

Research Assistant *Institute of Medical Sciences*

Closing date: Interview date: Reference number:

25 May 2021 TBC IMS210R













INTRODUCTION

Dr Delma Childers is a Lecturer in the Institute of Medical Sciences whose research group studies how antifungal resistance affects the overall fitness of the human fungal pathogen, *Candida glabrata*.

She has an exciting opportunity for a Research Assistant to join the group in a part-time research capacity for 2 years beginning 1 June 2021. The RA research activities will support ongoing work in the lab to establish high-throughput methods, including phenotypic analyses and flow cytometry techniques, for analysing fungal fitness during and after antifungal therapy. These methods will be combined with molecular studies to identify important mechanisms underlying antifungal resistance in important fungal pathogens. This work will ultimately lead to a better understanding of how fungal cells avoid killing by the innate immune system after antifungal treatment.

The successful applicant will be an effective team member in the Childers research group and contribute to communicating research outputs in the Aberdeen Fungal Group meeting and writing research manuscripts.

JOB DESCRIPTION

MAIN PURPOSE OF THE ROLE:

The Research Assistant (RA) will provide research support to a project that will investigate the fitness costs of antifungal resistance mechanisms in an important fungal pathogen. *Candida glabrata* can be innately resistant to azole drugs, an important frontline antifungal drug class, and frequently develops resistance to a second class of drugs, the echinocandins. This project will investigate how major antifungal resistance mechanisms affect fungal interactions with the host and general stress survival using a combination of well-established molecular, *ex vivo* interaction, and flow cytometry techniques.

KEY RESPONSIBILITIES:

- Conduct a research project in close collaboration with members of the Childers research group.
- Actively participate in research and training activities with the Aberdeen Fungal Group.
- Contribute to the preparation of manuscripts for publication.

CANDIDATE BACKGROUND

We are seeking an individual with the laboratory expertise to join our research team

Knowledge

• BSc or Master's degree in Life Sciences (e.g. Biochemistry, Microbiology, Molecular Biology, Immunology, or related field).

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• Demonstrable knowledge of biochemistry, microbiology, immunology, or molecular biology.

Skills

- Ability to work as part of a multi-disciplinary team and independently as required.
- Have exemplary attention to detail and record keeping skills.
- Ability to interact with all types of staff and students in a laboratory environment.



- Ability to work safely within a laboratory environment.
- Good IT and communication skills.
- General laboratory skills including microbiological culturing at containment level 2.

Experience

- Experience in laboratory research, including containment level 2.
- Experience in microbiology, molecular biology, or immunology,
- Experience in report and manuscript writing and data entry.

TERMS OF APPOINTMENT

Salary will be paid on the Grade 5 Salary Scale (50% of £28,332 per annum, actual rate £14,166 per annum, pro rata).

As this post is externally funded by the Academy of Medical Sciences it will be available of two years from 01 June 2021.

Any appointment will be made subject to satisfactory references and a 12month 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 for visa sponsorship under the Skilled Worker Route. We are therefore unable to consider applicants for this post that require sponsorship to work in the UK.

This role is based in the UK and as such the successful candidate will be required to live and work in the UK.

