



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Chemical Biology and Drug Discovery, Faculty of Biological Sciences



Salary: Grade 7 (£39,105 - £46,485 p.a.)

Reference: FBSAS1079

Available on a fixed-term basis for 2 years (to complete specific time limited work).

This role will be based on the University campus. We are also open to discussing flexible working arrangements.

Research Fellow in Chemical Biology and Drug Discovery, School of Molecular and Cellular Biology

Are you an ambitious researcher looking for your next challenge? Do you have an established background in biochemistry or drug discovery? Do you want to further your career in one of the UK's leading research intensive Universities?

We seek to appoint a Research Fellow in Chemical Biology and Drug Discovery to work on exciting new targets in ubiquitin signaling biology, with a particular emphasis on deubiquitylating enzymes (DUBs). The fellow will work closely with teams led by [Prof. Adam Nelson](#) and [Prof. Elton Zegiraj](#) at the Astbury Centre, University of Leeds, Leeds, UK. The position is available for two years.

The project will focus on the chemical biology of small-molecule inhibitors of enzyme complexes involved in ubiquitin cell signalling regulation. A major aspect of the post is applying workflows (developed in the Nelson group) that integrate plate-based chemistry, mass spectrometry and automated data analysis, to discover new chemical tools. You will also develop assays to uncover inhibitor mode of action and target engagement in vitro and in cells. The position will suit someone interested in small molecule ligand discovery and drug design, protein structure and cell signalling biology.

You should have, or be very close to completing, a PhD in Chemical Biology, Chemistry, or a related discipline. A background in ligand discovery, and experience with setting up assays to study small molecule ligands and protein-protein interactions will be advantageous. Experience with deubiquitylases (DUBs) or E3 ligases and past participation in early-stage drug discovery activities or target engagement studies would also be beneficial.

What we offer in return

- 26 days holiday plus approx. 16 Bank Holidays/days that the University is closed by custom (including Christmas) – That's 42 days a year!
- Generous pension scheme plus life assurance– the University contributes 14.5% of salary
- Health and Wellbeing: Discounted staff membership options at The Edge, our state-of-the-art Campus gym, with a pool, sauna, climbing wall, cycle circuit, and sports halls.



- Personal Development: Access to courses run by our Organisational Development & Professional Learning team.
- Access to on-site childcare, shopping discounts and travel schemes are also available.

And much more!

The Astbury Centre for Structural & Molecular Biology at the University of Leeds has excellent facilities for biophysical interactions, including the latest Biacore, MST, Dianthus (Nanotemper), ITC and Mass Photometry instruments. The University provides state-of-the-art infrastructure for mammalian cell culture, high-throughput screening, imaging, mammalian genetics, chemical biology and proteomics. Additionally, the centre is equipped for cryo-electron microscopy (two Titan Krios 300 kV with Falcon-4 detectors and Selectris energy filters, protein crystallography (crystallisation robots, automatic imaging), and protein production with expertise in multi-subunit expression in insect cell, yeast and bacterial expression systems.

Main duties and responsibilities

- Designing, planning, and conducting a program of investigation, in consultation with [Prof. Adam Nelson](#) and [Prof. Elton Zegiraj](#).
- Generating independent and original research ideas and methods in ubiquitin cell signaling biology and small molecule ligand discovery with an aim to extend the labs 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;
- 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;
- To contribute to, and to encourage, 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.

Qualifications and skills

Essential

- A PhD (or close to completion) in chemical biology, chemistry or a closely allied discipline;
- A strong background in the synthesis and discovery of bioactive molecules;
- A strong background in the study of the mechanisms of small-molecule chemical tools such as enzyme inhibitors;
- Experience with challenging chemical biology or biochemistry projects and/or challenging data processing pipelines;
- Experience with mass spectrometry data collection and/or analysis
- The ability to design, execute and write up research independently;
- A developing track record of peer-reviewed publications in international journals, undertaking challenging projects, or solving complex scientific questions;
- Excellent communication skills, both written and verbal, and the ability to communicate your research at national and international conferences;
- Good time management and planning skills, with the ability to meet tight deadlines;
- A proven ability to work well both independently and as part of a team;
- Ability to work accurately and carefully;
- A strong commitment to your own continuous professional development.

Desirable

- Experience of high-throughput discovery approaches such as plate-based chemistry and/or assays;
- Experience with protein production and the expression and purification of multi-subunit protein complexes;
- Experience with biophysical or structural biology methods and enzyme assays in vitro and in cells;
- Experience in studying E3 ligases and/or deubiquitylating enzymes and their mechanism of action;
- Experience with setting up proximity assays (e.g. AlphaLisa) or target engagement assays (e.g. NanoBRET);



- Experience with studying PROTACs or other similar protein targeting chimeras;
- Evidence of pursuing external funding to support research.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Your application should include:

- A supporting statement providing evidence to support each requirement listed on the 'What will you bring to the role' section of the Candidate Brief (no more than two sides of A4, minimum font size 11);
- An academic curriculum vitae, including a list of your publications

Contact information

To explore the post further or for any queries you may have, please contact:

Adam Nelson, Professor of Chemical Biology

Email: A.S.Nelson@leeds.ac.uk

[Elton Zeqiraj, Wellcome Trust Senior Research Fellow and Professor of Structural Biology](#)

Email: e.zeqiraj@leeds.ac.uk

Additional information

Find out more about the [Faculty of Biological Sciences](#) and the [School of Molecular and Cellular Biology](#)

Our University

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Biological Sciences, we are dedicated to diversifying



our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian, those who belong to a minority ethnic community; people who identify as LGBT+; and disabled people. Candidates will always be selected based on merit and ability

The University of Leeds and the Faculty of Biological Sciences are committed to providing equal opportunities for all and offer a range of family friendly policies. The University is a charter member of Athena SWAN (the national body that promotes gender equality in higher education), and the Faculty of Biological Sciences was awarded a Silver award in 2020. We are proud to be an inclusive Faculty that values all staff, and are happy to consider job share applications and requests for flexible working arrangements from our employees. Our Athena SWAN [webpage](#) provides more information.

Working at Leeds

We are a campus based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our [Working at Leeds](#) information page.

Information for disabled candidates

Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found under the 'Accessibility' heading on our [How to Apply](#) information page or by getting in touch by [emailing HR via hr@leeds.ac.uk](mailto:hr@leeds.ac.uk).

Salary Requirements of the Skilled Worker Visa Route

Please note: If you are not a British or Irish citizen, from 1 January 2021 you will require permission to work in the UK. This will normally be in the form of a visa but, if you are an EEA/Swiss citizen and resident in the UK before 31 December 2020, this may be your passport or status under the EU Settlement Scheme.

Please note that this post may be suitable for sponsorship under the Skilled Worker visa route but first-time applicants might need to qualify for salary concessions. For more information, please visit [the Government's Skilled Worker visa page](#).



For research and academic posts, we will consider eligibility under the Global Talent visa. For more information, please visit [the Government's page, Apply for the Global Talent visa](#).

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 page.

