Research Associates: Immunology
Hull York Medical School

Closing date: 14 November 2018
Interview date: TBC
Vacancy reference: 7061
Vacancies: x 2
INTRODUCTION

Leishmaniasis is a global threat, with over 1M new cases reported each year from 98 countries. Our interests lie particularly in diseases caused by Leishmania donovani, including visceral leishmaniasis, post kala azar dermal leishmaniasis and rarely cutaneous leishmaniasis. Our approach is to combine studies on human tissue with research in animal, in vitro and in silico models, to understand disease pathogenesis and mechanisms of onward transmission and to identify new approaches for intervention. The current posts are funded by a Wellcome Trust Senior Investigator Award that specifically aims to understand the biology underpinning host infectiousness to sand flies, including working towards the development of animal models of PKDL. We are seeking two postdoctoral immunologists, with a good track record of publications and experience in studying myeloid cells, T cells and/or the regulation of inflammation in murine models. Experience in immunohistology, image analysis and/or transcriptomics would be desirable to complement broader skills in cellular immunology. The posts are funded until end of December 2020.
Main purpose of the role

- To participate actively in research on the immunology of visceral leishmaniasis / PKDL, including working in vitro, in animal models and with human tissues.
- To develop, validate and apply techniques in immunology / molecular pathology to specific research questions.
- To contribute to and/or lead preparation of manuscripts for publication and to assist in preparation of bids for external research funding.
- To work collaboratively as part of a team and to contribute to training PhD students and the supervision of graduate and undergraduate research projects.

Key responsibilities

(Role holders will be required to undertake some or all of the duties below)

- To conduct individual and collaborative research projects, duties to include: analysis and interpretation of research data; use of appropriate research techniques and methods; writing up of research results and dissemination through publications, seminar and conference presentations and public engagement and outreach activities; contributing to the identification of possible new areas of research.
- To contribute to the preparation of research proposals and applications to external bodies.
- To undertake appropriate organisational and administrative activities connected to the research project including the development of promotional or education material.
- To develop and initiate collaborative working internally and externally, duties to include: the building of internal contacts and participation in internal networks; collaborating with colleagues on joint projects as required; participation in and identification of external networks in order to share information and identify potential opportunities for collaboration and possible sources of funding; attendance at and contribution to relevant meetings.
- To provide guidance to other staff and students, as required, as well as coordinating the work of small research teams.
- To assist with undergraduate / masters teaching in own area of expertise.

JOB DESCRIPTION

At a glance

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<tr>
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## PERSON SPECIFICATION

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<th>Qualifications</th>
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<tbody>
<tr>
<td><strong>First degree</strong></td>
<td>Essential</td>
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<tr>
<td><strong>PhD in Immunology or related discipline</strong></td>
<td>Essential</td>
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**Knowledge**

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<tr>
<td>Knowledge in immunology to engage in high quality research</td>
<td>Essential</td>
</tr>
<tr>
<td>Knowledge of a range of research techniques and methodologies (e.g. related to myeloid cell sand inflammation)</td>
<td>Essential</td>
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<tr>
<td>Have research expertise in an area that will complement and enhance the department's research strategy and goals</td>
<td>Essential</td>
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<tr>
<td>Advanced and specialist IT knowledge</td>
<td>Essential</td>
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<tr>
<td>Advanced knowledge of flow cytometry, including instrumentation, sample acquisition and data analysis</td>
<td>Essential</td>
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<tr>
<td>General understanding of immunity to infectious disease</td>
<td>Essential</td>
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<tr>
<td>Advanced knowledge of myeloid cell biology and/or inflammation</td>
<td>Desirable</td>
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**Skills, abilities and competencies**

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<th>Essential/Desirable</th>
</tr>
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<tr>
<td>Highly developed communication skills to engage effectively with a wide ranging audience, both orally and in writing, using a range of media</td>
<td>Essential</td>
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<tr>
<td>Ability to write up research work for publication and onward dissemination</td>
<td>Essential</td>
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<tr>
<td>Ability to develop research objectives, projects and proposals for own and joint research, with the assistance of a mentor if required.</td>
<td>Desirable</td>
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<tr>
<td>Competency to make presentations at internationally recognised conferences or exhibit work in other appropriate events</td>
<td>Essential</td>
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<tr>
<td>Well-developed analytical skills</td>
<td>Essential</td>
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**Experience**

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<tr>
<td>Experience of carrying out both independent and collaborative research</td>
<td>Essential</td>
</tr>
<tr>
<td>Evidence of writing up research work for publication</td>
<td>Essential</td>
</tr>
<tr>
<td>Ability to work as part of a team and also to work independently using own initiative</td>
<td>Essential</td>
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**Personal attributes**

