

Research Associate Stroke Research Group

Department of Clinical Neurosciences

Sunday 27th October 2024

Job Reference: ZE43499



Research Associate - Stroke Research Group

Salary:
Grade 7

Contract:
Fixed Term until 11.09.2026

Location:
Cambridge Biomedical
Campus

Department:
Clinical Neurosciences

Responsible to:
Professor Hugh Markus

Working Pattern:
Full Time on site

Purpose of the role

This is an exciting opportunity to join one of the leading Stroke Research Groups both within the UK and internationally, and make a real difference to patient care.

It would suit either a statistician or bioinformatician, or someone with a background in neuroscience /stroke/ cardiovascular disease who had experience of analysis of clinical/omic and /or imaging datasets

The post holder will play a key role in analysing clinical, and imaging genetic data to investigate relationships between vascular risk, stroke, and dementia. They will focus specifically on cerebral small vessel disease (SVD). SVD causes lacunar stroke, small deep strokes in the white matter and deep grey matter structures in the brain. It is the most common pathology underlying vascular cognitive impairment and dementia. The group has a longstanding research interest in SVD including imaging, genetic, and clinical studies.

They will work on datasets from individuals with both clinical SVD, and also epidemiological studies in which SVD has been quantified using MR imaging. Such datasets include in-house datasets including DNA Lacunar 1 & 2, clinical trial datasets, and UK Biobank. Other opportunities could include analysis of RCT datasets and systematic reviews in the area.

This current post is funded by a programme grant from the British Heart Foundation.

We are looking for someone with a PhD in a relevant area who has experience analysing datasets

including epidemiological and/or MRI and /or cognitive datasets who is genuinely interested in the area. The post-holder will need experience of applying statistical approaches to large datasets and a track record of producing publications in the area. Previous work in stroke and/or dementia is not essential.

The post holder will join a friendly Department which brings together clinical and non-clinical researchers from many disciplines including medicine, nursing, neuropsychology, brain imaging, genetics, biostatistics, epidemiology and clinical trials to research the causes of and treatment of stroke.

Within our research group we have bioinformaticians/ statisticians/data analysts working on a variety of projects including analysis of clinical trial datasets, genomics, and metabolomics, and the post holder will work closely with them.

There are exceptional opportunities to develop further links within the University of Cambridge which has great strengths in epidemiology and statistical analysis of cardiovascular disease. The post holder will be encouraged to become an active member of [Cambridge Cardiovascular](#) and [Cambridge Neuroscience](#)

Stroke and Clinical Neuroscience Research at Cambridge

The Stroke Research Group brings together approximately 20 researchers from multiple disciplines including clinical medicine, MR image analysis, clinical trials, statistics, and genetics. The main research areas of the group are applying MRI and other imaging techniques to investigate the pathogenesis and treatment of cerebral small vessel disease, including both polygenic and monogenic forms.

More details of our research can be found on our websites.

<http://www.cambridgestroke.com/>

Stroke research forms part of the much larger Department of Clinical Neuroscience which includes more than 200 researchers in a variety of aspects of clinical neuroscience. There are also a large number of DPhil and MPhil students within the Clinical Neurosciences department and a highly successful structured PhD programme.

Key responsibilities of this post

Analysing datasets primarily in individuals with, and at risk, of cerebral small vessel disease and dementia.

Specific duties will include:

1. Analysis of MRI and or clinical and/or 'omic datasets from a number of large stroke and VCI datasets, and writing up results: 70% daily
2. Assist and provide advice to other members of the Stroke Research Group including Postdocs, Research Associates and Students: 10% as required.
3. Provide support for setting up and maintenance of stroke research databases: 5% as required

