

School of Health and Medical Sciences

City St George's, University of London

Neurosciences & Cell Biology Research Institute

Research Scientist

Ref: 205-25

JOB DESCRIPTION

Post Title	Research Scientist
Grade	CSG 6
Contract type	Fixed term (6 months in the first instance, with possibility of renewal)
Responsible to	Reader in Biomedical Sciences & Senior Lecturer in Biomedical Image Analysis
Accountable to	Institute Director of Neurosciences
Responsible for	N/A
Liaises with	Professor of Cell Biology

Overall purpose of job

The successful candidate will contribute to a collaborative research program funded by the National Research Foundation of Korea, as part of the Global Joint Research Centre initiative titled *"Development of Innovative Technology for Controlling Aging Based on Primary Cilia Metabolism."*

The project takes an innovative approach to studying aging by exploring the primary cilium and developing novel diagnostic tools. Using advanced microscopy and imaging techniques, the research will generate and analyse the high-resolution image data. Key findings will be validated with clinical samples, enabling translational applications in agingassociated disorders. The resulting data will significantly enhance our understanding of the mechanisms of human aging and support improved diagnostics for brain health.









The research will be supervised by <u>Dr Soo-Hyun Kim</u> in the <u>Molecular & Cellular Sciences</u> Section, <u>NCB Research Institute</u>, and <u>Dr Constantino Carlos Reyes-Aldasoro</u> in the Department of Computer Science, in collaboration with <u>Professor Dot Bennett</u>.

Main Duties and Responsibilities

The project is scheduled to begin on 16 June 2025. The researcher will take responsibility for day-to-day aspects of the work. Training can be offered in the specialised techniques where needed, though all relevant experience will be advantageous.

Duties/activities will include:

- Responsible for the care and maintenance of human and mouse cell cultures, including primary cultures derived from clinical samples, with a focus on establishing and optimising culture conditions.
- Plan and perform experiments for high-quality image acquisition, incorporating techniques such as immunofluorescence staining or live imaging of cultured cells for fluorescence, confocal and time-lapse microscopy analysis.
- Conducting statistical analysis of data.
- Keeping well-organised and detailed records of results and protocols.
- Reporting of data at regular lab meetings.
- Administration as needed, such as ordering of supplies.
- Assisting in the preparation of research publication(s) as appropriate.
- Contributing to the submission of grant application(s) to relevant funding bodies.
- Contributing to international collaboration with research groups based in Seoul, Korea, when required.

It is expected that staff working with St George's School of Health and Medical Sciences, will be involved in our mentoring and tutoring activities, as appropriate, as well as supporting admissions, student recruitment and access and widening participation activities (MMI interviews, Open Days, school visits, clearing etc) where applicable. All academic staff are expected to act as a personal tutor.

You are also expected to undertake other activities appropriate to your grade as directed by your manager. This job description reflects the present requirements of the post. As duties and responsibilities change, the job description will be reviewed and amended in consultation with the post holder from time to time. City St George's, University of London aims to provide opportunities for all its employees to develop the skills required to be successful in their role and to further develop their careers.

St George's School of Health & Medical Sciences, University of London, is committed to <u>the</u> <u>San Francisco Declaration on Research Assessment (DORA) principles</u>.









Nature and Scope of Job

This is an interdisciplinary project integrating cell biology, microscopy and Al-driven data analysis. You will work with expert scientists in the field of cilia biology (Dr Soo-Hyun Kim) and computer science (Dr Constantino Carlos Reyes-Aldasoro), within the context of cellular aging (Prof Dot Bennett) (See profile links above). You will open new territory with this exciting project on establishing novel biomarker of aging and aid the development of diagnostic tools through the use of advanced imaging and data analysis platforms.

We are seeking a motivated research scientist with a strong background in cell biology and tissue culture. Hands-on-experience in microscopy, particularly in acquisition of confocal and time-lapse live cell images is required. Familiarity with data processing and data analysis is desirable, though not essential.

This is a unique opportunity to contribute to cutting-edge translational research with the potential to improve diagnostics and understanding of aging-related conditions.

St George's School of Health & Medical Sciences, University of London (formerly St George's, University of London) is a research-active institution specializing in medical and biomedical topics, and very successful in societal research impact (8th= among all UK universities in REF2021). It provides a friendly environment with strong support for new staff and early-career researchers. We offer a wide range of career-enhancing training for these staff. You will join the <u>Molecular & Cellular Sciences</u> (MCS) Section of the <u>NCB Research Institute</u> (current organization, though changes may occur following the merger of St George's with City University). MCS has 15 academic PIs and their groups, conducting a wide variety of research. A regular Cell Biology and Genetics seminar series runs, expected from this year to alternate between external and internal speakers, giving an opportunity to meet peers and colleagues and view cutting-edge science elsewhere.

Special Factors

- There is a possibility of extension for further 12 months based on performance and project needs.
- Working with clinical samples may be involved. Training on the safety of researcher and participants and the integrity and validity of data will be provided through the Good Clinical Practice (GCP) certification, as necessary.
- There may sometimes be a need to work late or at weekends to maintain healthy cell cultures, though not a routine expectation.









