

# Appointment details

Teaching Fellow in Biomedical and Biological Science

Job Ref: R170130

Closing Date: 18 May 2017









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- About Aston University

Founded in 1895 and a University since 1966, Aston is a long established research-led University known for its world-class teaching quality and strong links to business and the professions. Professor Alec Cameron became Vice Chancellor of the University in 2016, building on a strong legacy left by the Baroness Brown of Cambridge.

## **Outstanding graduate employability**

Aston has been a leading university for graduate employment success for over 25 years. More than 80% of Aston graduates go on to a graduate level job within six months. The majority of Aston students choose to take an integrated placement year or year abroad, making them very attractive to employers. We have strong relationships with national and international graduate employers, as well as smaller and local employers. These relationships are extremely important and make a real contribution to graduate employability.

## **Career focussed programmes**

Aston's close and established links with business, the public sector and the professions ensure that our career focussed degree programmes are inspiring, challenging and constantly updated to equip students with essential work-related skills and experiences.

## **Excellence in teaching and research**

We are committed to high quality teaching and academic excellence, ensuring we provide the highest standard of education to our students. Aston has an excellent reputation for research which shapes and improves lives. We're proud of the quality of our research and the real world applications developed as a result – it makes a substantial and beneficial difference to people, organisations and society.

Aston's four academic Schools offer a range of undergraduate and postgraduate degree programmes, and also work with the public and private sectors to develop tailored Foundation Degree programmes.

#### International

Aston University is a popular choice for international students. We recognise and welcome the important academic contribution and cultural diversity international students bring to our university environment. Students from over 120 countries study at Aston University each year

Aston University is ranked 29th in the world and 9th in the UK as one of the 'most international universities in the world.' (The Times Higher World University Ranking, 2016-17).

#### Birmingham – one of Europe's liveliest cities

Birmingham is internationally recognised as a leader in leisure, entertainment, shopping and sport. It is an international centre for business, commerce and industry, housing numerous UK and overseas banks and law firms. Birmingham attracts 25 million visitors each year and contributes billions to the national economy through manufacturing and engineering.

The University campus is located in the city centre making it very accessible to an extensive network of motorways and railways.

## A green, sustainable campus

Located in the heart of a vibrant city, our 40 acre campus houses all the University's academic, social and accommodation facilities for our 14,355 students. All staff have the opportunity to contribute to our sustainability agenda and practices.



Welcome from Professor Alec Cameron, Vice Chancellor & Chief Executive

## **Dear applicant**

The HE sector is currently experiencing an unprecedented scale and pace of change, combined with a high degree of ambiguity and uncertainty. Those universities able to adapt swiftly to a changing and increasingly competitive market will thrive. As a mid-sized, focused university Aston has the advantages of agility, innovation and team working that some other institutions do not. Our integrated placement year, our applicable, exploitable research, and our commitment to widening participation all help to make Aston distinct.

The 2014 Research Excellence Framework results recognised the quality and impact of Aston research. This research directly influences medical breakthroughs, advancements in engineering, innovation, policy and practice in government, and the strategies and performance of local and international business. The Times Higher Education REF rankings placed Aston University 35th in the UK and 78% of our submissions were judged to be World Leading or Internationally Excellent.

Teaching quality and the student experience are an important focus at Aston. We are committed to doing all we can to address the needs of students and to assisting them to achieve their career ambitions on graduation.

We very much look forward to receiving your application and learning more about how you would contribute to Aston's continuing success.

**Professor Alec Cameron** 

Vice Chancellor & Chief Executive

## **▶** University values

All staff are expected to demonstrate / promote the University's values and expectations, which are an integral part of our 2020 strategy and underpin the culture of the University. Our vision is to be the UK's leading University for business and professions, where original research, enterprise and inspiring teaching deliver global impact. More information about the university's values is available at www.aston.ac.uk/staff/working/dare-to-succeed/values/

In addition, our leaders are expected to be accountable, help to execute strategic visions of the University, share and set clear expectations that inspire those around them. Further information on our leadership expectations can be found at: http://www.aston.ac.uk/EasySiteWeb/GatewayLink.aspx?alld=158042



## **▶** Staff expectations

All staff are expected to;

- Be committed to delivering high performance
- Recognise and praise the high performance of others
- Remain open to new ideas and seek to act quickly for positive change
- Develop themselves, and support the development of others
- ▶ Be ambitious, for themselves, their teams and the university
- ▶ Engage with others, listen, observe and communicate
- Focus on excellent customer service, finding solutions and saying "yes"
- Make reasoned decisions without fear of blame
- Engender trust through their own actions
- Be fair in all matters.