Person Specification

Criteria	Essential	Desirable
Education		
<ul style="list-style-type: none"> BSc or equivalent in relevant subject. 	✓	
<ul style="list-style-type: none"> PhD in relevant subject 	✓	
Specialist knowledge & skills		
<ul style="list-style-type: none"> Previous experience of analysis of clinical and/or MRI data and/or data and/or genetic and other 'omic data 	✓	
<ul style="list-style-type: none"> Knowledge of statistical techniques required for analysis of medical datasets and familiarity with computer databases 		
<ul style="list-style-type: none"> Previous work in analysis of datasets from stroke and/or neurodegeneration 		✓
Interpersonal & communication skills		
<ul style="list-style-type: none"> Strong interpersonal communication skills with an ability to interrelate well to other members of the Stroke Research Group and our wider collaborators. 	✓	
<ul style="list-style-type: none"> Proven organisational skills and able to manage and deliver a range of tasks and projects to tight deadlines. 	✓	
<ul style="list-style-type: none"> Ability to work as part of a team and good collaborative skills. 	✓	
Relevant experience		
<ul style="list-style-type: none"> Experience of working with epidemiological datasets. 	✓	
<ul style="list-style-type: none"> Experience of statistical analysis for medical datasets. 	✓	
<ul style="list-style-type: none"> Experience of writing and publishing in peer review journals. 	✓	
Additional requirements		
<ul style="list-style-type: none"> Enthusiastic and a real interest in stroke and vascular dementia research. 	✓	
<ul style="list-style-type: none"> Adaptable and flexible. 	✓	

Department of Clinical Neurosciences

The Department of Clinical Neurosciences is located at the Cambridge Biomedical Campus and currently hosts over 300 academic and associated staff. The aim of the Department is to understand the nervous system in health and disease in order to develop new treatments for incurable neurological disorders. Embedded within Cambridge University Hospitals, our research questions stem from problems we have encountered in the clinic, and directly address the needs of patients and families.

Research Themes

Our research is arranged in a number of related themes and integrated with major University, national and international research centres. This research is directly supported by a number of cross-cutting capabilities and clinical disciplines, including the most advanced brain imaging centre in Europe. Our principal research themes are;



- Dementia and Neurodegeneration,
- Hearing and Vision,
- Neuroinflammation,
- Rare Neurological Disorders,
- Stroke,
- Traumatic Brain Injury and Disorders of Consciousness,
- Stem Cell Neurobiology.

Our cross-cutting capabilities span large areas of experimental and clinical neuroscience, conducting independent research and research in support of the Department's major themes.

This vibrant and multidisciplinary research environment comprises; the John van Geest Centre for Brain Repair, Wolfson Brain Imaging Centre and Neuroimaging.

Additionally, the Department hosts major research centres in the form of the Cambridge Centre for Frontotemporal Dementia, the Cambridge Centre for Parkinson's Plus and the Cambridge hub of the UK Dementia Research Institute.



Neurology and Neurosurgery

We are home to two leading neurology and neurosurgical units in Europe. In neurology, we have particular interests in Parkinson's disease, frontotemporal dementia, Alzheimer's disease, stroke, Multiple Sclerosis (MS) and genetic neurological disorders including mitochondrial diseases. The Unit combines experimental, informatics. Our many techniques include genomics; molecular, stem cell, and computational biologies; disease modelling, advanced imaging and artificial intelligence.

Our academic neurosurgery unit has major interests in acute head injury and disorders of consciousness (together with anaesthetics), glioma biology and treatment, developing new methods of bedside patient monitoring, the dynamics of the blood-brain barrier, brain haemorrhage and novel methods of imaging the damaged brain.



Professor Alasdair Coles, Head of Department

School of Clinical Medicine

Doing great work in a great place to work

About the School

The School of Clinical Medicine currently employs nearly 3,000 people, spanning all varieties of staff type from Academic Professors to administrative support.

In 1976 in response to the recommendation of the Royal Commission on Medical Education in the late 1960's, a complete medical course was re-established in Cambridge with the opening of the School of Clinical Medicine at the new Addenbrooke's Hospital site.

On 21st November 1980, HRH The Duke of Edinburgh, the Chancellor of the University of Cambridge, officially opened the Clinical School Building which presently accommodates the medical library, lecture theatres and seminar rooms.