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<tr>
<td>Attention to detail and commitment to high quality</td>
<td>Essential</td>
</tr>
<tr>
<td>Collaborative ethos</td>
<td>Essential</td>
</tr>
<tr>
<td>Positive attitude to colleagues and students</td>
<td>Essential</td>
</tr>
<tr>
<td>Willingness to work proactively with colleagues in other work areas/institutions</td>
<td>Essential</td>
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<tr>
<td>Ability to plan and prioritise own work in order to meet deadlines</td>
<td>Essential</td>
</tr>
<tr>
<td>Commitment to personal development and updating of knowledge and skills</td>
<td>Essential</td>
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THE DEPARTMENT

Leishmaniasis at York

York boasts one of the largest groups of researchers working on leishmaniasis in the UK (including Kaye, Mottram, Walrad, Hewitt, Hitchcock, Jeffares, Lagos, Lacey and Layton plus collaborators in Physics, Chemistry, Electronics and Health Sciences). We are the only centre where research encompasses the full life cycle of the parasite and spans molecular parasitology, immunology, animal models and clinical trials. Ongoing projects in the Kaye lab include research on the immunology underpinning host infectiousness in visceral leishmaniasis, molecular pathological studies on skin lesion diversity in tegumentary leishmaniasis, Phase II clinical trials of a candidate leishmaniasis vaccine in Sudan, identification of targets for host directed therapy across the L. donovani disease spectrum, and development of a human challenge model of cutaneous leishmaniasis. This work is supported by grants from the Wellcome Trust, MRC/DFID and the MRC/BBSRC Global Challenges Research Fund. Related work in the other groups includes studies on parasite cysteine peptidases and kinases and RNA binding proteins, on the role of non-coding RNAs in host immunity, on parasite genomics and on drug target identification. Most of the leishmaniasis research at York is co-housed within the Centre for Immunology.

The Centre for Immunology and Infection

The Centre for Immunology and Infection Unit (CII) is an Interdepartmental Research Centre created by the Hull York Medical School and the Department of Biology at the University of York. Research within the CII ranges from fundamental studies on immunology, haematology, microbiology and parasitology through to first-in-human and other early phase clinical research. Our aim is to develop a greater understanding of the processes underlying chronic infectious and non-infectious disease, and thus to develop new approaches to prevention and treatment. (www.york.ac.uk/cii)

Supported by major infrastructure investment the Centre was established in 2004 and expanded into additional purpose-built accommodation in 2010. Within the current 2000m2 of research and office space, we have excellent facilities for research on ACDP HG3 organisms. Proximity to the Biosciences Technology Facility and Biological Services Facility of the Dept. of Biology ensure ready access to state of the art and well-supported cutting edge technology platforms (http://www.york.ac.uk/biology/technology-facility/) and animal facilities (to CL3).

Clinical research is often a joint venture, utilising the expertise and resources of the University of York and York Teaching
THE DEPARTMENT

Hospital NHS Trust. We aim to provide an environment that can deliver early phase trials (phase 1 and phase 2) and support basic scientific research, which will result in high impact results (https://www.york.ac.uk/cii/clinicaltranslationalresearch/). Following the University of York’s acquisition of a Human Tissue Authority research license, the York Tissue bank was established within the CII. This initiative aims to develop networks with clinical care teams and help provide researchers from both the Hospital and University with access to human tissue for basic and translational research.

Research in the CII has a focus on chronic diseases of infectious, autoimmune and haematological origin. Details of specific research projects can be found at our staff pages (https://www.york.ac.uk/cii/staff/). This is an exciting time to join the CII with major new investments in academic posts, partly funded by expansion of the Medical School. Investment in immunology by HYMS over the next two years will see the appointment of two clinical academic Chairs, one clinical SL, a non-clinical Assistant / Associate Professor and a Research Fellowship. A further non-clinical academic Associate Professor in Haematology and a Chair in Microbiology are being appointed by the Department of Biology. In late 2018, the University will launch the York Biomedical Research Institute, a new initiative that will forge greater links between research in three themes, Neuroscience; Immunology, Haematology and Infection; and Molecular and Cellular Medicine. The new Institute will be led by Prof. Jeremy Mottram from the CII (https://www.york.ac.uk/cii/news/jmybridirector/).

Hull York Medical School

The joint medical school of the Universities of Hull and York, Hull York Medical School has a reputation as one of the UKs most exciting, contemporary schools. Established in 2003 it combines York’s strengths in biological science and health sciences and Hull’s Postgraduate Medical School and large clinical base. Hull York Medical School has recently been allocated 75 additional medical school places as part of HEFCE’s Expansion of Undergraduate Medical Education, which represents a 69% increase in home places to 220 in 2019. Hull York Medical School offers exceptional medical education delivered by senior academics and clinicians in a stimulating and supportive environment with world-class facilities.
THE UNIVERSITY

Founded on principles of excellence, equality and opportunity for all, the University of York opened in 1963 with just 230 students. In 2018 it is the home of more than 17,000 students across more than 30 academic departments and research centres. Since opening over fifty years ago, we have become one of the world’s leading universities and a member of the prestigious Russell Group.

