Research Fellow
School of Medicine, Medical Sciences and Nutrition

Closing date: 07 August 2019
Interview date: To Be Confirmed
Reference number: IMS162R
Introduction

The University of Aberdeen is offering a unique opportunity for a Postdoctoral Research Fellow to undertake research on an exciting infection biology project investigating antifungal drug-induced persistence in a major fungal pathogen.

The fellow will be a member of the Aberdeen Fungal Group based in the Institute of Medical Sciences at the University of Aberdeen. The Aberdeen Fungal Group has an international reputation in the study of fungal pathogens that cause life-threatening invasive infections in human.

Professor Carol Munro’s research focuses on the fungal cell surface and mechanisms that confer resistance to antifungal drugs.

The successful candidate will have a genuine interest in fungal pathogenesis and infection biology with experience in microbiology, microscopy and tissue culture techniques.
Job description

Main purpose of the role:

We are looking for a research fellow to undertake experimental research on the fungal pathogen *Candida albicans*. The project will investigate the molecular mechanisms that enable *C. albicans* to escape from macrophages and persist in the host. We will study interactions between fungal and immune cells and examine the impact of antifungal-induced cell wall remodelling on these interactions. The project will use a well-established combination of cell wall biochemistry, flow cytometry, microscopy, ex vivo studies of *Candida*-phagocyte interactions, ELISAs to measure cytokine induction and infection models.

Key responsibilities:

Research Fellow

- Perform, record and report on experimental work as directed by the supervisor
- Perform experiments in containment level 2
- Contribute to regular meetings, present data, provide critical assessments and report on novel published data relevant to the area of research
- To contribute to writing articles for scientific journals
- To disseminate research results in the scientific community and in the non-scientific community (via outreach and public engagement)
- Supervise undergraduate and master students and contribute to activities of the Research Programme, the School and the Institute during research events and seminars

At a glance

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**Salary:**
Grade 6 (75% of £33,199 - £37,345 per annum, pro rata)

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**Hours of work:**
Part-Time (75% FTE)

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**Contract type:**
Funding Limited (12 months)
Candidate background

We are searching for an excellent and highly qualified post-doctoral fellow, with previous experience in microbiology, immunology and cell biology. Experience with pathogens at least at containment level 2 is strongly preferred.

EXPERIENCE
- PhD degree in the Life Sciences (Microbiology, Cell Biology or Immunology).
- Demonstrable knowledge of microbiology, cell biology and immunology.
- Have practical experience of successfully executing microbiological or immunological research.
- Experience in research-intensive containment level 2 laboratory
- Tissue culture techniques
- Fluorescence/confocal microscopy

SKILLS
- Adept at working independently, but will also have strong interpersonal and team-working skills.
- Excellent oral and written communication skills
- Excellent computer skills
- Ability to work to deadlines

Terms of appointment

Salary will be at the appropriate point on the Grade 6 salary scale (75% of £33,199 - £37,345 per annum, pro rata) and negotiable with placement according to qualifications and experience. Consideration will be given to applicants who are nearing the completion of their PhD, who will be appointed as a Research Assistant on the Grade 5 salary scale (75% of £27,831 - £31,302 per annum, pro rata).

Any appointment will be made subject to satisfactory references and a 12 month probation period.

For further information on various staff benefits and policies please visit www.abdn.ac.uk/staffnet/working-here

This post does not meet the minimum requirements as issued by UK Visas & Immigration (UKVI) to qualify for an employer-sponsored visa. We are therefore unable to consider applications from candidates for this post who require sponsorship to work in the UK.
## Person specification

