



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Function and Structure of Specialised Ribosomes in *Drosophila melanogaster*, Faculty of Biological Sciences



Salary: Grade 7 (£33,199 – £39,609 p.a.)

Reference: FBSMB1149

Fixed-term for up to 3 years (external funding)

Available from 1 April 2019

We will consider flexible working arrangements

Research Fellow in Function and Structure of Specialised Ribosomes in *Drosophila melanogaster*

School of Molecular and Cellular Biology

Are you an ambitious researcher looking for your next challenge? Do you have an established background in either mRNA translation or cryo-EM? Are you keen to develop new skills in a range of approaches? Do you want to further your career in one of the UK's leading research intensive Universities?

Applications are invited for a BBSRC-funded postdoctoral research fellow position, to dissect the function and structure of specialised ribosomes. This exciting, timely and transformative research project has the potential to provide a step-change in our understanding of protein synthesis. Together we will characterise the composition, function and structure of specialised ribosomes in the *Drosophila* testis. This research project is a collaboration between two experts in the fields of mRNA translation/initiation ([Dr Julie Aspden](#)) and cryo-EM ([Dr Juan Fontana](#)), combining genetic, biochemical, genomic and structural approaches to tackle an important, outstanding question on the structure-function relationship of specialised ribosomes. We have already obtained evidence by mass spectrometry of the existence specialised ribosomes in different tissues from *Drosophila melanogaster*, and we have obtained cryo-EM averages of these ribosomes at $\sim 4\text{\AA}$ resolution. Therefore this is an active project that requires someone to drive it forward. You will join a vibrant research community within the Faculty of Biological Sciences at Leeds, including [LeedsOmics](#) and [The Astbury Centre for Structural Molecular Biology](#).

You should have a PhD (or close to completion) in RNA and/or structural biology or a closely allied discipline and experience in mRNA translation and/or cryo-EM of macro-molecular complexes.

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 research, in consultation with Aspden and Fontana;
- Generating independent and original research ideas and methods in mRNA translation;
- Contributing to scientific discussions within the research team during group meetings, journal clubs and project meetings;
- Keeping up-to-date with relevant literature and attending seminars;
- Making a significant contribution to the dissemination of research results by generating publications in leading peer-reviewed journals, and by presenting work at national and international meetings;
- Attending courses and workshops to improve skills and personal development.
- 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 (or close to completion) in RNA and/or structural biology or a closely allied discipline;
- Experience in mRNA translation and/or cryo-EM of macro-molecular complexes;
- Drive to pursue cutting-edge research in the field of mRNA translation using a range of approaches (biochemical, genetic, genomic and structural);
- Aptitude for computational analysis e.g. NGS and/or cryo-EM data analysis;



- 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;
- Ability to communicate your research at national and international conferences;
- Good time management and planning skills, with the ability to meet tight deadlines;
- Strong analytical skills and aptitude for problem solving;
- A proven ability to work well both independently and as part of a team;
- The ability to work accurately and carefully;
- A strong commitment to your own continuous professional development;
- Determination and initiative to help drive the research project.

You may also have:

- Experience in biochemical purification of translation complexes, *Drosophila melanogaster* husbandry and genetics, analysis of RNA-Seq or similar data, structural biology, genomics, CRISPR or RNAi;
- 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:

- 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:

[Dr Julie Aspden](#), University Academic Fellow in Pervasive Transcription

Tel: +44 (0)113 343 9607

Email: j.aspden@leeds.ac.uk

Additional information

To find out more about

- The [Aspden](#) and Fontana Groups
- [LeedsOmics](#)
- [The Astbury Centre for Structural Biology](#)
- [The Faculty of Biological Sciences](#)
- [School of Molecular and Cellular Biology](#)
- Our Research and associated [facilities](#)
- Our [Faculty Equality and inclusion](#) and Inclusion initiatives

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.