The University of Cambridge School of Clinical Medicine aspires to change the practice of medicine and improve biological understanding in a wide range of clinical specialities and scientific disciplines. Collaborative research, both within biomedicine and crossing the boundaries to the mathematical, physical and social sciences, is key to our approach. The School also supports key enabling technologies and facilities in imaging, bioinformatics and biological systems. The main areas of research interest are:

- Cancer research
- Cardio-Respiratory Medicine
- Cellular mechanisms of disease
- Diabetes, Endocrinology and Metabolism
- Epidemiology, Public Health and Primary Care
- Genetics and Genetic Medicine
- Haematological and Transplantation Medicine
- Infection and Immunity
- Neurosciences and Mental Health
- Stems Cells and Regenerative Medicine.

The School aims to provide leadership in education, discovery and healthcare. It will achieve this through; inspirational teaching and training, outstanding basic and clinical research and integration of these to improve medical practice for both individual patients and the population.

The School will:

Through inspirational teaching and training, educate individuals who:

- will become exceptional doctors or biomedical scientists
- combine a depth of scientific understanding with outstanding clinical and communication skills demonstrate a caring, compassionate and professional approach to patients and the public and
- are equipped to become future international leaders of their profession.

Through its commitment to the pursuit of excellence, support scientists of international standing in basic and clinical research aiming to:

- understand fundamental biology and thereby the mechanisms underlying disease integrate basic and clinical research
- apply a rigorous mechanism-based approach to clinical problems and
- innovate to solve the health challenges of our society.



Professor Patrick Maxwell, Regius Professor of Physic and Head of the School of Clinical Medicine

Terms of Appointment

Tenure and probation The post is funded from a fixed term due to the funding of the BHF programme grant ending on 11.09.2026, so the post will be up to this date. There is the possibility of extension of the post beyond this time but this would depend on future research grants.

Hours of Work and Working Pattern

The hours of work for the position are full-time 9.00 – 5.00 Monday – Friday. Some flexibility in working hours is necessary for occasional projects.

Pension

You will automatically be enrolled to become a member of USS (Universities Superannuation Scheme) – a defined benefits pension scheme. For further information please visit: www.pensions.admin.cam.ac.uk/.

Annual leave

Full time employees are entitled to annual paid leave of 6.6 weeks (or 33 days for those working full time), plus public holidays.

General information

Pre-employment checks

Right to work in the UK

We have a legal responsibility to ensure that you have the right to work in the UK before you can start working for us.

If you do not have the right to work in the UK already, any offer of employment we make to you will be conditional upon you gaining it.

Health declaration Once an offer of employment has been made the successful candidate will be required to complete a work health declaration form.

Qualifications

The person specification for this position lists qualifications that are essential and/or desirable. Please note that if you are offered the post you will be asked to provide your relevant original certificates of these qualifications.

References - offers of appointment will be subject to the receipt of satisfactory references.

Screening Checks:

This role requires a basic disclosure/ standard Disclosure and Barring Service (DBS) Check/an enhanced Disclosure and Barring Service (DBS) check/a security check. Any offer of employment we make to you will be conditional upon the satisfactory completion of this/these check(s); whether an outcome is satisfactory will be determined by the University. The nature of this role means that the successful candidate will also need to undergo a health assessment.

Information if you have a disability

The University welcomes

applications from individuals with disabilities. We are committed to ensuring fair treatment throughout the recruitment process. We will make adjustments to enable applicants to compete to the best of their ability wherever it is reasonable to do so and, if successful, to assist them during their employment.

Information for disabled applicants is available at <http://www.admin.cam.ac.uk/offices/hr/staff/disabled/>

We encourage you to declare any disability that you may have, and any reasonable adjustments that you may require, in the section provided for this purpose in the application form. This will enable us to accommodate your needs throughout the process as required. However, applicants and employees may declare a disability at any time.

If you prefer to discuss any special arrangements connected with a disability, please contact, the Department Administrator, who is responsible for recruitment to this position. Alternatively, you may contact the Clinical School Recruitment Team who are responsible for recruitment to this position via: csrecruitment@medschl.cam.ac.uk

The University

The University of Cambridge is one of the world's oldest and most successful universities. We are a renowned centre for research, education, and scholarship that makes a significant contribution to society. The University is consistently ranked amongst the top universities in the world. Our affiliates have won more Nobel Prizes than any other University.

