

CANDIDATE BRIEF

Research Fellow, Leeds Institute of Medical Research, Faculty of Medicine and Health



Salary: Grade 7 (£33,797 – £40,322 p.a.)

Reference: MHLMR1006

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 Fellow Leeds Institute of Medical Research at St James's Division of Haematology and Immunology

Are you an ambitious researcher looking for your next challenge? Do you have a background in Cancer Biology, Immunology or Virology? 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 fellow 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 hepatic cells. 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 or 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 Fellow, your main duties will include:

- Designing, planning and conducting a programme of investigation, in consultation with Dr Stephen Griffin and the other investigators;
- Working with and in support of Dr Griffin's research grant to ensure the project is successfully completed;
- Generating and pursuing original research ideas methods applicable to the study of oncolytic viruses and liver cancer, with an aim to extend the cancer immunotherapy research portfolio;
- Making a significant contribution to the dissemination of research results by publication in leading peer-reviewed journals, and by presentation at national and international meetings.
- Working independently and as part of a larger team of researchers, both internally and externally to develop new research links and collaborations and engage in knowledge transfer activities where appropriate;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team including, where appropriate, preparing proposals for funding in collaboration with colleagues;
- Maintaining your own continuing professional development whilst contributing to the supervision of junior researchers and PhD students and acting as a mentor to less experienced colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and relating such evaluations to your own research;
- Contributing to the research culture of the School, where appropriate;
- Contributing to and encouraging a safe working environment.

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 a Research Fellow you will have:

- A first degree and PhD (or close to completion) in cancer/cell biology, immunology, virology, or another closely allied discipline;
- A willingness to work using preclinical rodent-based models;
- A strong background in cancer/cell biology/immunology/virology;
- Practical experience in processing and analysing fresh tissue, including work with primary cells;
- Practical experience in studying innate and adaptive immunological responses and immune cell phenotyping (e.g. using flow cytometry);
- Practical experience in molecular biology and virus culture up to biological safety level (BSL) 2 containment;
- Practical experience of protein and RNA biochemistry and analysis;
- A developing track-record of publications in well-regarded, peer reviewed international journals;
- The ability to design, execute and write up research independently to the standard required for research reports/international publications;
- Excellent communication skills, both written and verbal, and established ability to communicate research at national and international conferences;
- Good time management and planning skills, with the ability to meet tight deadlines;
- Proven ability to manage competing demands effectively, responsibly, and without close support;
- A proven ability to work well both individually and in a team;
- Organised and willing to work collaboratively as part of a team;
- A strong commitment to your own continuous professional development.

You may also have:

- A personal home office licence (or equivalent if not from the UK) and practical experience of preclinical work in rodents, ideally incorporating cancer models;
- Proven experience in the field of cancer immunotherapy, specifically involving oncolytic viruses;
- Practical experience in studying cell signalling pathways;
- Experience in analysing and interpreting transcriptomics data sets.

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 <u>How to Apply</u> 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: <u>s.d.c.griffin@leeds.ac.uk</u>

Additional information

Find out more about the Faculty of Medicine and Health

Find out more about <u>Leeds Institute of Medical Research</u>. The institute and its facilities are predominantly based on the <u>St James's University Hospitals Campus</u> although some team are also located on the <u>University of Leeds' main campus</u>.

Find out more about <u>Dr Griffin's Research</u>

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 <u>Working at Leeds</u> information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk.</u>

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 <u>Criminal Records</u> information page.

