



**UNIVERSITY OF LEEDS**

## **CANDIDATE BRIEF**

**Senior Cryo-electron Microscopy Scientist in Single Particle Analysis,  
Faculty of Biological Sciences**



**Salary: Grade 8 (£51,753 - £59,966 p.a.)**

**Reference: FBSMB1303**

**Available on a full-time basis**

**This role will be based on the university campus.**

**We are also open to discussing flexible working arrangements.**



# Senior Cryo-electron Microscopy Scientist in Single Particle Analysis

## School of Molecular and Cellular Biology

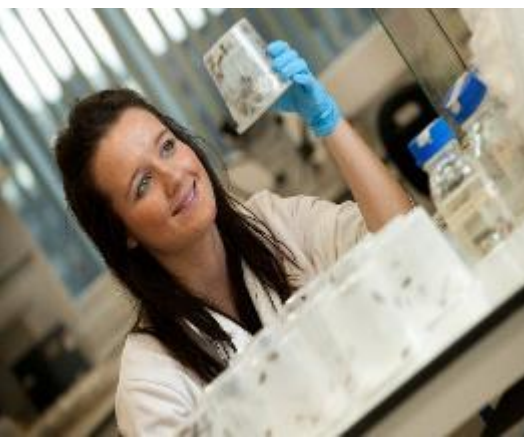
**Would you like to play a leading role within the Astbury Biostructure Laboratory in Leeds? Do you have broad experience in biochemistry, structural biology and cryo-electron microscopy for single particle analysis? Do you have a passion for cutting edge biological and biomedical discovery, and delivering cutting edge outputs where the generation and analysis of data play a key role?**

Working in the Astbury Biostructure laboratory with state-of-the-art experimental equipment and expertise in the field of cryo-electron microscopy, you will lead on the provision and development of single particle analysis services and workflows. You will play a key role in growing our userbase internally and externally, taking a proactive stance to bring attention to the excellence in single particle analysis services that can be found at the Astbury Biostructure Laboratory.

As an expert in the field, you will assist users by using experience-led and innovative methods in sample preparation, data collection and data processing for tackling a wide range of challenging samples. You will support research leaders at Leeds by assisting with the acquisition of research funding, contributing to high-quality publications, and by introducing the use of single particle analysis to new research areas.

For industrial clients, you will ensure the provision of industry standard services, maintaining clear communication and punctuality throughout the completion of work orders. You will act as an external facing representative of the facility to promote industrial user growth, creating opportunities to communicate and demonstrate the capabilities of the facility in providing tailored and expert-led services.

You should have a Ph.D. in Structural Molecular Biology and a passion for studying biological and biomedical processes, with extensive experience in preparing, imaging and analysing challenging specimens for cryo-electron microscopy for single particle analysis. As you will work closely and collaboratively with a wide range of researchers and lead new research projects, you will also have excellent communication skills.



## Main duties and responsibilities

- Acting as a spokesperson for the excellence in single particle analysis (SPA) that can be found at the Astbury Biostructure Laboratory (ABSL), effectively communicating its SPA capabilities to external stakeholders through presentations, client meetings and digital platforms;
- Develop and implement strategic initiatives to expand the facility's external academic and industrial userbase, increasing visibility through targeted outreach and partnerships;
- Maintain strong, professional relationships with industrial clients ensuring consistent delivery of high-quality services and negotiating service terms where appropriate;
- Providing expert support and training in single particle analysis (SPA) workflows to users of the Astbury Biostructure laboratory (ABSL) electron microscopy facility, including in sample preparation, data collection and data processing;
- Liaising with the legal team at the University of Leeds to ensure that contracts for external clients are finalised and amended in a timely manner;
- Acting as a conduit between the ABSL community and IT to realise an up-to-date module system for SPA-related software across user computing devices;
- Maintaining SPA data storage systems, ensuring best practise by users to minimise unnecessary data, and leading on the design and provision of storage system expansion or replacement;
- Expanding and improving on existing SPA workflows used within the ABSL community by integrating advancements in SPA sample preparation technology and data processing software;
- Establishing complimentary workflows between cryo-electron microscopy and other research facilities within the Faculty of Biological Sciences;
- Assisting research leaders at the University of Leeds with the design and implementation of SPA projects, supporting them through the grant application process;
- Working closely with the electron microscopy facility manager and senior tomography staff scientist to achieve continuous development of the facility;
- Where necessary, line managing staff within the electron microscopy facility, providing appropriate levels of direction, guidance and support;
- Upholding high standards of communication and collaboration between staff in the electron microscopy facility community, ensuring a healthy and productive working environment.

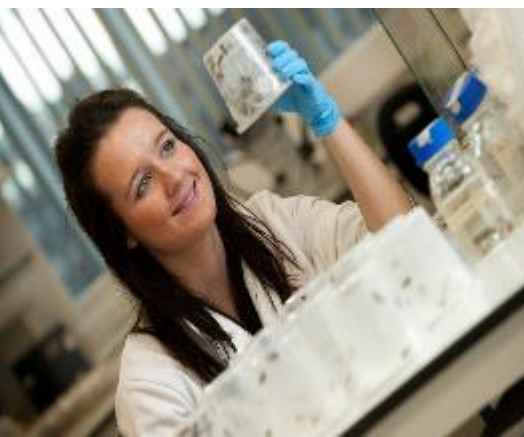


These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

## Qualifications and skills

### Essential

- A PhD, or equivalent experience, in Structural Molecular Biology;
- A minimum of three years post-doctoral or equivalent experience in cryo-electron microscopy for single particle analysis;
- A track record of cryo-electron microscopy research outputs in refereed publications of internationally excellent quality;
- Excellent communication skills, with the ability to publicise the expertise in cryo-electron microscopy that can be found at the Astbury Biostructure Laboratory, through seminars, conferences and social media;
- An understanding of the cryo-electron microscopy industry landscape, as well as the level of communication, professionalism and punctuality required to meet industry standards;
- Intimate knowledge in the operation Titan Krios microscopes for sample screening and data collection for single particle analysis, with the ability to independently support users of any ability;
- Extensive experience in preparing a wide range of macromolecular samples for cryo-electron microscopy, including knowledge of tailored approaches to tackle challenging samples;
- Extensive experience in the analysis, visualisation, validation and interpretation of cryo-electron microscopy single particle analysis data;
- A good understanding of the computing hardware, software and data requirements for single particle analysis pipelines, including experience with high performance computing and networking;
- Outstanding organisational, planning and self-management skills, with the ability to support multiple projects, and fulfil multiple different roles simultaneously whilst retaining a clear focus on outcomes/deadlines;
- The ability to work collaboratively within a complex team environment, communicating clearly with team members and delegating responsibilities to achieve continuous development towards team objectives;





## Desirable

- An understanding of grant application processes, with the ability to assist research leaders at Leeds in securing research funding;
- The potential to secure external research funding in collaboration with research facilities across the United Kingdom;
- Knowledge of coding languages to generate scripts for automating processes, such as organising and monitoring data storage;
- Demonstrated ability to engage with external stakeholders, negotiate service agreements, and represent a technical environment or service in a professional and strategic manner.

## 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 Louie Aspinall** – Cryo-Electron Microscopy Facility Manger

Email: [L.P.Aspinall@leeds.ac.uk](mailto:L.P.Aspinall@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](#)

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

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.

### **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).

## **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.*