We are consistently recognised as one of the leading Higher Education Institutes and are ranked 16th in the Times & Sunday Times league table (2017). The University of York has won six Times Higher Education (THE) Awards and five Queen’s Anniversary Prizes.

The University is proud of its association with Athena SWAN, holding 12 awards in support of gender equality, representation and success for all, with gold awards for Chemistry and Biology and a University-wide bronze award.

Of 154 universities that took part in the Research Excellence Framework (REF) in 2014, The University of York ranked 14th overall and 10th for the impact of our research. The University is consistently in the top ten UK research universities and attracts over £60m a year of funding from research alone.

Our vision is to make the University of York a world leader in the creation of knowledge through fundamental and applied research, the sharing of knowledge by teaching students from varied backgrounds and the application of knowledge for the health, prosperity and well-being of people and society.
Attractive workplace

Centred around the picturesque village of Heslington on the edge of the city of York, our colleges are set in an attractive landscaped campus. York enjoys a safe, friendly atmosphere with facilities including bars, shops, theatres and concert halls all within easy walking distance.

The University has undergone an unprecedented period of expansion and renewal since 2000. We have invested in twenty new buildings on the original campus and have completed the first and second phases of a £750m campus expansion. Our investment in new colleges, teaching and learning spaces, laboratories, research facilities and a new sports village mean there has never been a better time to join us.

During this period of change we've worked hard to retain our friendly, informal and collegiate atmosphere, which is important to our core values of inclusivity and interdisciplinarity.

We have a thriving international community and are committed to providing staff moving to York with as much support as possible through our Relocation Package and Welcome Officers.

The University is committed to promoting a diverse and inclusive community - a place where we can all be ourselves and succeed on merit. We offer a range of family friendly, inclusive employment policies, flexible working arrangements, staff engagement forums, campus facilities and services to support staff from different backgrounds.

For further information please visit our employee benefit pages.
The City of York

Internationally acclaimed for its rich heritage and historic architecture, York’s bustling streets are filled with visitors from all over the world. Within its medieval walls you will find the iconic gothic Minster, Clifford’s Tower and the Shambles - just a few of the many attractions.

But York isn’t just a great place to visit - it’s also a great place to live and work. While nourishing a vibrant cosmopolitan atmosphere, York still maintains the friendly sense of community unique to a small city.

Visit [www.visityork.org](http://www.visityork.org) for more information on the city of York

Shopping, culture and entertainment

York boasts specialist and unique boutiques but also all the high street stores on its busy shopping streets. Alongside them you will find cinemas, theatres, an opera house, art galleries, a vast range of restaurants, live music venues and clubs. York is particularly renowned for its multitude of pubs and bars, from the modern to the medieval.

Housing and schools

Whether you choose to live close to the city, in one of the surrounding villages or further afield, you will find a wide range of housing within comfortable distance of York and the University. For families, the area has a range of excellent schools both in the state and independent sector.

Great location

York is one of Britain’s best-connected cities. Halfway between London and Edinburgh on the East Coast mainline, on intercity trains you can reach London King’s Cross in less than two hours and Edinburgh in two and a half hours. York is also well served by road links, and it is easily accessible from the A1, M1 and the M62.

For those travelling from overseas, Manchester Airport is two hours away and Heathrow Airport just three and a half. Flights from nearby Leeds Bradford Airport provide easy access to mainland Europe. By Eurostar from London St Pancras, Paris is just over six hours away.

Yorkshire

The Lonely Planet guide recently declared Yorkshire the third best region in the world to visit. There is something to cater to every taste, whether it be the rugged landscapes of the Moors or the Dales, the picturesque seaside towns of Scarborough and Robin Hoods Bay, the gothic architecture of Whitby or the vibrancy of cosmopolitan Leeds.
Apply online
- Go to https://jobs.york.ac.uk
- Find this job using reference 7061
- Complete the online application form

You will need to submit your completed application by midnight (local UK time) on 14 November 2018

What will I need?
You will need to upload:
- your CV
- a letter describing how you meet the requirements of the job

You will also need details of 2 referees.

Help and assistance
Direct any informal queries to Professor Paul Kaye (paul.kaye@york.ac.uk; +44 (0)1904 328840).
If you have any questions about your application, contact the HR Services team:

recruitment@york.ac.uk
+44 (0)1904 324835