Our sustained pursuit of academic excellence is built on a long history of first-class teaching and research within a distinctive collegiate system. For eight centuries our ideas and innovations have shaped the world. Our principal goal is to remain one of the world's leading universities in an increasingly competitive global higher education sector. Today the University of Cambridge is at the centre of a cluster of over 4,300 businesses employing 58,000 people.

Our capital investment projects include the West Cambridge site, the North West Cambridge development and the growth of the Biomedical Campus in the south of the city. The North West Cambridge development and the growth of the Biomedical Campus in the south of the city. The North West Cambridge development includes the opening of a primary school – the first in the UK to be managed by a University. So we are deeply embedded in, and committed to serving, our local community. These are all conspicuous signs of a University that is not only adapting to new needs, but also anticipating the future.

Our mission is to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence. Our core values are:

- freedom of thought and expression; and
- freedom from discrimination.





About Us

The University is one of the world's leading academic centres.

It comprises 150 faculties and departments, together with a central administration and other institutions. Our institutions, museums and collections are a world-class resource for researchers, students and members of the public representing one of the country's highest concentrations of internationally important collections.

The University has an annual income of £1.66 billion. Research income, won competitively from the UK Research Councils, the European Union (EU), major charities and industry, exceeds 400 million per annum and continues to grow.

The Colleges and the University remain committed to admitting the best students regardless of their background and to investing considerable resources both in widening access and financial support.

The 31 Colleges are self-governing, separate legal entities which appoint their own staff. Many academic staff are invited to join a College as a Teaching Fellow, which provides a further social and intellectual dimension. The Colleges admit students, provide student accommodation and deliver small group teaching.

The University awards degrees and its faculties and departments provide lectures and seminars for students and determine the syllabi for teaching and conducting research.

The University's estate is undergoing the most significant transformation in its history. Cambridge has been able to create a new science and technology campus to the west of the city centre, and is now expanding further to the north west of Cambridge including investing in affordable homes for University key workers and community facilities. Even with our continued development, the University remains within walking or cycling distance across the campus. The University is a major partner on the Cambridge Biomedical Campus and we continue to redevelop our historic city centre sites demonstrating our determination to ensure that we can offer the best facilities and opportunities for our staff and students.

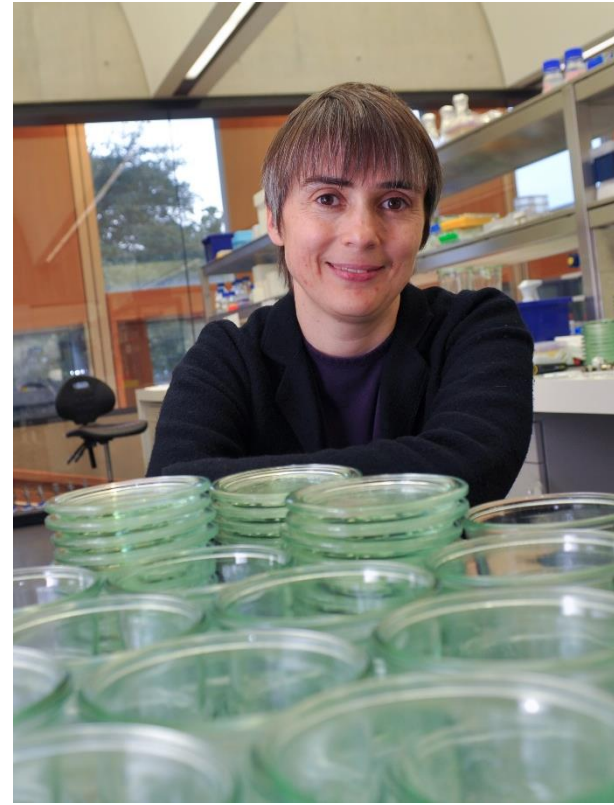
Our instinct for seeking out excellence and setting up enduring and mutually beneficial collaborations has led us to establish strategic partnerships across the globe. Whether it is the successful Cambridge-research in crop science; or the creation, with Germany's Max Planck Institutes, of a Cambridge-based centre for the study of ethics, human economy and social change – international partnerships are now an inextricable part of the University's make-up.

