



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Senior Research Technician in Protein Purification, Faculty of Biological Sciences



Salary: Grade 6 (£27,511 - £32,817 p.a. pro rata) Please note due to funding restrictions, it is unlikely that any appointment will be made above the full time equivalent salary of £28,331.

Reference: FBSFO1137

Fixed-term for 3 years,

Part-time – 80% of full time

Available from 1st February 2020

Senior Research Technician in Protein Purification Faculty of Biological Sciences

Are you an experienced technician looking for a challenge? Do you have a background in molecular/cell biology or biochemistry? Do you want to further your career in one of the UK's leading research intensive Universities?

We are looking for a highly motivated person to provide technical support to the Membrane Protein Biology group of [Professor Adrian Goldman](#). The project is highly multidisciplinary involving molecular biology, protein expression using eukaryotic expression systems, protein biochemistry and protein-protein interaction studies. The project is funded by the BBSRC.

The successful candidate will have a degree in a related subject (or equivalent experience) and have significant experience of working in a similar technical role. Experience in DNA cloning techniques, recombinant protein production and purification of membrane proteins for structural biology and biophysical studies are essential. The lab uses a range of techniques, including recombinant protein production in insect cells and *E. coli*, cryo-electron microscopy, X-ray crystallography, high-throughput (HT) screening, enzymology and protein-protein binding studies. In your role as laboratory technician you will work closely with other research scientists within the group. You should, therefore, be highly motivated, organised, and able to communicate and collaborate as part of a team.

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. <http://www.fbs.leeds.ac.uk/equality-and-diversity/athena-swan/>



What does the role entail?

As Senior Research Technician your main duties will include:

- Working with the Principal Investigator (PI) and other Goldman lab personnel to plan and conduct experiments using current methodology, and developing new techniques as appropriate. These would include (but are not limited to) the following:
 - *E. coli* and *S. cerevisiae* Large scale expression, preparation and purification of tagged membrane proteins (detergent extraction, affinity chromatography, ion-exchange and size exclusion chromatography including use of AKTA purifier);
 - Characterisation of membrane proteins by SDS-polyacrylamide gel electrophoresis, western blotting and functional assays;
 - Growing of insect cell cultures and use of Baculovirus expression techniques for protein production in insect cells;
 - Standard recombinant DNA techniques (microbial culture, PCR, site-directed mutagenesis, plasmid preparation, sequence analysis);
 - Implementing HT methodology to work with multiple parallel projects running at once;
- Day-to-day supervision of the laboratory and any junior staff or students working in the area associated with the project;
- Responsibility for the management and maintenance of all equipment specifically associated with the project. This will also include ordering of specialist services and supplies, ensuring compliance with university requirements and systems;
- Troubleshoot any research methodology or experimental difficulties encountered within the laboratory reporting findings and opportunities for remedial solutions to the PI;
- Act as first point of contact for any Health and Safety matters related to the work in the laboratory developing risk assessments for new and existing protocols. This will include responsibility for the induction of new group members, explaining local laboratory procedures and protocols;
- Maintaining good laboratory records of work carried out and databases of samples held in storage;
- Providing clear understandable data to other members of the research group;
- Communicating the research activity both internally and externally via written and oral presentations;



- Supplying information as required to contribute to grant applications and research papers for publication.

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 Senior Research Technician you will have:

- A Degree in a relevant subject or equivalent relevant experience;
- Recent comprehensive experience in recombinant protein production and purification of proteins for structural biology and biophysical studies including the purification of unstable proteins;
- Experience of working with membrane proteins;
- Recent substantial research experience with cloning and shuttle and expression vectors in *E. coli* and *S. cerevisiae*;
- Excellent aseptic technique and experience of mammalian or insect cell culture with the ability to perform technically demanding tasks with care and precision;
- Good experience of managing and maintaining laboratory equipment, including the purchase of consumables;
- Excellent organisational and time management skills, demonstrable through the running of several research projects concurrently, with the ability to manage your own workload, whilst working under pressure to maintain a high level of accuracy;
- Demonstrable problem solving skills, with the ability to work pro-actively, using your initiative, both independently and within a team;
- Excellent verbal and written communications skills, with the ability to clearly articulate and present information, ideas and analysis, modifying your approach to suit different audiences;
- Good IT skills, including use of MS Office software and database management;
- Successful experience of the supervision of other laboratory users.

You may also have:

- Experience with scale up of cell cultures with volumes as large as 30L;
- Experience with high-throughput cloning/expression strategies;
- Experience using LIMS to capture results and provide them to end users;



- RSci (Registered Scientist) or RSci Tech (Registered Science Technician) qualification from IST;
- Experience using MAC computers;
- Experience of working with ordering systems such as SIPR or Science Warehouse.

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.

Contact information

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

[Amelia Lesiuk, Laboratory Area Coordinator,](#)

Tel: +44 (0)113 3433171

Email: A.Lesiuk@leeds.ac.uk

Or

[Professor Adrian Goldman, Chair in Membrane Biology,](#)

Tel: +44(0) 113 34 38537

Email: A.Goldman@leeds.ac.uk

Additional information

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

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



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.