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<th>Education/Qualifications</th>
<th>Essential</th>
<th>Desirable</th>
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<tbody>
<tr>
<td>Academic, technical and professional education and training</td>
<td>• PhD in microbiology, immunology, or cell biology.</td>
<td>• Presented work at conferences.</td>
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<td>• Publication record</td>
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<th>Work and Other relevant experience (including training)</th>
<th>Essential</th>
<th>Desirable</th>
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<tr>
<td>eg Specialist knowledge, levels of experience, supervisory experience, research</td>
<td>• Work in containment level 2 laboratory;</td>
<td>• experience of working with fungal pathogens</td>
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<td>• Tissue culture</td>
<td>• Experience of microbial:host interaction assays</td>
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<td></td>
<td>• Practical experience of successfully executing microbiological or immunological research</td>
<td>• Adept at live cell imaging and microscopy techniques</td>
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<td>• Experience of flow cytometry</td>
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<th>Personal qualities and abilities</th>
<th>Essential</th>
<th>Desirable</th>
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<td>eg initiative, leadership, ability to work on own or with others, communication skills</td>
<td>• Evidence of good intellectual skills</td>
<td>• Strong organisational skills</td>
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<td>• Ability and motivation to work independently as well as collaboratively in an interdisciplinary team</td>
<td>• Ability to meet targets</td>
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<td>• Ability to think independently</td>
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<td>• Excellent attitude and commitment to work</td>
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<td>• Excellent oral and written communication skills</td>
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<th>Other</th>
<th>Essential</th>
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<td>eg special circumstances (if any) appropriate to the role such as unsocial hours, travelling, Gaelic language requirements etc.</td>
<td>• Ability to work outside of regular working hours when experiments require it</td>
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The University

Founded in 1495, Aberdeen is Scotland’s third oldest University and the fifth oldest in the UK. Ranked within the world top 160 in the Times Higher Education Rankings 2019 and named Scottish University of the Year in the Times and Sunday Times Good University Guide 2019. Aberdeen is ‘open to all and dedicated to the pursuit of truth in the service of others’.

Aberdeen is a broad based, research intensive University, which puts students at the head of everything it does. It has significant academic strengths and potential across a wide variety of disciplines. Outstanding in a wide range of discipline areas, Aberdeen has also been credited for its international reach and its commercialisation of research ideas into spin out companies.

The University has over 14,000 matriculated students and 3,600 staff representing 130 nationalities. We encourage bold thinking, creativity and innovation and we nurture ambition with many opportunities for professional and personal development in an inclusive learning environment which challenges, inspires and helps every individual to reach their full potential.

The University combines a distinguished heritage with a forward looking attitude. In the past few years, the University has encouraged creativity in its academic staff, broken new ground with an innovative curriculum, and developed state-of-the-art facilities including the new Sir Duncan Rice Library and the Aberdeen Sports Village and Aquatics Centre. In looking to the future, the University seeks to enhance its reputation as one of the world’s leading Universities by moving forward with ever more ground breaking research; ensuring students have an intellectual and social experience second to none; and capitalising upon the dual role as one of the major institutions of the north and as a cornerstone of regional economic and cultural life.
The School (https://www.abdn.ac.uk/smmsn/index.php) encompasses all of the disciplines that underpin today’s medicine, including biomedical sciences, health sciences, nutrition and medical, medical science and dental education and these are organised into five Institutes. The largest school in the University, the SMMSN has five Institutes: the Institute of Medical Sciences (IMS), the Institute of Applied Health Sciences (IAHS), the Rowett Institute, the Institute of Education in Medical and Dental Sciences (IEMDS) and the Institute of Dentistry, comprising all of our undergraduate and postgraduate programmes and our own graduate entry Dental School.

Staff are line managed and research opportunities are supported through our institutes which work together in an integrated and coordinated way to deliver research and teaching across the School, details of which can be found on their websites as below.

- The Institute of Applied Health Sciences https://www.abdn.ac.uk/iahs/
- The Institute of Medical Sciences http://www.abdn.ac.uk/ims/
- The Rowett Institute http://www.abdn.ac.uk/rowett/
- The Institute of Education for Medical and Dental Sciences https://www.abdn.ac.uk/iemds/
- The Institute of Dentistry https://www.abdn.ac.uk/dental/

Within the IMS, our scientists are working towards the creation of effective therapies for patients with a range of debilitating and life-threatening conditions. Current research areas include: arthritis and musculoskeletal medicine; cell developmental and cancer biology; immunity, infection and inflammation; metabolic and cardiovascular health; microbiology and translational neuroscience.

Within the IAHS, research is focused on improving health and health care delivery. It is home to a multidisciplinary grouping of around 100 university academic staff who conduct population and clinically-orientated health research and hosts the Health Services Research Unit (HSRU) and Health Economics Research Unit (HERU), both funded by the Chief Scientist’s Office (CSO) of the Scottish Government.