Our ideas and innovations have shaped the world. Our campaign, 'Dear World... Yours, Cambridge', will raise £2 billion to help us shape all our futures.

Working at the University

Working at Cambridge you will join a diverse, talented and innovative community, with more than 18,000 students and over 12,000 staff from all walks of life and corners of the world.

The University continually explores strategies to attract and retain the best people. It is committed to supporting its staff to achieve their best. We are a fair, diverse and inclusive society and we believe our staff are our greatest asset. There is strong commitment to developing institutional leadership and supporting and encouraging staff development at all levels. Further-more, the University's Athena SWAN award recognises and celebrates good practice in recruiting, retaining and promoting women. We offer a variety of roles including academic, research, professional, managerial and support roles. We also offer extensive benefits and excellent learning opportunities within a stimulating working environment. The University has signed up to the Race Equality Charter, a notional framework for improving the representation, progression and success of minority ethnic staff and students within higher education.



Living in Cambridge



Cambridge is rich in cultural diversity. From beautiful University and College buildings, museums and art galleries, quaint gardens and punts on the River Cam, to a vibrant restaurant and café scene, our employees are surrounded by the wonderful features of this unique city.

If you prefer the faster pace of life, London is a 45 minute train journey away. For those travelling from overseas, Stansted Airport is just 45 minutes away and Heathrow Airport under 2 hours away.

The University is a short distance from a host of other attractions such as Ely Cathedral, Newmarket Races and various wildlife parks and stately homes. Cambridge is also within easy reach of the beautiful Broads and coastlines of Norfolk and Suffolk.

Further information about attractions in and around Cambridge can be found at [Visit Cambridge](#), the official tourism website for the city.

What Cambridge can offer

We offer a comprehensive reward package to attract, motivate and retain high performing staff at all levels and in all areas of work.

The University offers a wide range of competitive benefits, from family leave entitlement, to shopping and travel discount schemes. Our generous annual leave package contributes to the positive wellbeing of our University employees. Sabbatical leave enables academics to focus on research and scholarship, whilst still maintaining their full salary. The University also has a career break scheme for academic and academic-related staff, with additional flexible working policies for all other staff.



CAMbens employee benefits

We offer a CAMbens scheme for University employees, providing access to online and in-store shopping discounts and cashback. With more than 2,000 participating retailers, employees can save money on a wide range of household expenses, from groceries and clothes, to holidays and insurance and much more. A range of local discounts are also available, helping employees to save money whilst also supporting local Cambridge businesses. CAMbens Cars and CAMbens Cycle to Work salary sacrifice schemes are also available, which enable employees to save money on transport costs. A discount rate on the purchase of train season tickets, bulk buy tickets and an interest free travel to work loan are also available for staff of the University

Family-friendly policies

The University recognises the importance of supporting its staff. We have a range of family-friendly policies to aid employees' work-life balance including a generous maternity, adoption and shared parental leave entitlement of 18 weeks full pay and emergency family care support via My Family Care. In addition, our highly regarded workplace nurseries, childcare vouchers, a childcare salary sacrifice scheme and a high quality holiday play scheme are available to help support University employees with caring responsibilities. The Newcomers and Visiting Scholars Group is an organisation within the University run by volunteers whose aim is to help newly arrived wives, husbands, partners and families of Visiting Scholars and members of the University to settle in Cambridge and give them an opportunity to meet local people. The Office of Postdoctoral Affairs supports the postdoctoral community within Cambridge. Further details are available here: <https://www.opda.cam.ac.uk/>

Your wellbeing

The University's Sport Centre, Counselling Services and Occupational Health are just some of the support services available to University employees to promote their physical and mental wellbeing. There are many societies in Cambridge catering for almost every taste and interest. Whether you want to take part in a sport, participate in music or drama, pursue a hobby, or join a political group, you will almost certainly find that a society exists for this purpose. The University also hosts the [Cambridge Science Festival](#) and [Cambridge Festival of Ideas](#), as well as [Open Cambridge](#) weekend, which together attract over 50,000 visitors per year. The festivals are a great opportunity to get your first taste of public engagement, through volunteering, supporting hands-on activities or proposing a talk.

