UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Structural Biology (CryoEM/ET), Astbury Centre for Structural Molecular Biology, Faculty of Biological Sciences

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

Reference: FBSAS1085

Available on a fixed-term basis for 36 months (to complete specific time limited work)

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

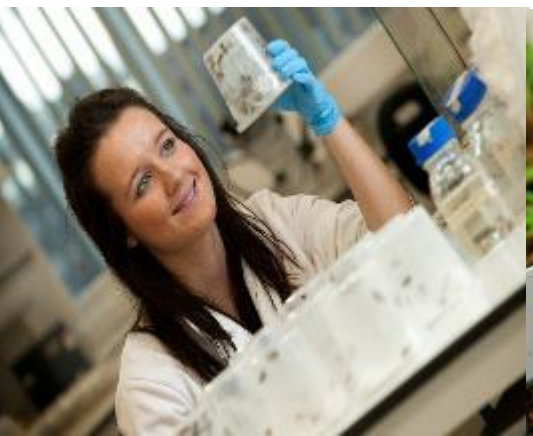
Research Fellow in Structural Biology (cryoEM/ET), Astbury Centre for Structural Molecular Biology, School of Molecular and Cellular Biology

Are you an ambitious researcher looking for your next challenge? Do you have an established background in mechanistic studies of protein assembly using cryoEM/ET and want to help to develop new routes to combat amyloid disease? Do you want to further your career in one of the UK's leading research-intensive Universities?

Understanding and Controlling Amyloid Polymorphism: From Test Tube to Tissue

We are looking for an outstanding research fellow to join our interdisciplinary team investigating how proteins aggregate into amyloid fibrils, and how fibrils with different structures perturb cellular function. This 6-year Wellcome Discovery award will involve three post-doctoral fellows and two PhD students, who will form an integrated team combining biochemical, biophysical, cell biological and structural methods (cryoEM and cryoET) with the goal of transforming our understanding of amyloid polymorphism in vitro and its consequences in cells, in mouse models and in human tissue. The project will focus on IAPP involved in type-2 diabetes and α-synuclein in Parkinson's disease. For this position we are seeking a talented postdoctoral researcher with expertise in cryoEM/ET of protein assemblies. You will use cryoEM/ET to explore how changing the assembly conditions alters the structures of amyloid fibrils, and how fibril structure and polymorphism change with time in vitro, in cells and in tissues. You will also determine the structures of fibrils extracted from murine and patient samples and determine the role of different fibril types in causing cellular dysfunction and disease. You will work closely with two other postdoctoral fellows funded on the grant who bring expertise in biophysical analysis of amyloid assembly and cell biological/imaging methods.

You will be based in the laboratories of Professors Sheena Radford and Neil Ranson, and work closely with other members of our amyloid team. For this position you should have (or be close to completing) a PhD in Structural biology (cryoEM/ET) to elucidate protein assembly mechanisms.



Main duties and responsibilities

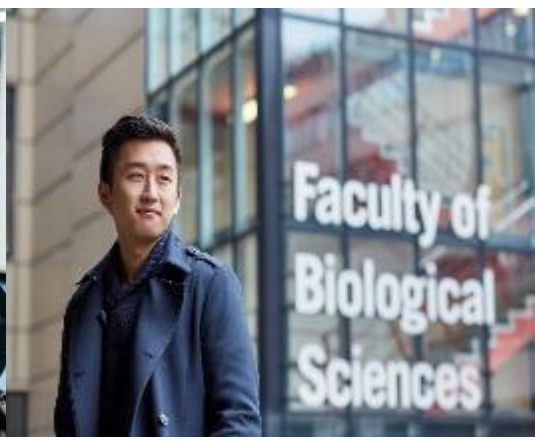
- Designing, planning and conducting a programme of investigation, in consultation with Professor Sheena Radford and Professor Neil Ranson;
- Generating independent and original research ideas and methods to investigate the structural evolution of amyloid fibrils formed in vitro and in cells and tissues, and determine how the assembly mechanism and fibril types formed contribute to cellular dysfunction and disease;
- 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;
- Contribution to, and encouragement of a safe working environment.

Qualifications and skills

Essential

- A PhD (or close to completion) in Structural Biology (cryoEM/ET);
- Substantial experience of solving structures of proteins and protein complexes using cryoEM;
- Experience in using cryoET, or the skills to rapidly learn the techniques, to mill cell/tissue samples and analyse protein structures and cellular effects of protein complexes in situ;
- Significant skills in the use of computational methods applied to the analysis of protein complexes and protein interactions;
- Experience in working with precious samples to address mechanistic questions in biology;
- Excellent data management, analytical and computer skills including using/developing software for analysing complex and large datasets;
- The desire to learn new skills and techniques and the imagination, creativity and ambition to drive new areas of science;





- 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;
- A strong commitment to your own continuous professional development.

Desirable

- Experience of working in the field of protein aggregation and amyloidosis;
- Experience in working with murine or human tissue.

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:

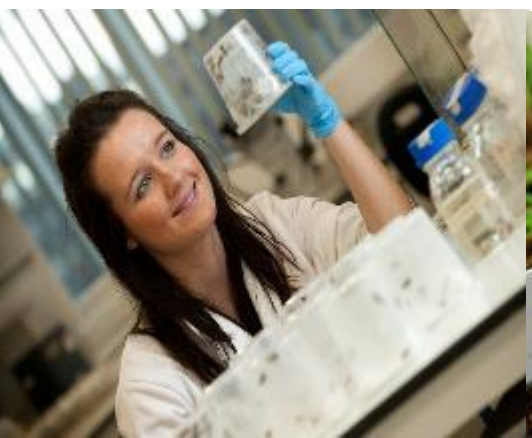
- A supporting statement providing evidence to support each requirement listed on the 'What will you bring to the role' section of the Candidate Brief (no more than two sides of A4, minimum font size 11);
- An academic curriculum vitae, including a list of your publications.

Contact information

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

Professor Sheena Radford**, Astbury Professor of Biophysics**
Tel: +44 (0)113 343 3170
Email: s.e.radford@leeds.ac.uk

Professor Neil A Ranson, **Professor of Structural Molecular Biology**
Tel: +44 (0)113 343 7065
Email: n.a.ranson@leeds.ac.uk



Additional information

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 has received a prestigious Silver award. 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.

Find out more about the Faculty of Biological Sciences and the School of Molecular and Cellular Biology

For information about our facilities available and the Astbury Centre for Structural Molecular Biology.

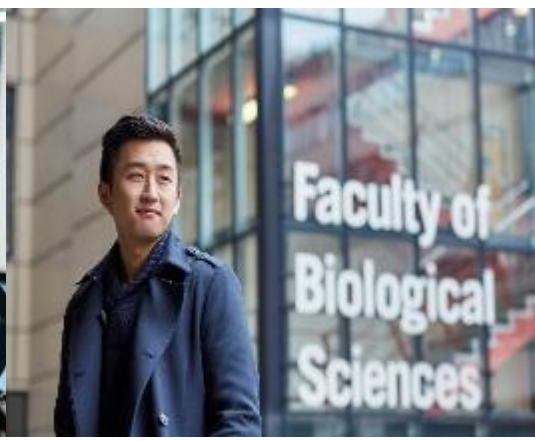
To see our recent publications and our Research Team

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.

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.



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.

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.

Salary Requirements of the Skilled Worker Visa Route
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.

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.