

Research Assistant



Reference: 0078-25 Grade: 07 Salary: £33,482 - £36,130 per annum, pro rata depending on experience Contract Type: Fixed Term (12 months) Basis: Part-Time (1day/week)

Job description

Job Purpose: We are seeking a dedicated Research Assistant to join our collaborative research team for a fixed-term, part-time position based at Aston University. This project addresses the urgent need to improve treatment options for drug-resistant temporal lobe epilepsy (TLE). Drug-resistant epilepsy affects approximately 30% of the 1-2 million people with epilepsy in our population of interest, with existing antiepileptic drugs (AEDs) facing delivery challenges.

The Research Assistant will focus on the formulation and characterisation of novel drug delivery systems to improve AED efficacy and CNS uptake as well as development of cellular *in vitro* models. This role involves hands-on laboratory work, data management, and supporting the preparation of research outputs. The successful candidate will play a key part in ensuring accurate, reproducible outcomes and maintaining high-quality standards in all research activities.

Main Duties/Responsibilities

- Formulate and prepare novel drug delivery systems, including nanoparticles and microneedle patches.
- Perform routine laboratory tasks, including sample preparation, formulation characterisation with a focus on drug release kinetics and efficacy.
- Aid *in vitro* modelling to evaluate the complex kinetics and efficacy of formulated drug delivery systems.
- Study the metabolic aspects of treatment on rare epilepsies at the molecular level through biochemical and molecular analyses.
- Perform molecular biology techniques such as Western blotting, cell culture (including induced pluripotent stem cells and immortalised cells), and Seahorse assays for mitochondrial respiration.
- Collaborate closely with the research team to deliver project milestones, ensuring adherence to timelines and deliverables.
- Support the preparation of research outputs, including technical reports, conference presentations, and peer-reviewed publications.
- Manage and organise large datasets, including pharmacokinetic and formulation data, ensuring accuracy and maintaining backups.
- Ensure compliance with ethical, legal, and administrative requirements, including preparing documentation for ethical review and regulatory compliance.
- Assist in training and supervising junior researchers and students where required.
- Participate in the preparation and deposition of data in the university's data repository.
- Engage with stakeholders and contribute to public health discussions aimed at improving epilepsy care and treatment in Indonesia.
- Undertake other duties appropriate to the role of Research Assistant as needed.

Additional responsibilities

- Engage in continuous personal and professional development in line with the demands of the role, including undertaking relevant training and development activities.
- Ensure and promote the personal health, safety and wellbeing of staff and students.
- Carry out duties in a way which promotes fairness in all matters and which engenders trust.
- 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 Bachelor's degree (2:1 or above) in a relevant scientific discipline. (e.g., Pharmaceutical Sciences, Biochemistry, Chemistry, Molecular Biology, Biomedical Sciences, or related field).	Application form and interview
Experience	 Experience in formulation preparation (e.g., nanoparticles, microneedles) and characterisation techniques. Hands-on experience with pharmacokinetic studies or drug delivery systems. Practical experience in molecular biology techniques such as Western blotting, cell culture (including induced pluripotent stem cells and immortalized cells), and Seahorse assays for mitochondrial respiration. Demonstrated ability to collect, analyse, and organize large datasets accurately. Experience preparing technical reports and assisting with scientific publications. 	Application form and interview
Aptitude and skills	 Strong analytical and problem- solving skills related to drug formulation and pharmacokinetics. Excellent organisational skills with attention to detail and data management. Ability to work independently and as part of a multidisciplinary team. 	Application form and interview

 Essential	Method of assessment
Effective communication skills (written and oral) for technical documentation and scientific dissemination.	

