note that these postdoctoral positions are advertised under an AZ/MedImmune partnership with Brazilian Science without Borders (SWB). If you are interested in any of these positions, please apply through the SWB website specifying the position number, [click here](#).