UNIVERSITY OF LEEDS

# CANDIDATE BRIEF

## Research Fellow in Structure-based Cancer Drug Discovery and Biophysics, Faculty of Biological Sciences

**Salary: Grade 7 (£33,797 – £40,322 p.a.) Due to funding restrictions there is a maximum salary of £36,914 for this post.**

**Reference: FBSMB1168**

**Closing date: 19 November 2019**

**Available from 01 January 2020**

**Fixed-term for 2 years**

**We will consider flexible working arrangements**

# Research Fellow in Structure-based Cancer Drug Discovery and Biophysics
# School of Molecular and Cellular Biology

**Are you an ambitious researcher looking for your next challenge? Do you have an established background in structural biology and biophysical methods, including X-ray crystallography and/or NMR spectroscopy? Do you want to further your career in one of the UKs leading research intensive Universities?**

Based in the laboratory of Professor Alex Breeze in the Astbury Centre for Structural Molecular Biology and in collaboration with partners based in Leeds (Dr Darren Tomlinson) and at Newcastle University (Professor Mike Waring, Department of Chemistry) you will work on the design of allosteric inhibitors of the Ras exchange factor, SOS.

The project is funded for 2 years by Cancer Research UK (CRUK) and will involve fragment-based compound screening and structural analysis using X-ray crystallography, together with analysis of binding interactions by NMR, biophysical and computational methods. You will then take optimised compounds forward into cell-based assays. Exceptional facilities are available in Leeds to support the project, including state-of-the-art X-ray crystallography and biophysics infrastructure and a new, 950 MHz cryoprobe-equipped NMR spectrometer.

To apply, you should be a highly multidisciplinary and collaborative Postdoctoral Researcher who has a PhD (or close to completion) in structural biology (preferably with a focus on X-ray crystallography) and has experience in the use of other structural and biophysical methods (e.g. NMR, SPR, ITC, thermal melt/DSC, MST).

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 reawarded a Bronze award in 2017. 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.



## What does the role entail?

As a Research Fellow your main duties will include:

- Designing, planning and conducting a programme of investigation, in consultation with Professor Alex Breeze and Dr Darren Tomlinson;
- Generating independent and original research ideas and methods in structure-based inhibitor design and Ras/SOS pathway inhibition with an aim to extend the Breeze group research portfolio;
- Communicating research results and sharing plans with Professor Waring's group (Newcastle);
- 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.

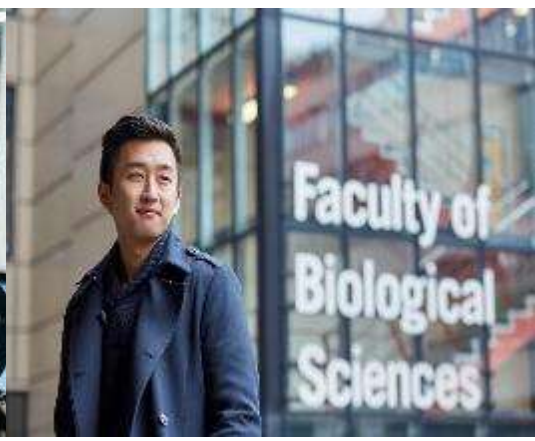
These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

## What will you bring to the role?

As a Research Fellow you will have:

- A PhD (or close to completion) in structural biology (with emphasis on X-ray crystallography) or a closely allied discipline;
- Experience in the use of complementary structural (e.g. NMR) and biophysical methods (e.g. SPR, ITC, thermal melt/DSC, MST) for characterising ligand:protein interactions, with some knowledge of cell-based assays an advantage;
- The ability to design, execute and write up research independently;





- A developing track record of peer reviewed publications in international journals;
- 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.

You may also have:

- Experience in fragment-based lead compound discovery and/or structure-based inhibitor design and cellular potency assays;
- 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:

**Professor Alex Breeze, Professor of Biomolecular NMR**
Tel: +44 (0)113 343 0087
Email: a.l.breeze@leeds.ac.uk



## Additional information

Find out more about the Faculty of Biological Sciences and the School of Molecular and Cellular Biology.

Find out more about our Research and associated facilities at the Astbury Centre for Structural Molecular Biology.

**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 Working at Leeds information page.

**Candidates with disabilities**
Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our Accessibility information page 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 page.