#### School of Life and Health Sciences

All the activities within the School of Life & Health Sciences affirm the mission of Aston University to be an international centre of excellence in learning & teaching, research and community engagement. Taught Programmes

http://www1.aston.ac.uk/lhs/undergraduate/ http://www1.aston.ac.uk/lhs/postgraduate-study/

The School offers a range of HEFCE funded undergraduate programmes spanning the life and health sciences, all of which were rated as excellent in the last Quality Assurance Agency (QAA) teaching assessment.

There are currently around 2200 undergraduate students studying within the school of whom the majority are on single honours programmes. Entry to all single honours programmes is highly competitive with entry qualifications in excess of BBB at A-level.

The school also offers a range of taught postgraduate programmes focused upon the developing career needs of health professionals. The current teaching activities within the school are divided into subject groups of audiology, biology, optometry, pharmacy, and psychology, each of which is led by a Subject Leader. Under each subject there are a range of undergraduate and postgraduate programmes each led by a Programme Director.

#### Research

http://www1.aston.ac.uk/lhs/research/

The exceptional quality of the research in the School has been demonstrated once again in the 2014 Research Excellence Framework (REF2014) results. Research in LHS is ranked 5th overall from 94 UK Higher Education institutions in Allied Health Professions, Dentistry, Nursing and Pharmacy, top 10 in the UK by every measure, and 1st for Environment which assesses the "vitality and sustainability" of our research. In LHS, 94% of our academic research is classed as world leading or internationally excellent. This outstanding performance reflects the vibrant, world class research environment, and is a testament to the worldwide reputation and outstanding scientific activity of our research staff.

The School of Life & Health Sciences is equipped with state-of-the-art facilities to pursue cutting-edge research. Aston University Day Hospital is a >£10m flagship clinical research centre and day hospital which accommodates Optegra (ophthalmology services) and Birmingham Children's Hospital Cochlear implant team. The Day Hospital, which opened in the spring of 2004, is designed to support the core health research and clinical activities within the School. It is a

European centre of excellence in Ophthalmic research (cornea and refractive surgery, human myopia, vascular imaging) and other health-related research including paediatric Cochlear Implantation and Rehabilitation. A further investment of around £3.5m in laboratory refurbishment and equipment has occurred in the last four years. In addition, the University has invested a further £3m towards the virtual Aston Research Centre for Healthy Ageing (ARCHA) encompassing researchers from all disciplines within the School and a further £3.6m towards the Aston Brain Centre (ABC).

Specialised Research Facilities in the School of Life & Health Sciences:

#### **Biomedical Sciences**

Biomedical Sciences have invested in scale-up facilities for protein expression and purification; this is supported by a range of chromatographic separation equipment (HPLCs, FPLCs, amino acid analyser) which can be used for DNA, protein and carbohydrate analysis. Real-time PCR is available for quantification of specific gene expression and our proteomics facility includes peptide sequence analysis by LC-MS/MS. Cell analysis work is also undertaken using flow cytometry resources, confocal, epifluorescence and atomic force microscopy (shared with the School of Engineering and Applied Sciences) while In vivo investigations of disease process, progression and management are undertaken within the newly refurbished Biomedical Facility.

The new ARCHA imaging facility provides research groups with access to state-of-the-art equipment enabling users to carry out a range of experiments from sample screening to deep tissue imaging. The new facility, located in the main building consists of a Leica Widefield Fluorescence Microscope Leica SP5 multiphoton Laser Scanning confocal microscope.

#### **Pharmaceutical Sciences**

Novel compound discovery is supported by computer aided drug design; synthetic chemistry laboratories are well furnished for synthesis of novel entities and understanding is further extended by determination of molecular structure using x-ray crystallography. Drug Delivery and Drug Dosage From design is undertaken in our Pharmaceutics laboratories which are furnished with a large range of state of the art analytical equipment (e.g. pharmacopeial apparatus, particle sizing equipment; Differential Scanning Calorimetry; Thermogravimetric Analysis). Small molecule chemical synthesis and analysis facilities include high-field NMR, GC-MS and LC-MS.

#### **The Aston Brain Centre**

The Aston Brain Centre is a research facility comprising specialist assessment and laboratory provision, primarily for the School of Life and Health Sciences, although collaborations across the University are established and encouraged. Operational from July 2011 the newly constructed ABC building accommodates an integrated research facility for the study of neurodevelopment in health and disease. It provides a novel training centre for Magnetoencephalography (MEG) and Electroencephalographic studies incorporating translational and humane research. The ABC was funded through £3.6M Science Research Infrastructure Funding (SRIF) together with £800k from Aston University, and houses The Wellcome Trust laboratory for MEG studies, first established in 1999 to for the first whole brain MEG system in the UK, and soon to be the location of the world's first high-resolution paediatriccompliant MEG system (supported by The Wellcome Trust grant - Ref: 088314/Z/09/Z). The facility also houses the Development and Dyslexia Assessment Unit and the Clinical Neurophysiology Unit, comprising two dedicated Sleep Laboratories, 128 channel dense array EEG dense, a Transcranial Magnetic Stimulation Laboratory and a sound proofed auditory laboratory for clinical testing. A dedicated computer analysis and training suite provides an environment for collaboration and integration of scientists and techniques from diverse disciplines.

