



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Computational approaches to study mRNA Translation
Faculty of Biological Sciences



Salary: Grade 7 (£41,064 - £48,822 p.a.)

Reference: FBSMB1320

Available on a fixed-term basis for 1 year (to complete specific time limited work)

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

Research Fellow in Computational approaches to study mRNA Translation

School of Molecular and Cellular Biology

Are you an ambitious researcher looking for your next challenge? Do you have an established background in computational biology and bioinformatics? Do you want to further your career in one of the UKs leading research intensive Universities?

We are looking for an outstanding postdoctoral research fellow to join the Aspden group at the University of Leeds. The postdoc will be part of a large team (£5.6M, funded by a BBSRC Strategic Longer and Larger grant). The team aims to unravel the 'ribosome code', rules that explain how compositionally dissecting ribosomes enable translation of specific sets of mRNAs. Specifically, the postdoc will focus on dissecting the molecular mechanisms using bioinformatics and computational approaches. This will include analysing ribosome profiling data and direct-RNA-Seq data, as well as building novel pipelines and employing machine learning approaches to predict translational output. The postdoc will work closely with others of the team who will generate the data. Together we will be able to dissect conserved mechanisms of ribosome specialisation across eukaryotes, allowing us to unravel the 'ribosome code'.

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.

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 [Dr Julie Aspden](#).



- Generating independent and original research ideas and computational methods to dissect mechanisms of mRNA translational regulation by specialised ribosomes;
- Contributing to scientific discussions within the research team during group meetings, journal clubs and project meeting;
- Keeping up-to-date with relevant literature and attending seminars;
- 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;
- Contributing to, and encouraging, 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 degree in computational biology, bioinformatics, biochemistry, biological sciences, genetics, biology or a closely allied discipline.
- Experience in analysing Ribosome profiling and direct-RNA sequencing data;
- Expertise in using machine learning to understand post-transcriptional gene regulation;
- Drive to pursue cutting-edge research in the field of ribosome specialisation using a range of computational approaches;
- Strong analytical skills and aptitude for problem solving;
- 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:

- Evidence of pursuing external funding to support research;
- Experience in public engagement and/or outreach.

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:

- 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:

Dr Julie Aspden

Email: j.aspden@leeds.ac.uk

Please note: If you are not a British or Irish citizen, 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, this may be your status under the EU Settlement Scheme.

Additional information

Find out more about the [Faculty of Biological Sciences](#) and the RiboCode <https://ribocode.org/> project.

At the University of Leeds, we are committed to providing a culture of inclusion, respect and equity of opportunity that attracts, supports, and retains the best students and staff from all backgrounds and from across the world. Whatever role we recruit for we are



always striving to increase the diversity of our community, which each individual helps enrich and cultivate. We particularly encourage applications from, but not limited to Black, Asian, people 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.

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.

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.

