



**UNIVERSITY OF LEEDS**

## **CANDIDATE BRIEF**

**Research Technician in Cancer Immunotherapy,  
Leeds Institute of Medical Research, Faculty of Medicine and Health**



**Salary: Grade 5 (£23,067 – £26,715 p.a.)**

**Reference: MHLMR1007**

**Closing date: 27 February 2020**

**Fixed-term for 4 years available from 1 April 2020**

**We are happy to consider job share applications and are committed to flexible working for all our employees.**

## **Research Technician**

### **Leeds Institute of Medical Research at St James's**

### **Division of Haematology and Immunology**

**Are you an early career researcher looking for a challenge? Do you have a background in Cancer Biology, Immunology or Virology? Can you provide technical support to research projects? Do you want to further your career in one of the UK's leading research-intensive Universities?**

#### **A new paradigm in virus-mediated immunotherapy for liver cancer**

We are seeking a research technician to work on a new approach to liver cancer immunotherapy in the laboratory of Dr Stephen Griffin. You will use a range of molecular immunology and cell biology approaches to study therapeutic immune responses to liver cancer, driven by a new virus-based immunotherapy.

Advanced liver cancer is the fastest-growing cause of cancer-related deaths worldwide and current targeted therapy extends life expectancy by only a matter of months. However, harnessing the power of our own immune systems – immunotherapy - is showing increasing promise for the treatment of otherwise incurable malignancies. Cancer-killing, or “Oncolytic” viruses are increasingly used to evoke therapeutic immune responses in cancer patients, an example of which is now commonly used to treat malignant melanoma in the skin. We have discovered that modifying a particular oncolytic virus to prevent its ability to replicate dramatically improves therapy in preclinical models of liver cancer, as well as promoting synergy with the targeted cancer drug, Sorafenib.

This four-year project, funded by the Medical Research Council (MRC), seeks to both optimise and understand how the modified virus co-operates with Sorafenib to evoke immune responses against malignant hepatocytes. In particular, it will explore the immunological mechanisms that distinguish effective therapy within both primary human liver tissue and preclinical models of liver cancer. We will employ a range of techniques spanning functional immunology, molecular virology and cell biology, histochemical and immunofluorescence tissue analysis, as well as next generation transcriptomics designed to discriminate immunological phenotypes. The objective will be to achieve comprehensive understanding of the fundamental processes by which



host immune responses target liver cancers, as well as providing the foundation for future clinical studies exploring this novel therapeutic approach.

You will have a background in cancer/cell biology/immunology/virology, and an interest in applying that expertise to the study of tumour immunotherapy. You will join a team of researchers focussing on the mechanisms of virus-host interactions in the cancer field.

## What does the role entail?

As Research Technician, your main duties will include:

- Manage and prioritise own day to day workload to plan and conduct experiments whilst working with minimal supervision;
- Liaising with Dr Griffin, or other academics and researchers to perform techniques and protocols as appropriate. These would include (but are not limited to) the following: tissue processing and analysis (e.g. FACS, flow cytometry, western blotting, RNA purification, immunofluorescence and immunohistochemistry); maintaining laboratory stocks of e.g. viruses, cells, plasmids, antibodies and primers; preparing and assisting with preclinical models;
- To actively contribute and support the research funded by Dr Griffin's MRC grant, including oversight of specific project areas, as appropriate;
- Assisting in the day-to-day running of the laboratory, including the care and maintenance of laboratory equipment or machinery, ordering supplies, overseeing and cataloguing laboratory reagent stocks and resources, provision of/receiving reagents to/from collaborators, and routine culture of primary cells and cell line stocks;
- Maintaining Health and Safety records, developing risk assessments for new and existing protocols and enabling inductions and ongoing compliance for staff within the group;
- Explaining laboratory procedures to new users and students within the research group;
- Providing flexible technical support to members of the research group based on their needs;
- Preparing, collating and presenting data in an understandable manner to members of the research group at regular group meetings;
- Maintain a proactive approach to the research project, inputting ideas and providing flexible technical support to staff and students based on their needs;





- Liaising effectively and pro-actively maintaining contact with colleagues across the team and ensuring that information is cascaded appropriately;
- Contributing to the safe and well organised functioning of the laboratory;
- Maintain good records and laboratory notebooks of work carried out, including providing clear understandable data to other members of the research group where necessary;
- Willingness to prepare and update standard operating procedures and provide technical support updates to other members of the team;
- Provide feedback to Dr Griffin on service usage, stock utilisation and to discuss progress and future plans;
- Willingness to undergo training in new techniques and additional areas as required.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

## What will you bring to the role?

As Research Technician you will have:

- Educated to Degree level, BTEC higher level or equivalent, or possess equivalent experience in cancer/cell biology, molecular immunology or virology;
- An understanding of the principles of molecular biology (this can include a period in Further or Higher Education)
- Practical experience of cell biological and immunological/virological techniques;
- A willingness to work with preclinical rodent models;
- Practical experience of tissue processing and analysis, including human and preclinical systems;
- Practical experience of working with cell culture systems (ideally including primary cell culture);
- Practical experience of protein and nucleic acid biochemistry, including essential molecular biology analysis techniques
- A proven ability to perform technically demanding tasks with care and precision;



- Good organisational and time management skills, with the ability to work unsupervised and use your own initiative to solve problems within deadlines;
- A capacity to work independently and collaboratively as part of a team;
- Experience of working in a laboratory environment and familiarity with safety regulations;
- Good computing skills, including MS office software;
- Good written and verbal communications skills with an ability to analyse, record, and communicate information, ideas and analysis clearly, modifying your approach to suit different audiences.

You may also have:

- Practical experience of preclinical rodent models, ideally including a personal home office license, or equivalent if not from the UK;
- Practical experience of flow cytometry, immunohistochemistry and immunofluorescence
- RSci (Registered Scientist) or RSci Tech (Registered Science Technician) qualification from IST.

You will report to Dr Steve Griffin, Associate Professor

## How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

## Contact information

To explore the post further or for any queries you may have, please contact:

**Dr Steve Griffin, Associate Professor**

Tel: (+44)113 3438637

Email: [s.d.c.griffin@leeds.ac.uk](mailto:s.d.c.griffin@leeds.ac.uk)



## Additional information

Find out more about the [Faculty of Medicine and Health](#)

Find out more about [Leeds Institute of Medical Research](#). The institute and its facilities are predominantly based on the [St James's University Hospitals Campus](#) although some team are also located on the [University of Leeds' main campus](#).

Find out more about [Dr Griffin's Research](#)

Find out more about [Athena Swan](#) in the Faculty.

### Working at Leeds

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our [Working at Leeds](#) information page.

### Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at [disclosure@leeds.ac.uk](mailto:disclosure@leeds.ac.uk).

### Security checks

Appointment to this post will be subject to appropriate security checks being carried out with your permission by a third party company.

## Criminal record information

### Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

