



Research Associate in Biomedical Engineering

Reference: 0105-24

Grade: 8

Salary: £37,099 to £40,521 per annum

Contract Type: Fixed term until 31/03/2025

Basis: Full Time

Job description

Job Purpose

Aston University has been recently funded with the aim of accelerating the growth of a nascent regional cluster of excellence in Health tech through the following objectives:

- a) Responding directly to specific sectoral and regional challenges/needs, including fragmentation of support, market access, regulatory and product development complexities, access to investment, coordination of appropriate facilities and growth space, and talent development, as well as addressing specific NHS-led needs.
- b) Bringing together multiple cross-regional public and private partners to align strengths, address gaps and provide a single, unified West Midlands pathway for industry support in HealthTech/MedTech.
- c) Focusing on mechanisms by which we can leverage further Research, Development, and Innovation (R&D&I) funding into the region.
- d) Refining and learning from our interventions through mechanisms which can influence local, regional, and national policy decisions.

Aston University will work with a regional consortium to provide a unique platform for businesses to accelerate the translation of novel innovations through clinical and commercial impact by creating a network of expertise and an integrated programme of initiatives to support companies with their journey. Our expertise will translate in supporting medical device prototyping, including medical data processing and analysis with advanced technologies (e.g., AI). To this aim, there will be several centrally co-ordinated activities designed to identify requirements for – and tackle barriers to – medical translation, in which the post-holder will support as required. We are looking for a highly motivated individual to join a fast pace disruptive team within the Engineering for Health Research Centre at Aston.

At Research Associate level, we seek one candidate to contribute to, develop and enhance Aston's research activities in the field of engineering applied to Health Tech and Med Tech. This new post is seen as vital in allowing us to pursue innovation in biomedical engineering research and incredibly significant opportunities exist for the correct candidate to grow within the University.

The successful applicant is expected to be research active and will be integrated in the Engineering for Health Research Centre within the College of Engineering and Physical Sciences. The College hosts and nurtures strong experience in Biomedical Engineering, Photonics and Sensors, Digital Engineering and Data Analytics, Mechanical Engineering, Materials, Engineering Systems and Management, Sustainable Energy and Transport.

Main duties and responsibilities

Research

- ▶ To develop new tools in the areas of data processing and analysis.
- ▶ To involve, develop and support other academic staff in fulfilling their research objectives.
- ▶ To publish the outcomes of research in outlets of national and international standing.
- ▶ To contribute to multiple research project supervision and management.
- ▶ To contribute to research proposal writing to secure research funding.
- ▶ To supervise students at master's and Doctoral levels.

- ▶ To collaborate in research initiatives with colleagues in and beyond the College of Engineering & Physical Sciences as appropriate.

Community Engagement and Citizenship

- ▶ To participate in activities to raise the regional and national profile of the developing Health tech consortium and the College of Engineering & Physical Sciences.
- ▶ To forge relationships with key local bodies.
- ▶ To contribute raising funding for third-stream activities and Intellectual Property exploitation.
- ▶ To manage own scholarship and administrative activities.
- ▶ To provide pastoral care and support to students.
- ▶ To display and promote Aston values through own actions and behaviour.

Additional responsibilities

- ▶ To engage in continuous personal and professional development in line with the demands of the role, including undertaking relevant training and development activities to develop themselves and support the development of others.
- ▶ To ensure and promote the personal health, safety and wellbeing of staff and students.
- ▶ To carry out duties in a way which promotes fairness in all matters, and which engenders trust.
- ▶ To promote equality of opportunity and support diversity and inclusion as well as working to support the University's environmental sustainability agenda and practices.

Person specification

	Essential	Method of assessment
Education and qualifications	A PhD in Computer Science, Software, Biomedical Engineering, Electronic Engineering, or a relevant discipline.	Application form.
Experience	<p>Research experience in data pre-processing and analysis, including data manipulation and visualisation.</p> <p>Design and development of algorithms and or new methods to process biomedical data or images, with preference to AI related methods.</p> <p>Experience of conducting and contributing to research.</p> <p>A developing track record of publications.</p>	Application form and interview.
Aptitude and skills	<p>Excellent communication skills with the ability to interact with interdisciplinary team including clinicians, engineers, policy makers and alike.</p> <p>Programming skills utilising languages such as Python, MATLAB, R, as well as good knowledge of data processing libraries (e.g., OpenCV).</p> <p>Problem solving experience, with desirable focus within the context of HealthTech or MedTech applications.</p> <p>Ability to work independently and as a member of a team.</p> <p>A willingness to undertake further training as appropriate and to adopt new procedures as and when required.</p> <p>Excellent organisational skills.</p>	Application form and interview.

