

Researcher

Ecole/Institution/Société:

QUEENS UNIVERSITY BELFAST, Ireland / Belfast

Discipline:

Image Processing

Type d'emploi::

Full-time

Date de publication:

2025-02-23

Personne à contacter:

If you wish to apply for this position, please specify that you saw it on AKATECH.tech

Research Fellow in Multimodal Image Integration

Employer: QUEENS UNIVERSITY BELFAST

Location: Belfast, Northern Ireland

Salary : £39,922 - £43,603 per annum

This post is part of a new research project "Transforming spatial and structural biology: Native ambient mass spectrometry" funded by a Wellcome Trust Discovery Award jointly awarded to Professor Iain Styles at Queen's University Belfast and Professor Helen Cooper at the University of Birmingham.

The project will develop new computational and experimental technologies to detect, identify, and image intact, folded (ie native) proteins and protein complexes directly from biological tissue samples using state of the art mass spectrometry imaging techniques coupled with innovative new computational analysis methods to identify, map, and structurally characterise proteins, protein complexes, and protein assemblies without any prior knowledge of the proteins involved. The outcomes will be new tools that have the potential to revolutionise our understanding of human health, and we will demonstrate the technology's potential in the key application areas of molecular pathology and drug discovery.

The successful applicant will develop new computational methods for data integration and image fusion to integrate the unique data produced by the novel experimental methods with complementary optical microscopy data and build high resolution 3d maps of proteins in tissues. They will draw on a range of technical approaches including artificial intelligence, computer vision, image processing, and data reduction, and will collaborate closely with the experimental team in Birmingham, including regular visits.

About the person:

The successful candidate must have, and your application should clearly demonstrate that you meet the essential criteria, which includes:

Have, or be about to obtain, a PhD in Computer Science or other computationally intensive discipline.

Have a proven track record of developing novel computational methods to solve research problems.

Have experience of conducting high-quality research in machine learning, computer vision, artificial intelligence or related areas.

Have demonstrated that they can communicate to a range of audiences, both in writing and orally.

Have strong all-round skills in computing, programming, and mathematics.

Ideally they will also have:

Experience of developing and applying their skills to biological imaging research.

Experience of working on interdisciplinary projects.

To be successful at shortlisting stage, please ensure you clearly evidence in your application how you meet the essential and, where applicable, desirable criteria listed in the Candidate Information on our website.

Fixed term contract posts are available for the stated period in the first instance but in particular circumstances may be renewed or made permanent subject to availability of funding.

What we offer:

Beyond a competitive salary, the University offers an attractive benefits package including a holiday entitlement of up to 8.4 weeks a year, pension schemes and development opportunities. We support staff wellbeing with flexible working options, work-life balance initiatives and support for physical and mental health. You can find more detail on all of this and more on our website.

Queen's University is committed to promoting equality of opportunity to all. We subscribe to Equality Charter Marks such as the Diversity Charter Mark NI and Athena Swan and have established staff

networks such as iRise (Black, Asian, Minority Ethnic and International Staff Network) and PRISM (LGBTQ+) which help us progress equality.

For further information on our commitment to Equality, Diversity and Inclusion, please visit our website.

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