#### **Clinical Audiology Research Centre**

This centre opened in September 2006, and includes sound-treated test rooms and specialised equipment for clinical and applied hearing research.

The centre provides a specialist audiology clinical service to the local area as well as supporting the research of the Audiology staff and research students.

## **Vision Sciences and Day Hospital**

Over the last 30 years, Aston University has developed a strong track record in conducting ophthalmic research, which is recognised internationally. Within the Ophthalmic Research Group (ORG), optometrists, ophthalmologists and biomedical engineers work within an integrated investigative framework to advance understanding of the development, use, preservation and restoration of ocular function. Using bidirectional transfer of research between structure, function and clinical application provides the flexibility to address a range of contemporary research issues: the development and management of refractive error; the diagnosis and management of major ocular pathology and the management of ocular dysfunction and pathology in the ageing eye. Studies are conducted in a series of self-contained laboratories designed for clinical investigations. These facilities are

housed within the Vision Sciences building and the Aston University Day Hospital. The former offers over 3,000 appointments per year for members of the general public and specialised clinical facilities in all areas of optometric investigation, while the Day Hospital provides a platform, unique in the UK, for the combination of leading edge clinical research in optometry and ophthalmology.

Under development is our new £2m 3D visualisation teaching labs and CAVE virtual environment for the teaching of anatomy, physiology and computer aided design as well a research into vision and perception, which will be operational by the end of 2015.

#### Centre for Vision and Hearing Research

Aston University has a strong international track record in the fundamental workings of the normal human visual and auditory systems. Investigations into how sensory data is picked up and encoded by our brains to build meaningful representations of the outside world are performed using non-invasive techniques of psychophysics, functional imaging and computational modeling.

## Aston Laboratory for Immersive Virtual Environments (ALIVE)

This recently built (2015/16) facility has been funded by the Wolfson Foundation, the Eranda Foundation, the Cadbury Charitable Trust and the Eveson Charitable Trust, and comprises a motion capture laboratory, a driving simulator and large interactive CAVE virtual reality platform. It pulls together researchers from the CVHR, the ABC and ARCHA from the School of Life and Health Sciences (see above) and from the Aston Interactive Media Laboratory in the School of Engineering and Applied Science, to carry out multi-disciplinary research in visual perception, social perception and cognition, social neuroscience, pedestrian and driver behaviour, ambulation and navigation.

#### Organisation

The School is led by an appointed Executive Dean, Professor Chris Hewitt, and operates through three key committees: Senior Management Committee, Teaching Committee and Research Committee.
The Executive Dean is supported by a Deputy Dean and six Associate Deans. All undergraduate and postgraduate programmes have a Programme Director and are delivered by the staff from the subject groupings.

For more information, visit our website www.aston.ac.uk/lhs

### **▶** Job description

To contribute to and enhance the teaching activities of the Biomedical/Biological Science programme by delivering, assessing and examining modules/courses and supervising/assessing UG/PG projects.

To assist in the preparation of learning resources and materials including VLE.

To deliver small group teaching/tutorials.

To deliver and assist in the delivery of practicals.

#### Responsibilities:

- ► To teach undergraduate and postgraduate students using an appropriate range of learning and teaching methods and techniques (including on-line formats).
- To carry out the associated assessment and examination processes using an appropriate range of assessment methods and techniques.
- ▶ To provide academic and pastoral support and advice to undergraduate and postgraduate students.
- ▶ To engage in the regular evaluation and development of the content, delivery and assessment of modules.
- To supervise undergraduate and postgraduate dissertations and projects.
- ▶ To undertake an appropriate range of additional responsibilities such as: personal tuition/pastoral care of students; attending subject group meetings; participation in graduation events; assist with staff induction; community engagement e.g. delivery of Masterclasses for schools/presentations and career talks at schools; delivery of bespoke courses as required.

