

CANDIDATE BRIEF

Research Fellow in Chemical Biology, Faculty of Engineering & Physical Sciences



Salary: Grade 7 (£33,797 - £40,322 p.a.) Reference: EPSCH1018 Closing date: 29 March 2020

Fixed-term for 9 months We will consider job share / flexible working arrangements

Research Fellow in Chemical Biology, School of Chemistry, Faculty of Engineering and Physical Sciences.

Are you an ambitious researcher looking for your next challenge? Do you have an established background in chemical biology in its broadest sense? Do you want to further your career in one of the UKs leading research intensive universities?

As a Research Fellow in Chemical Biology you will join an EPSRC-funded team focused on developing, validating and then exploiting new tools for discovering inhibitors of Protein-protein interactions (PPIs). You will assist the Investigators in delivering this large research programme by focussing on the design and synthesis of small-molecule chemical probes for disease relevant PPIs, with considerable emphasis on targets in oncology.

The Perturbation of Protein-Protein Interactions (<u>PoPPI</u>) project is a major £3.4 million five-year collaborative research programme led by <u>Professor Andy Wilson</u>, funded by the <u>Engineering and Physical Sciences Research Council (EPSRC)</u>, and bringing together the <u>University of Leeds</u>, the <u>University of Bristol</u>, the <u>Northern Institute of Cancer Research</u> (Newcastle University) and drug discovery organisations, <u>AstraZeneca</u> and <u>Domainex</u>. This large and diverse programme focuses on developing, validating and exploiting new tools to discover inhibitors of PPI's.

You will be part of a large team based in <u>The Wilson Group</u>, in the <u>School of Chemistry</u> and the <u>Astbury Centre for Structural Molecular Biology</u> with access to a superb infrastructure for research in chemical biology, including synthetic laboratories, NMR equipment, X-ray crystallographic, mass spectrometry and, biophysical techniques, together with state of the art online resources.

You will have a PhD (or have submitted your thesis prior to starting) in an area appropriate to the project, along with extensive knowledge of modern molecular biology and the ability to apply knowledge of a broad range of modern biophysical methods to study molecular recognition.



What does the role entail?

As Research Fellow, your main duties will include:

- Designing, planning and conducting a programme of investigation, in consultation with Dr Thomas Edwards and Prof Andrew Wilson;
- Generating and pursuing independent and original research ideas and for the analysis and inhibition of protein-protein interactions using synthetic reagents;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own work;
- Preparing papers for publication in leading international journals and disseminating research results through other recognised forms of output;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

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?

As Research Fellow, you will have:

- A PhD (or have submitted your thesis before taking up the role) in an area appropriate to the project;
- Demonstrable ability to successfully apply extensive knowledge of modern molecular biology, protein expression and purification to cutting edge research;
- Exceptional background knowledge of contemporary research in Chemical Biology;



- Exceptional ability to apply knowledge of a broad range of modern biophysical methods to study molecular recognition;
- Knowledge of structural biology in its broadest sense and appreciation of the key role it plays in drug discovery;
- Expertise in biomolecular NMR spectroscopy;
- Experience of synthetic chemistry e.g. small-molecule or peptide synthesis;
- The ability to design, execute and write up research independently;
- Evidence of practical experience in multidisciplinary research;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;
- A proven track record of peer-reviewed publications in high impact factor journals;
- Excellent written and verbal communication skills including presentation skills;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.

You may also have:

- Experience of pursuing external funding to support research;
- Practical experience in the following: (i) use and/or development of isothermal titration calorimetry or surface plasmon resonance to monitor biomolecular interactions; (ii) experience in cell culture and cell-based assays;
- Development of chemical probes;
- Expertise in protein crystallography;
- Experience of public communication and engagement.

How to apply

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



Contact information

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

Andrew Wilson, Professor of Organic Chemistry

Tel: +44 (0)113 343 1409 Email: <u>A.J.Wilson@leeds.ac.uk</u>

Additional information

Faculty and School Information

Find out more about the project and the research of the Wilson Group.

Find out more about the:

- Protein-Protein Interactions Network;
- School of Chemistry;
- <u>Astbury Centre</u> for Structural Molecular Biology, their <u>research</u> and associated <u>facilities;</u>
- Faculty of Engineering and Physical Sciences;
- University <u>libraries</u>, journal and <u>database</u> subscriptions.

A diverse workforce

The Schools in the Faculty of Engineering & Physical Sciences are proud to have been awarded the Athena SWAN <u>Bronze</u> or <u>Silver</u> Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our <u>equality</u> and inclusion webpage provides more information.

Working at Leeds

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our <u>Working at Leeds</u> information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk</u>.



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 <u>Criminal Records</u> information page.