	Desirable	Method of assessment
Education and qualifications	A Master's degree in a relevant scientific discipline (e.g., Pharmaceutical Sciences, Biochemistry, Chemistry, Molecular Biology, Biomedical Sciences, or related field).	Application form
Experience	 Familiarity with regulatory documentation processes and ethical compliance. Experience contributing to grant proposals, conference presentations, or peer-reviewed publications. 	Application form and interview
Aptitude and Skills	 Ability to perform complex statistical analysis 	Application form and interview

University values

All staff are expected to demonstrate/promote the University's values and expectations, which are an integral part of our strategy and underpin the culture of the University. In addition, our leaders are expected to be accountable, help to execute strategic visions of the University and share and set clear expectations that inspire those around them.





Innovation

We strive for excellence within ourselves and others, providing solutions to new and existing challenges.



Collaboration

We work best when we are collaborative, working together to contribute to the Aston community.



Ambition

We strive together for improvement and innovation looking ahead to see the bigger picture.



Inclusion

We treat everyone in our community equally and how they would like to be treated.



We are open, honest and fair. We take ownership of the way we work and how we treat each other.

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 <u>recruitment@aston.ac.uk</u>.

Contact information

Enquiries about the vacancy:

Name: Dr Mandeep Kaur Marwah Job Title: Lecturer Email: m.marwah1@aston.ac.uk

Enquiries about the application process, shortlisting or interviews: Recruitment Team via <u>recruitment@aston.ac.uk</u> or 0121 204 4500.

Additional information

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

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

Benefits: Benefits and Rewards | Aston University

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 applying for is listed an exception under the act.

Eligibility to work in the UK: You should ensure that you meet the eligibility requirements, including meeting the <u>English language standards</u>. If you do not meet the eligibility criteria, any application for a work visa would be unsuccessful. Please see UKVI guidance for further information on eligibility, knowledge of English requirements and approved test centres <u>https://www.gov.uk/tier-2-general</u>

With the end of free movement for EU/EEA/Swiss nationals from 1 January 2021, the UK's new immigration system applies to all non-UK/Irish nationals who require a visa.

Where an individual is subject to UK immigration control, they will require a visa to work in the UK.

The following individuals do not need a visa for the UK, <u>but</u> do still have to prove their right to work before employment can commence:

- British Citizens or Irish Nationals
- EU/EEA/Swiss nationals with Settled or Pre-settled status under the EU Settlement Scheme
- Non-EEA nationals with Indefinite Leave to Remain/Settlement in the UK

The main routes available for those who need a visa to work in the UK are **Skilled Worker**, **Global Talent** and the **Graduate Route**.

You can find further information about each of these visa routes on our candidate immigration page.

If you will conduct research in your role, you may need to apply for and obtain ATAS clearance before Aston can issue a Certificate of Sponsorship for your visa application. Please see below for further details.

Academic Technology Approval Scheme (ATAS):

If you will conduct research in your role and you apply for a Skilled Worker or Temporary

Worker GAE visa, you may need to apply for and obtain ATAS clearance before Aston can issue a Certificate of Sponsorship for your visa application.

This process can take at least 6 weeks to process, and Aston will consider this when confirming your expected start date. Processing times will increase between April and September and can longer to complete.

There is no fast-track option available. ATAS certificates will be processed in order of receipt.

You can find more information about ATAS on our candidate immigration page.

Before you start and Right to Work

90-day entry vignette

If you have applied for your visa outside of the UK, you will receive a vignette in your passport which is usually valid for 90 days. Please make sure to travel to the UK within the 'valid from' and 'valid to' dates on this visa. If you entered the UK before or after these dates, you would not 'activate' the visa and you would need to leave and re-enter the country.

You will also receive a decision letter confirming details about your immigration permission and where to collect your Biometric Residence Permit.

Cost of Living - Estate and Letting Agents

There are numerous Estate and Letting Agents in and around Birmingham that can help you find suitable accommodation. The Midland Landlord Accreditation Scheme provides a list of professional agencies and landlords who have applied with them for accreditation. Whilst accreditation is not a guarantee of quality, it provides some reassurance about the standard of the service they provide.

You can also use property search websites such as Rightmove or Zoopla.

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

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www.aston.ac.uk