



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Postdoctoral Research Fellow (Horizon), Faculty of Medicine and Health



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

Reference: MHLRM1135

Closing date: 23 August 2020

Available immediately on a fixed term basis for up to 28 Months (or until April 2023 whichever is sooner)

Postdoctoral Research Fellow (Horizon)

School of Medicine

Leeds Institute of Rheumatic & Musculoskeletal Medicine

Applications are invited for a Postdoctoral Research Fellow position in the research group of Professor Michael McDermott on a project funded by the Horizon 2020 entitled “Immunome project consortium for Autoinflammatory disorders (ImmunAID).

You will co-ordinate projects related to Work Package 3 (WP3) of ImmunAID programme entitled: “Inflammasome-associated pathways in sporadic and undiagnosed systemic autoinflammatory disorders”. More specifically you will be working on the task 1 and 2 of WP3 with the aims to:

1. To characterise NLRP3 inflammasome particles and ASC specks, which may be associated with activation and release of inflammatory cytokines, in the serum of SAID patients.
2. To investigate additional factors, such as anti-ASC antibodies (anti-ASC Ab), which may inappropriately prolong inflammasome activation.

Dr Sinisa Savic who is a grant co-holder with Prof McDermott will directly supervise these tasks. The work will be carried out in collaboration with Dr. Rained Doffinger, Department of Clinical Biochemistry and Immunology based at Addenbrooke's Hospital, Cambridge.

Capitalising on the infrastructure and samples collected from concurrent studies at Leeds [the Centre for Systemic Autoinflammatory disorders (SAID) based in the Department of Clinical Immunology at St James's University Hospital and the Academic Department of Rheumatology in Chapel Allerton Hospital] the post-holder will examine the status of inflammasome activation (NLRP3 and NLRC4, Pyrin initially) in cells and sera (blood) from patients with genetically defined SAID and also in those with sporadic or unknown cause.

The post-holder will work on developing assays to measure inflammasome particles in cell culture supernatants and biological fluids, mainly sera. Furthermore, the post-holder will, in collaboration with Dr Doffinger, work on developing assays for detection of novel autoantibodies, including anti-ASC antibodies, which potentiate the activity of the NLRP3 inflammasome. Lastly, we will have access to sera and cells from patients



across the ImmunAID consortium (15 different centres across the EU), to validate the assays and help with development of relevant biomarkers.

The post-holder will support the management of the research group, specifically dedicated to this project, consisting of a Clinical Fellow, and one PhD student (in 2nd years), as required.

What does the role entail?

As a Postdoctoral Research Fellow, you will:

- Work independently to develop and enhance the project experimental plan, Develop methods and techniques applicable to your own work and for widespread dissemination. Additionally evaluate methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to own work;
- Take responsibility for the day-to-day running of your area of the project including the budget and co-ordinate work with other internal and external collaborators. Identify additional resources to effectively deliver the project work;
- Prepare reports for your supervisors and for team meetings to report progress, agree future work and exchange data/experience;
- Working as part of a larger team of researchers, engage in knowledge-transfer activities where appropriate and feasible. Develop internal and external networks for the exchange of information and for future collaboration;
- Train undergraduate and postgraduate students in relevant and developing laboratory techniques and co-supervise projects students working within the group;
- Prepare written papers for publication in journals with international standing and presentations to disseminate the research findings to both the academic and clinical communities and to the wider public at both national and international level leading to high quality publications in peer-reviewed journals, as appropriate;
- Maintain appropriate databases, keeping accurate written and computerised records and to ensure that these records are stored in a secure place, and to maintain confidentiality of all electronically stored personal data in line with the provisions of the Data Protection Act/GDPR;



- Identify other research project opportunities and directions as they arise including assisting with drafting budgets and applications for potential research projects and grants;
- Work within and apply the standard operating procedures, health and safety regulations and quality assurance procedures of both the Institute and the School and be responsible for the health and safety management of relevant projects and research work;
- Undertake travel to meet with / work with collaborators in Cambridge and Manchester.

Although no formal teaching requirements will be made of fellows, they may be expected to share in these tasks on an occasional basis, contributing to the teaching activities of the group.

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?

- A first degree and PhD (or passed PhD with minor corrections at the point of application) in a molecular biology subject;
- Previous experience of managing a project in a research field including demonstrable evidence of successfully setting and delivering project objectives within strict time limitations and budget;
- Demonstrated experience in molecular biological, biochemical and cell culture techniques including experience in DNA cloning, Western blots, and ELISA. Familiarity with cell biology methods;
- Evidence of having developed independent research skills, the ability to work independently and to organise and prioritise own work (and those of others if appropriate) and maintaining records;
- Computer literacy, including word processing, Excel and literature searches;
- Ability to interpret the scientific literature and incorporate into project;
- Effective interpersonal and communication skills, including previous experience presenting to an audience and writing detailed reports and preparing data;
- Evidence of an ability to write to a standard required for research reports/publications (at least co-authorship of peer-reviewed publications);



- Demonstrated the ability to work as part of a multidisciplinary team involving, technicians, clinicians, students and research personnel as well as being independent if required;
- Willingness to work flexibly, where necessary, to fulfil the needs of the research project;
- Willingness to travel within the UK and internationally, particularly able to meet/work with European collaborators and spend periods working in their labs;
- Effective data management skills, including knowledge of Data Protection requirements;
- A working knowledge of health and safety issues within the laboratory setting.

You may also have:

- Experience in CRISPR-Cas9 gene editing technology;
- Experience in cell sorting, in immunohistochemistry and indirect immunofluorescence;
- Experience in writing COSHH and GM risk assessments, and Standard Operating Procedures (SOPs) for good laboratory practice.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information. 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 Sinisa Savic, Associate Professor (Clinical),

Tel: +44 (0)113 2065567, Email: s.savic@leeds.ac.uk

or

Professor Michael McDermott, Professor of Experimental Rheumatology

Tel + 44 (0) 113 343 8641, Email: m.mcdermott@leeds.ac.uk.



Additional information

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

Find out more about [Athena Swan](#) in the Faculty of Medicine and Health.

Find out more about our [Institute](#).

Find out more about our [Research and associated facilities](#).

Working at Leeds

You can find out more about our generous benefits package and more about what it is like to work at the University and live in the Leeds area in our [Working at Leeds](#) information.

You will report to Dr Sinisa Savic, Associate Professor (Clinical), & Professor Michael McDermott, Professor of Experimental Rheumatology.

Candidates with disabilities

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

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](#).