Person Specification

Criteria	Description	Essential/ Desirable	How it is to be tested*
Qualifications	A research degree equivalent to PhD or Master's in a related subject area	E	PQ/AF
Experience	Experience in mammalian cell culture	E	SS1, INT
	Experience in advanced microscopy	E	SS2 , INT
Knowledge/ Skills	Background in biology of primary cilia	D	SS3 , INT
	Excellent communication and interpersonal skills	E	SS4, INT
	Fluent spoken and written English	E	AF, INT
	Skilled use of Word, Excel, and PowerPoint tools (or equivalent)	E	AF
	Skilled use of statistical analysis tools	E	AF
Personal Attributes	Quick learner	E	AF, INT
	Friendly, empathetic	E	AF, INT
	Enthusiastic	E	AF, INT
	Creative, problem-solver	E	SS5, INT
	Committed to practices that promote diversity and equal opportunity	E	AF, INT

Key:

PQ=Prerequisite Qualification, AF=Application Form, CV=Curriculum Vitae, SS=Selection/Supporting Statements, ST=Selection Test/Presentation, INT=Interview

Note: Elements marked SS (Supporting Statements) in the Person Specification will be highlighted in Step 6 (Supporting Statements) on the online application form. Applicants' answers to Step 6 are an essential part of the selection process. Applicants should write individual supporting statements to demonstrate how their qualifications, experience, skills and training fit each of the elements highlighted in this section.









<u>Applicants should address other elements of the Person Specification in Step 7 (Additional Information)</u>. Shortlisting will be based on applicants' responses to Step 6 **and** Step 7. Therefore applicants should complete both sections as fully as possible on the online application form.

Date: 23/04/2025









About City St George's, University of London

City St George's, University of London is the University of business, practice and the professions.

City St George's attracts around 27,000 students from more than 150 countries.

Our academic range is broadly-based with world-leading strengths in business; law; health and medical sciences; mathematics; computer science; engineering; social sciences; and the arts including journalism, dance and music.

In August 2024, City, University of London merged with St George's, University of London creating a powerful multi-faculty institution. The combined university is now one of the largest suppliers of the health workforce in the capital, as well as one of the largest higher education destinations for London students.

City St George's campuses are spread across London in Clerkenwell, Moorgate and Tooting, where we share a clinical environment with a major London teaching hospital.

Our students are at the heart of everything that we do, and we are committed to supporting them to go out and get good jobs.

Our research is impactful, engaged and at the frontier of practice. In the last <u>REF (2021)</u> 86 per cent of City research was rated as 'world-leading' 4* (40%) and 'internationally excellent' 3* (46%). St George's was ranked joint 8th in the country for research impact with 100% of impact cases judged as 'world-leading' or 'internationally excellent'. As City St George's we will seize the opportunity to carry out interdisciplinary research which will have positive impact on the world around us.

Over 175,000 former students in over 170 countries are members of the City St George's Alumni Network.

City St George's is led by Professor Sir Anthony Finkelstein.









School of Health and Medical Sciences currently offers a range of employee benefits:

Salary:	£42,882 pa, (pro-rated for part-time staff). The salary range for Grade 6 is £42,882 – £49,559 . The appointment will be at the minimum point.	
Hours:	35 hours per week which can be done flexibly in various ways or part time/job share can also be considered. Staff are expected to work the hours necessary to meet the requirements of the role and this will be dependent on the service area.	
Annual leave:	30 days per annum. Plus eight UK public holidays and four days when City St George's, University of London is closed (usually between Christmas and New Year). Part time staff receive a pro rata entitlement.	
Pension:	Membership of competitive pension schemes with generous employer contribution and a range of extra benefits.	
	Superannuation Arrangements of the University of London (SAUL)	
	London Pension Fund Authority (LPFA)	
	Universities Superannuation Scheme (USS)	
	National Health Services Pension Scheme (NHSPS) (existing members only)	
Flexible working	Flexible working, including part-time or reduced hours of work, opportunities to work from home for many posts, compressed hours and local flexibility in agreeing start and finish times of work.	
Travel	City St George's, University of London offers an interest free season ticket loan and participates in the Cycle to Work Scheme.	
Gift Aid	If you would like to make a tax-free donation to a charity of your choice, this can be arranged through our Payroll.	
Sports and Leisure Facilities	Rob Lowe Sports Centre, situated on the St George's Healthcare NHS Trust site offers exercise facilities that can be utilised by City St George's, University of London staff.	
	Within walking distance from St George's is Tooting Leisure Centre. Facilities include a swimming pool, gym and various exercise classes. The Centre offers staff an all-inclusive corporate membership. For more information please contact	

Tooting Leisure Centre









Shops and facilities There are a number of shops and facilities situated on site including ATMs, student bar and shop, Pret a Manger, M&S Simply Food store, library and multi-faith room.

Informal enquiries

Informal enquiries may be made via email to: skim@citystgeorges.ac.uk

Making an application

All applicants are encouraged to apply on line at <u>http://jobs.sgul.ac.uk</u> as our system is user friendly and the online application form is simple to complete. Please note that CVs only will not be accepted.

For any accessibility issues please contact <u>hrhelp@sgul.ac.uk</u>

Closing date: 07 May 2025

Interview date will be on 16 May 2025. As shortlisted candidates will be notified by email, it is imperative that you provide an email address that is accessed frequently.

Please quote reference **205-25**

We are delighted that you are interested in working at St George's School of Health and Medical Sciences. You will be notified of the outcome of your application by email. We aim to respond to all candidates within 5 weeks of the closing date of the vacancy.