AT A GLANCE

SALARY: Grade 5 £50% of £28,332 per annum

HOURS OF WORK: 18.75 hours per week

CONTRACT TYPE: Open ended, project limited for 2 years

CELEBRATING

1495 - 2020

LOCATION: Aberdeen

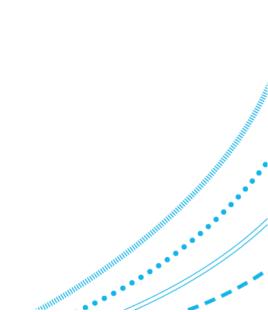




PERSON SPECIFICATION

	ESSENTIAL	DESIRABLE
Education/Qualifications Academic, technical and professional education and training	 Bachelor's degree in a Life Sciences field (e.g. microbiology, molecular biology, biochemistry, or immunology) 	• MSc in a relevant field
Work and Other relevant experience (including training) e.g. Specialist knowledge, levels of experience, supervisory experience, research	 Practical experience successfully conducting biochemical, molecular, microbiology, or immunological research. 	 Laboratory experience in biochemistry, microbiology, molecular biology, or immunology
Personal qualities and abilities e.g. initiative, leadership, ability to work on own or with others, communication skills	 Ability to work effectively as a collaborative team and independently Ability to think independently and critically to address research problems Excellent attitude and proactive commitment to work Excellent oral and communication skills Proficiency in IT skills and recording research outputs Willingness to undertake training and learn new skills 	 Proven track record to work to deadlines and complete objectives Strong organizational skills
Other e.g. special circumstances (if any) appropriate to the role such as unsocial hours, travelling, Gaelic		

language requirements etc.





UNIVERSITY OF ABERDEEN

open to all and dedicated to the pursuit of truth in the service of others

The University of Aberdeen is a broad based, research intensive University, and we put students at the centre of everything we do. Outstanding in a wide range of discipline areas, Aberdeen is credited for its international reach and commercialisation of research ideas into spin out companies. The University has over 16,000 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 and inspires.



CURRENT CONTEXT

The University continues to build on the achievements above. Underpinning our high performance and significant growth is a £100m investment in Aberdeen's estate which will include the completion of a new Science Teaching Hub, the regeneration of the historic King's Quarter and a new Business School building. The University has also invested in 50 new academic posts and in 2020 launched five interdisciplinary, cross-institution Research Centres that will catalyse world-leading research in our areas of strength. Our five Interdisciplinary Challenges are: Energy Transition; Social Inclusion and Cultural Diversity; Environment and Biodiversity; Data and Artificial Intelligence; and Health, Nutrition and Wellbeing.

In 2017 we received the Queen's Anniversary Prize, awarded to recognise the world-class excellence in innovation and practical benefit to people and society. The University was given this award for health service research leading to improvements in academic and clinical practice and delivery of health care.

INTERNATIONAL

Aberdeen is increasing its international presence, positioning the University as a global organisation and building on established global partnerships in e.g. Qatar, China, North America, Europe. We feature in the top 50 institutions worldwide for international students¹ and have been named 32nd in the world for International Outlook². The University of Aberdeen is proud to be the first UK University to operate on a dedicated campus in Qatar. Phase 1 of this partnership with AFG College has successfully recruited over 600 students. Phase 2 will see the creation of a substantially larger campus, with capacity for at least 5,000 students and research activity. For further information on our Qatar campus visit <u>www.abdn.ac.uk/qatar</u>.

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¹ Times Higher Education World University Rankings 2021

² QS World University Rankings 2021



ABERDEEN 2040

On our 525th anniversary as a University we launched <u>Aberdeen 2040</u>, our strategic vision for the next 20 years. Four strategic themes will shape our learning and discovery, underlined by 20 commitments we have made against each theme:

Inclusive

We welcome students, staff and partners from all backgrounds, organisations and communities. We value diversity.

Interdisciplinary

We innovate in education and research by generating, sharing and applying new kinds of knowledge. We learn together.

International

We connect with others and extend our networks and partnerships around the world. We think across borders.

Sustainable

We understand and nurture our environment, and take care of our resources, including our people and our finance. We work responsibly.

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OUR EDUCATION

Recognised as the Scottish University of the Year in the Times and Sunday Times Good University Guide 2019, we remain true to our roots as an ancient Scottish university, combining breadth and depth in our degree programmes and drawing strength from the quality of our research. Our flexible curriculum encourages students to grow as independent learners and therefore to thrive as graduates in the diverse workplaces of the future. Our education is open to all and we are setting ambitious targets to further widen access.

OUR RESEARCH

Researchers at the University of Aberdeen have been at the forefront of innovation and excellence throughout the centuries, generating insights in medicine, science, engineering, law, social sciences, arts and humanities. This research has contributed to five Nobel prizes as well as other awards such as the Queen's Anniversary prize. Our research is intellectually rigorous working within our established areas of excellence as well as new methods of enquiry. We will continue to



generate new knowledge addressing economic and societal issues with ambition and imagination, ensuring that it is globally excellent and locally relevant.