As well as being the organisational home to the teaching scholarship staff and responsible for oversight of the UG and PGT programmes offered by the School, the IEMDS promotes and supports excellence in medical education through research and development, with a focus on conceptually and theoretically robust research and development which has strong potential for reaching international recognition.

The Dental Institute runs an undergraduate BDS programme and a growing suite of masters programmes for professional development.

We have a number of specialist Centres representing areas of particular research strength and capacity within the School all of which are willing to support colleagues on projects in their areas. More information is available at the following websites.

- The Centre for Healthcare Education Research and Innovation (https://www.abdn.ac.uk/acdc/)
- The Centre for Health Data Science (https://www.abdn.ac.uk/achds/)
- The Aberdeen Cardiovascular & Diabetes Centre (https://www.abdn.ac.uk/acdc/) and
- The Aberdeen Centre for Arthritis and Musculoskeletal Health (https://www.abdn.ac.uk/acamh/)
The School is home to over 800 staff and 2000fte students. It is located on the Foresterhill site, shared with our main clinical partner, NHS Grampian, with whom we work in close collaboration at primary and secondary care levels. This is one of the largest integrated healthcare delivery, training and research sites in Europe and has rich assets including state-of-the-art academic (research and teaching) and clinical buildings. Excellent infrastructure is also provided through core facilities for biomedical science including flow cytometry, proteomics, microscopy and genome sequencing, support for data health science projects and clinical trials.

The last major academic capital development was the opening of the Rowett Institute, occupied in March 2016, whose staff undertakes nutrition research to help improve people’s lives through the prevention of ill-health and disease. Their new £40M building has provided the University of Aberdeen with a facility with unique capabilities for human nutrition and metabolic research. Currently, the NHSG is carrying out an exciting £164 million building development creating The Baird Family Hospital and The Aberdeen and North Centre for Haematology, Oncology and Radiotherapy (ANCHOR) Centre Project, scheduled for completion in 2021.
The city and the region

Aberdeen and Aberdeenshire

With a population of approximately 230,000, the city stands between the Rivers Dee and Don. This historic city has many architectural splendours and the use of its sparkling local granite has earned Aberdeen the name of the Silver City. Recognised as the oil capital of Europe, Aberdeen nevertheless retains its old-fashioned charm and character making it an attractive place in which to live.

Aberdeen enjoys excellent communication services with other European cities - e.g. flying time to London is just over one hour with regular daily flights. There are direct air links to London (City, Gatwick, Heathrow, and Luton), Manchester, Birmingham, Leeds, Southampton, Belfast and East Midlands within the U.K. There are also flights to international hub airports: Amsterdam (Schiphol), and Paris (Charles De-Gaulle) as well as flights to other European destinations. http://www.aberdeenairport.com Road and rail links are also well developed.

The Grampian Region which took its name from the Grampian Mountains has a population of approximately 545,000. It is made up of five districts – Aberdeen, Banff & Buchan, Gordon, Kincardine & Deeside and Moray. The city and the surrounding countryside provide a variety of urban, sea-side and country pursuits. Aberdeen has first class amenities including His Majesty's Theatre, Music Hall, Art Gallery, the Aberdeen Exhibition Centre, Museums, and Beach Leisure centre. Within a short time, beach pursuits, equine activities, salmon, trout and sea fishing, hill-walking, mountaineering, golf, sailing, surfing and windsurfing can be reached. The city and the surrounding countryside are repeatedly given high ratings for quality of life in surveys.

Aberdeenshire is one of Scotland’s most appealing regions. Royal Deeside and the Cairngorms National Park are within easy access of the city, and there are a variety of towns and villages scattered along the coastline.

Aberdeen and Aberdeenshire cater for a wide range of tastes in sporting and cultural activities.

To find out more about Aberdeen and Aberdeenshire go to www.visitabdn.com
How to apply

Online application forms are available at www.abdn.ac.uk/jobs

The closing date for receipt of applications is 07 August 2019

Should you wish to make an informal enquiry please contact:

Professor Carol Munro, Personal Chair
01224 437485
c.a.munro@abdn.ac.uk

Please do not send application forms or CVs to Professor Munro.

Please quote reference number IMS162R on all correspondence

The University pursues a policy of equal opportunities in the appointment and promotion of staff.