



UNIVERSITY OF LEEDS

## CANDIDATE BRIEF

Research Fellow, Faculty of Biological Sciences



**Salary: Grade 7 (£33,797 – £40,322 p.a.) Due to funding limitations it is unlikely an appointment will be made above £35,845.**

**Reference: FBSBM1137**

**Closing date: 18 January 2020**

**Available from 01 February 2020 for a fixed-term for 36 months**

## Research Fellow School of Biomedical Sciences

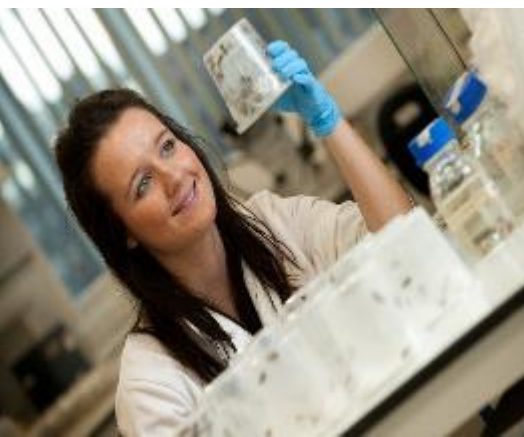
**Are you an ambitious researcher looking for your next challenge? Do you have an established background in Biochemistry or Structural Biology? Do you want to further your career in one of the UKs leading research intensive Universities?**

This position is to study the dynamics and catalysis integral membrane pyrophosphatases, aiming to determine how they pump both sodium ions and protons, to determine the mechanism (alternating or both ions pumped through a single chain at once) of this and of gate opening, and to use this as the basis for drug design. It builds on recent work published in Nature Communications and Science Advances (Vidilaseris, K. et al. & Goldman, A. Sci Adv 5, eaav7574 (2019); Li K-M. et al. & Goldman, A. Nat Commun 7, 13596 (2016)). The project combines protein production and purification with crystallisation, crystallography and electrophysiological measurements to determine the structure and mechanism of this challenging system.

You will work in the multidisciplinary [School of Biomedical Sciences \(SBMS\)](#), which includes biochemists and physicists, and as part of the [Astbury Centre for Structural Molecular Biology](#). You will be supervised by [Professor Adrian Goldman](#) (SBMS), and the work will involve close collaboration with the groups of Professor Lars Jeuken and [Dr. Christos Pilotas](#) (SBMS), and [Dr. Antreas Kalli](#) (Faculty of Medicine and Health).

You will be a highly motivated individual with a strong basis in structural biology, and experience in working with membrane proteins. You should have a PhD (or be close to completion) in Biochemistry, Structural Biology or a closely allied discipline and have previous experience in membrane protein expression and purification, x-ray crystallography or cryo-electron microscopy. Experience in lipid assays, eukaryotic tissue culture, EPR, FRET and/or Molecular dynamics simulations would be desirable.

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 Adrian Goldman](#);
- Generating independent and original research ideas and methods in structural biological and biophysical characterisation of membrane proteins with an aim to extend the Goldman 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.

## What will you bring to the role?

As a Research Fellow you will have:

- A PhD (or be close to completion) in Biochemistry, Structural Biology or a closely allied discipline;
- A strong background in protein expression and purification, in working with membrane proteins;
- Demonstrable skills in either x-ray crystallography or cryo-electron tomography;



- Strong analytical skills, with the ability to work accurately and carefully, designing, executing and writing 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;
- The ability to work well both independently and as part of a team;
- Strong initiative and a pro-active approach, with excellent organisational, planning and self-management skills, including the ability to prioritise workloads to meet deadlines/demand and deliver high quality under pressure;
- A strong commitment to your own continuous professional development.

You may also have:

- Experience in lipid assays, eukaryotic tissue culture, EPR, FRET and/or Molecular dynamics simulations;
- 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.

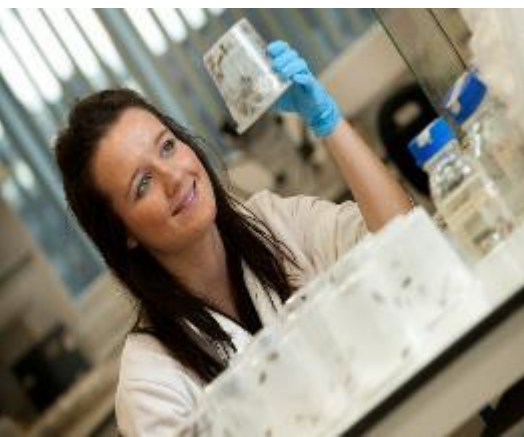
## Contact information

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

**Adrian Goldman, Professor in Membrane Biology**

Tel: +44 (0)113 343 8537

Email: [A.Goldman@leeds.ac.uk](mailto:A.Goldman@leeds.ac.uk)



## Additional information

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

### 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](mailto: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.