SCHOOL OF MEDICINE, MEDICAL SCIENCES AND NUTRITION

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 for 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 <u>http://www.abdn.ac.uk/rowett/</u>
- 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/ 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/cheri/)
- The Centre for Health Data Science (https://www.abdn.ac.uk/achds/)
- The Aberdeen Cardiovascular & Diabetes Centre (<u>https://www.abdn.ac.uk/acdc/</u>) and
- The Aberdeen Centre for Arthritis and Musculoskeletal Health (<u>https://www.abdn.ac.uk/acamh/</u>)

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.

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ABERDEEN AND ABERDEENSHIRE

Scotland's third largest city, Aberdeen sits on the coast between the mountains of Aberdeenshire and the stunning North Sea coastline. The Aberdeen City region, is a can-do place that is actively investing, at scale, in its future.

Renowned as a Global Energy Hub, Aberdeen is a vibrant, entrepreneurial region, home to a unique mix of business opportunities and specialist skills across various sectors including energy, technology, life sciences and food & drink. More than 20% of Scotland's top business are located in this region which is taking great strides to ensure that it continues to compete on a world stage. Investments of more than £10 billion of public and private infrastructure is due to be delivered before 2030, marking an exciting time to be part of a genuine world-class location.

Built from sparkling local granite Aberdeen has earned the name of the Silver City. As the energy capital of Europe, Aberdeen nevertheless retains its old-fashioned charm and character making it an attractive place in which to live, work and study. Due to its global business and international energy industry credentials, Aberdeen is well served by local and national transport infrastructure with excellent rail networks that run both North and South of Scotland and the rest of the UK. It also acts as an international travel hub. Flying time to London is just over one hour with regular daily flights and serves international travel to European centres such as Amsterdam (Schiphol) and Paris (Charles de-Gaulle) as well as flights to other European destinations.

The City and the surrounding countryside provide a variety of urban, seaside and country attractions. Aberdeen has first class amenities including <u>His Majesty's Theatre</u>, <u>Music Hall</u>, <u>Art Gallery</u>, <u>the P&J Arena</u>, <u>Museums</u>, and <u>Beach Leisure Centre</u>. The City is framed by its accessible beach front which is within a short walk of the city centre and there are an array of activities available across the region such as hill walking; mountaineering; sailing; surfing; salmon, trout and sea fishing; golf; sailing; surfing and windsurfing. The surrounding countryside, known as Aberdeenshire, is also 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.

The city and the surrounding area have ranked consistently highly in nationally recognised quality of life surveys, coming out top 10 as one of the best places to live in Scotland in 2020 in the annual Bank of Scotland survey.

To find our more visit www.visitabdn.com





EQUALITY AND DIVERSITY

The University values a diverse working environment and recognises the benefits this can bring. The University is keen to receive applications from individuals from across all of the equality protected characteristics (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation).

The University supports opportunities for flexible working for a range of reasons and has policies in place to facilitate this. The policies can be found at www.abdn.ac.uk/staffnet/working-here/flexible-working--5607

The University's commitment to gender equality has been recognised through the achievement of an Athena SWAN Bronze award at an institutional level and across all its subject areas. The University is also a Stonewall Diversity Champion to further LGBT+ equality.

The University is signed up to Advance HE's Race Equality Charter, affirming the University's commitment to the charter's aim of improving the representation, progression and success of minority ethnic staff and students within higher education.

Candidates who are British Sign Language (BSL) users can contact us directly by using contact SCOTLAND-BSL.

The University if delighted to be accredited as a <u>Disability Confident</u> employer and strives to ensure that disabled staff and students have the opportunity to work and study in an inclusive, accessible and supportive environment.

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www.abdn.ac.uk/staffnet/governance/equality-and-diversity-277

HOW TO APPLY

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

The closing date for receipt of applications is 25 May 2021

Should you wish to make an informal enquiry please contact:

Dr Delma Childers, Lecturer in the Institute of Medical Sciences delma.childers@abdn.ac.uk

Please do not send application forms or CVs to Dr Childers.

Please quote reference number IMS210R on all correspondence