	Desirable	Method of assessment
Experience	<p>Experience in AI or machine learning application development.</p> <p>Engagement with relevant stakeholders (NHS, industry, etc.)</p>	Application form and interview.
Aptitude and Skills	Ability to instigate further opportunities from seminal research.	Application form and interview.

How to apply

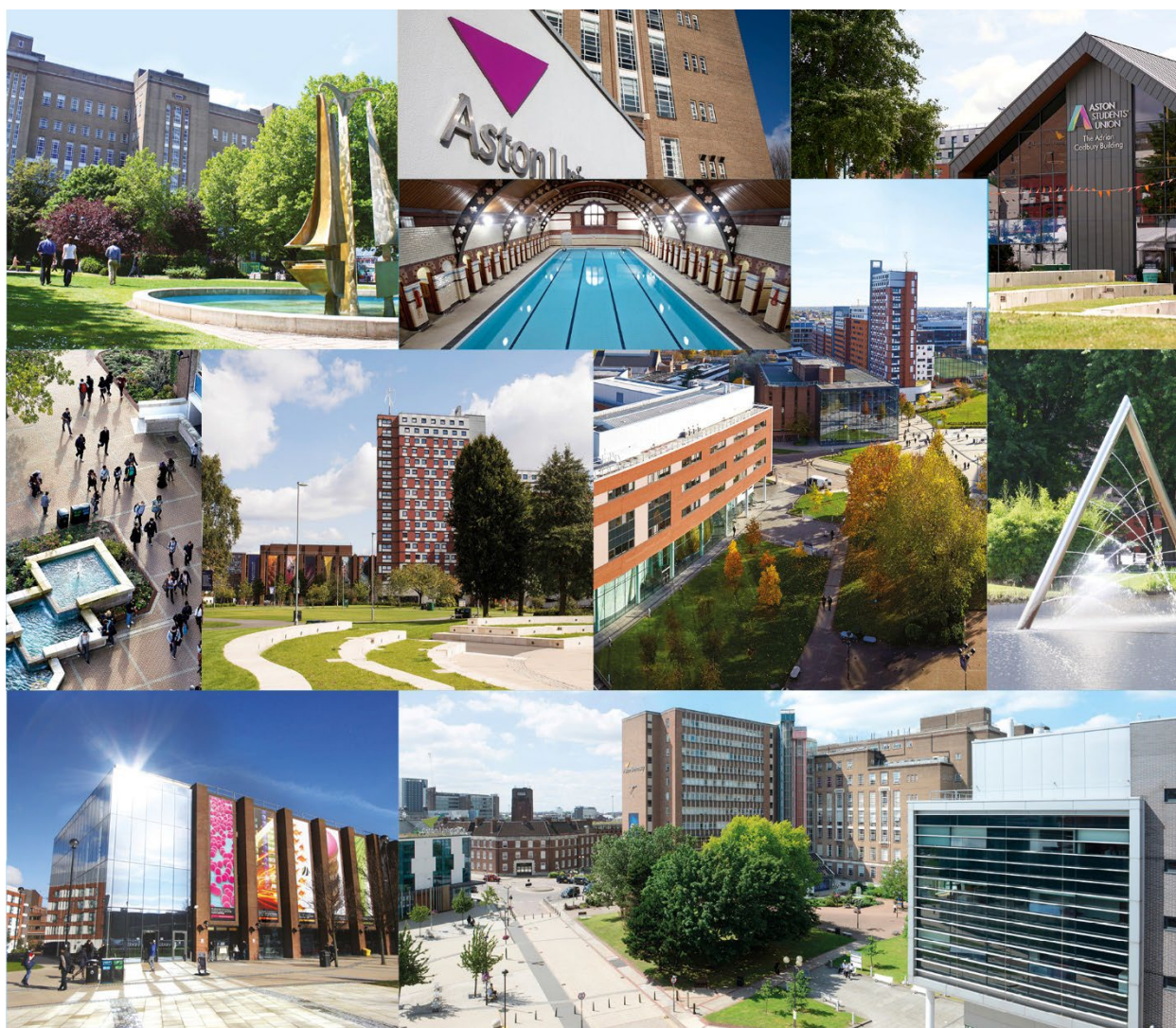
You can apply for this role online via our website <https://www2.aston.ac.uk/staff-public/hr/jobs>.