What Cambridge can offer

Pay and benefits

The University salary structure includes automatic service-related pay progression in many of its grades and an annual cost of living increase. In addition to this, employees are rewarded for outstanding contribution through a number of regular pay progression schemes. The University offers attractive pensions schemes for employees, with an additional benefit of a salary exchange arrangement providing tax and national insurance savings. Payroll giving is also a simple, tax-efficient way for employees to make monthly donations to charity.

Relocating to Cambridge

The University Accommodation Service exists to help employees in their search for a rental home in Cambridge. A new University development at North West Cambridge called Eddington offers subsidised rented accommodation to University staff. The development consists of high quality furnished one and two bedroom apartments. For more information about the development and how to apply please visit the website: www.nwcambridge.co.uk. The importance of helping individuals settle into a new area is also recognised by the University. The Shared Equity Scheme <https://www.hr.admin.cam.ac.uk/pay-benefits/cambens-employee-benefits/financial/shared-equity-scheme> provides financial assistance to qualifying new staff with the purchase of living accommodation, where they have to relocate to take up their appointment. Removal expenses are also available for qualifying new members of staff.

Equality & diversity

The University has a vibrant and varied community. We support and encourage under-represented groups and we value diversity. We welcome applications from individuals with disabilities. Our recruitment and selection procedures follow best practice. We have an Equal Opportunities Policy, along with a range of diversity networks for women, black and minority ethnic and lesbian, gay, bisexual and transgender staff. More details are available here: <http://www.equality.admin.cam.ac.uk/>



Development opportunities

We support new employees to settle in through various activities. The encouragement of career development for all staff is one of the University's values and we put this into practice through various services and initiatives. Our Personal and Professional Development Department provides development opportunities and courses for all University employees. These include face-to-face sessions, online learning modules and webinars. Employees may also apply for financial support to undertake training that will lead to a qualification. We offer reduced staff fees for University of Cambridge graduate courses and the opportunity to attend lectures and seminars held by University departments and institutions. The CareerStart@Cam programme also supports employees in assistant staff roles who do not hold higher education qualifications to develop their skills, experience and qualifications.

Whether it is understanding the molecular basis of neurodegenerative diseases, or helping farmers in India increase their yield, or discovering better ways to live in large cities – I know that what we do in Cambridge affects lives, and livelihoods, the world over.

Vice Chancellor Emeritus, Professor Sir Leszek Borysiewicz, 2016



Clinical School Wellbeing Programme

Following the launch of the Clinical School Wellbeing Programme in April 2014 it has continued to develop and grow each year. The School holds regular wellbeing talks and events in addition to hosting two dedicated Wellbeing Weeks packed with activities for staff each year. Activities include staff massages, smoothie bikes, step challenges, arts and crafts sessions and many more.

The School also has a team of mental health first aiders recruited and trained from our own pool of staff. The School is always looking for new ways to engage staff and encourage them to look after their physical and mental wellbeing.



Equality, Diversity and Inclusion

The School of Clinical Medicine has a dedicated governance group overseeing equality, diversity and inclusion related activities. Regular talks are held throughout the year and all staff members are expected to undertake Equality and Diversity training.

The School has a number of networks for different staff groups encouraging communication and sharing of practices. There is also a growing network of 100+ Equality Champions who meet termly and help raise awareness of equality, diversity and inclusion within their departments. The School currently holds a silver Athena SWAN award utilising the process to critically analyse all areas of equality and diversity within the school.

How to apply

Applications should be submitted online via the University of Cambridge jobs page www.jobs.cam.ac.uk by clicking "Apply online" in the job advert. You will need an email address to register for our online system.

Informal enquiries are welcomed and should be directed to:

Professor Hugh Markus, Professor of Stroke Medicine
Email: hsm32@medschl.cam.ac.uk

The closing date for applications is: 27th October

The interview date for the role is: 11th November