## Additional responsibilities

- ▶ 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.
- 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 PhD in a relevant subject.	Application form
Experience	Experience of applying relevant analytical skills.  Experience of teaching in higher education, preparing and presenting information in a clear and concise way.  Experience within the fields Biology/Biomedical Science.	Application form, interview and presentation
Aptitude and skills	Excellent presentation skills.  Up to date knowledge and expertise in the discipline.  Excellent oral and written communication skills.  Ability to explain complex concepts and theories in a clear and understandable manner to a range of abilities.  Good organisational skills including the ability to meet deadlines.  Good IT Skills - including MS Office packages and internet use.  Competence in the use of virtual learning environments such as Blackboard.	Application form, interview and presentation
Other	Approachable, patient and reliable.  Self-motivated.  Commitment to observing the University's Equal Opportunities policy at all times.  Committed to own personal development.	Interview

	Desirable	Method of assessment
Education and qualifications	FHEA prior to appointment.	Application form
Experience	Biochemistry/ Cellular Pathology and other key Biomedical Science disciplines.  Experience in teaching maths and statistics.  Teaching experience in Schools.	Application form, interview
Aptitude and skills	An understanding of issues affecting students knowledge of e-learning facilities and techniques.	Application form, interview



## ▶ Salary & benefits

This post is offered on a full time continuing basis. The appointment is Grade 8 and the salary range for this grade is £32,004 to £38,183 per annum.

**Holiday entitlement** 30 days per annum, in addition to 13 days public and university holidays.

**Pension** Eligible staff are offered membership of the University Superannuation Scheme which is a hybrid pension arrangement. For further information please visit

www.uss.co.uk/members/members-home.

Contribution pay The University's Performance Development and Reward Scheme provides for

salary enhancement for staff who are considered to be performing at an

exceptional level on a consistent basis.

**Relocation** Aston University aims to recruit the most talented individuals. This policy is

intended to support this aim by providing assistance to new employees who have to relocate to take up a position. This policy applies to staff appointed to a position from 1 January 2014 at grade 7 (salary point 25) or above on an openended contract or to a fixed term position of two years or more, and who have to relocate their place of residence in order to take up the appointment. Positions which are externally funded fall outside of this policy. Individuals may be eligible

to claim costs in line with the relevant funding arrangements.

Visit our website: aston.ac.uk/hr for full details of our salary scales and the benefits Aston University staff enjoy.

### ▶ How to apply and the selection process

Please visit our website <u>aston.ac.uk/jobs</u> to apply online. If you do not have internet access, call 0121 204 4500 and leave your name and address guoting the job title and reference number.

Closing date for applications 18 May 2017

Interview date To be confirmed

Please contact Dr Tony Worthington, Head of Biomedical and Biological Science, for an informal discussion about the role.

If you would like information on the progress of your application, advice on any aspect of the appointment process, or a conversation about our terms and conditions of service, please contact:

Sarah Carey Grace Ntamirira

HR Business Partner Recruitment Administrator +44 (0) 121 204 4581 +44 (0) 121 204 3323 <a href="mailto:s.j.carey@aston.ac.uk">s.j.carey@aston.ac.uk</a> <a href="mailto:g.ntamirira@aston.ac.uk">g.ntamirira@aston.ac.uk</a>

## Outline terms and conditions of the appointment

**Qualifications** Successful candidates will be required to produce evidence of their qualifications

upon joining the University

Medical clearance It is a condition of appointment that newly-appointed staff receive medical

clearance from the University's Health Centre.

Eligibility to work in the UK Candidates who are not citizens of the United Kingdom, or of another EEA

member country, should ensure that they meet the requirements of one of the 5

tiers of the immigration points based system.

Candidates should check their eligibility to enter or remain in the UK in advance of making any job application using the <u>points-based calculator</u> on the UK Visas and Immigration website. If you do not meet the minimum points requirement, you will not be able to work in the UK and any application for employment would

be unsuccessful.

**Document checks**As a result of the implementation of sections 15 to 26 of the Immigration, Asylum

and Nationality 2006 Act on 29 February 2008, the University requires all prospective and, in some cases, current employees, to provide documentation to

verify their eligibility to work in the UK. Further information about these requirements can be found on the <u>UK Visas and Immigration website</u>.

**Equal opportunities** Aston University promotes equality and diversity in all aspects of its work. We

individual's career at Aston.

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 students or potential students, staff or potential staff. This commitment applies to all functions of the University and to any stage of an

An Equal Opportunities Monitoring Form is included with the application form.

#### **Data Protection Act 1998**

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.

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, Code of Practice and Guidelines on Equal Opportunities in Employment. Individuals will not be identified by name.

## Disclosure and Barring Service (DBS)

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

#### **Teaching Qualifications**

It is the normal expectation that all teaching staff who are not able to satisfy the requirements of an advanced teaching qualification (such as the University's PG Certificate in Professional Practice (PGCPP)) on appointment should be able to do so within two years of appointment. This may be extended to four years in exceptional circumstances or where staff hold part-time posts.

Full details of our terms and conditions of service and associated policies and procedures are available online at www.aston.ac.uk/hr.

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