Applications should be submitted by 23.59 on the advertised closing date.

All applicants must complete an application form, along with your CV.

Any CV sent direct to the Recruitment Team and Recruiting Manager will not be accepted.

If you require a manual application form, then please contact the Recruitment Team via recruitment@aston.ac.uk



Contact information

Enquiries about the vacancy:

Name: Antonio Fratini

Job Title: Director – Engineering for Health Research Centre

Email: a.fratini@aston.ac.uk

Enquiries about the application process, shortlisting or interviews:

Recruitment Team via recruitment@aston.ac.uk

Additional information

Visit our website <https://www2.aston.ac.uk/staff-public/hr> for full details of our salary scales and benefits Aston University staff enjoy

Salary scales: <https://www2.aston.ac.uk/staff-public/hr/payroll-and-pensions/salary-scales/index>

Benefits: <https://www2.aston.ac.uk/staff-public/hr/Benefits-and-Rewards/index>

Working in Birmingham: <https://www2.aston.ac.uk/birmingham>

Employment of Ex-Offenders: Under the Rehabilitation of Offenders Act 1974, a person with a criminal record is not required to disclose any spent convictions unless the positions they are applying for is listed an exception under the act.

Eligibility to work in the UK:

Post-Brexit transition period / EU Settlement Scheme

The post-Brexit transition period ended on 31 December 2020. If you are an EU/EEA citizen and you were a resident in the UK before 31 December 2020, you and your family members (including non-EU citizens need to apply to the EU Settlement Scheme to continue to live, work and study in the UK beyond 30 June 2021. The deadline for applying to the EU settlement scheme is 30 June 2021. You can apply via the Government webpage <https://www.gov.uk/settled-status-eu-citizens-families>
Irish Nationals do not need to apply for settlement as they retain the right to work in the UK.

New immigration system for EU/EEA and Swiss Nationals who were not resident in the UK before 31 December 2020

A new immigration system has been introduced for people arriving in the UK from EEA countries with effect from 1 January 2021. In addition to those who have always required a visa, EU citizens moving to the UK to work will need to get a visa in advance. You can find more information on the following website. Candidates should check their eligibility to enter or remain in the UK in advance of making any job application via the UKVI website <https://www.gov.uk/browse/visas-immigration/work-visas>. Before applying you should ensure that you meet the requirements, including meeting the English Language requirements. If you do not meet the eligibility criteria, any application for a work visa would be unsuccessful.

If you require a visa to work in the UK, the most common types of visa are:

Skilled Worker Visa

<https://www.gov.uk/skilled-worker-visa>

Global Talent Visa

If you are a leader or potential leader in one of the following fields, you may be eligible to apply for a Global Talent Visa:

- Academia or Research
- Arts and Culture
- Digital Technology

Please click the following link for further information and to check your eligibility for this visa.

<https://www.gov.uk/global-talent>

Equal Opportunities: Aston University promotes equality and diversity in all aspects of its work. We aim to ensure, through our admissions policies for students, and our staff recruitment and selection processes that we encourage applications from all groups represented in the wider community at a local, national, and international level.

The University will endeavour not to discriminate unfairly or illegally, directly, or indirectly, against student or potential students, staff, or potential staff. This commitment applies to all functions of the University and to any stage of an individual's career.

An Equal Opportunities Monitoring Form is included within the application form. Data you provide on the Equal Opportunities Monitoring Form will be included in a general database, for statistical monitoring purposes, enabling the University to monitor the effectiveness of its Policy, Codes of Practice and Guidelines on Equal Opportunities in Employment. Individuals will not be identified by name.

Data Protection: Your personal data will be processed in compliance with the Data Protection Act 2018 and the General Data Protection Regulation ((EU) 2016/679) ("GDPR"). The University's Data Protection Policy and Privacy Notices, including the Job Applicant Privacy Notice can be found at <https://www2.aston.ac.uk/data-protection>. Your application will only be used to inform the selection process, unless you are successful, in which case it will form the basis of your personal record with the University which will be stored in manual and/or electronic files. Information in statistical form on present and former employees is given to appropriate outside bodies.

Full details of our terms and conditions of service and associated policies and procedures are available online at <https://www2.aston.ac.uk/staff-public/hr/policies>

Aston University

Birmingham

B4 7ET, UK.

+44 (0)121 204 3000

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