



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Structural Molecular Virology, Faculty of Biological Sciences



Salary: Grade 7 (£39,105 - £46,485 p.a.)

Reference: FBSMB1298

Closing date: 11 March 2025

Available on a fixed-term basis for up to 12 months (to complete time specific limited work)

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

Research Fellow in Structural Molecular Virology

School of Molecular and Cellular Biology

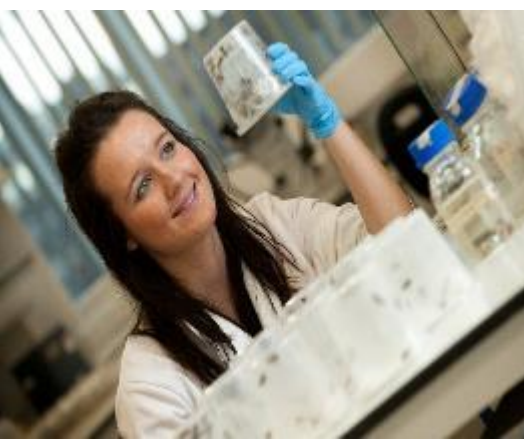
Are you an ambitious researcher looking for your next challenge? Do you have a background in structural biology? Do you want to further your career in one of the UKs leading research intensive Universities?

Enteroviruses cause a range of diseases and emerging enteroviruses are of global concern. The applicant will be joining our NIH-funded research project to investigate the molecular mechanism of enterovirus (EV) VP0 cleavage. We are applying a combination of bioinformatic, structural and evolutionary approaches to clarify the molecular mechanism of EV maturation. This project will involve using structural approaches to determine the functional role of critical residues and capsid reorganisation in the cleavage event. Specifically, the successful candidate will generate cryo-EM structures of EV mutants using techniques such as immunocapture.

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.

Main duties and responsibilities

- Designing, planning, and conducting a programme of investigation, in consultation with Dr Kingston, Prof Stonehouse and Prof Rowlands.
- Generating independent and original research ideas and methods for the characterisation of enterovirus maturation pathways.
- 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.

Qualifications and skills

Essential

- A PhD (or close to completion) in computational biology, biochemistry, molecular biology or a closely allied discipline.
- Extensive experience in immunocapture cryoEM including optimisation, map refinements and model building (preferably with enteroviruses).
- Expertise in SHAPE-MaP, including Shapemapper2.0 and RNAFramework.
- Expertise in solving structures of RNA and protein complexes.
- Experience with software such as Auto-DRRAFTER and RNAComposer, Relion, CryoSparc, Cryolo.
- Experience with PaSTRY assays.
- Good time-management and organisational skills.
- The ability to design, execute and write up research independently.
- Excellent communication skills, both written and verbal and the ability to communicate your research at national and international conferences.
- A proven ability to work well both independently and as part of a team.

Desirable

- Experience with protein production and purification.
- Experience with RNA production and purification.
- Experience with virus recovery from reverse genetics systems.
- Experience working with enteroviruses.
- Experience with mammalian cell culture
- Familiar with RTqPCR.
- Expertise in protein characterisation by Western blotting and ELISA.



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. «**closing date: insert hyperlink to job advert on Stonefish**»

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:

[Nicola Stonehouse](#), Professor in Molecular Virology

Email: n.j.stonehouse@leeds.ac.uk

[David Rowlands](#), Emeritus Professor of Molecular Virology

Email: d.j.rowlands@leeds.ac.uk

[Natalie Kingston](#), Research Fellow in Virology

Email: n.kingston@leeds.ac.uk

Additional information

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

Our University

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Biological Sciences, we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring,



and particularly encourage applications from, but not limited to Black, Asian, those 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.

Information for disabled candidates

Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found under the 'Accessibility' heading on our [How to Apply](#) information page or by getting in touch by [emailing HR via hr@leeds.ac.uk](mailto:hr@leeds.ac.uk).

Salary Requirements of the Skilled Worker Visa Route

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.

Please note that this post may be suitable for sponsorship under the Skilled Worker visa route but first-time applicants might need to qualify for salary concessions. For more information, please visit [the Government's Skilled Worker visa page](#).

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information, please visit [the Government's page, Apply for the Global Talent visa](#).

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.

