

Job Description

Job title	Postdoctoral Research Associate
School / department	School of Medicine and Biosciences
Grade	Research PDRA-B, P32
Line manager	Professor of Microbiology and Head of Research
Responsible for (direct reports)	N/A
Date of creation or review	08/06/2026

Main purpose of the job

Postdoctoral Research Associate – Genomics and Microbiome Sciences

Centre for Innovation in Genomics and Microbiome Sciences (CIGMiS), University of West London

We are pleased to invite applications for a Postdoctoral Research Associate to join the Centre for Innovation in Genomics and Microbiome Sciences (CIGMiS) at the University of West London. CIGMiS is a centre of excellence dedicated to addressing complex, system-wide questions in microbiome science to improve public health outcomes. Our research spans from fundamental discovery to translational science, supporting the development of new technologies, therapeutics, and evidence-based policy change.

This post offers a unique opportunity to contribute to an international, interdisciplinary consortium project investigating ancient medical sources using innovative modern techniques, including Microbial Genomics, Bioinformatics, AI and Machine Learning. The successful candidate will collaborate closely with colleagues at the Royal Holloway University of London, as well as research partners in Italy, France and Armenia. The role includes overseas travel to partner countries as part of the research programme. We are seeking an enthusiastic and experienced researcher with expertise in genomics and bioinformatics, AI and machine learning. The post holder will play an integral role in experimental design, sequencing, data interpretation, manuscript preparation, project coordination, and the training of students and international partners. They will also engage actively with external collaborators.

As an equal opportunity employer, we are committed to creating an inclusive and supportive working environment. We welcome applications from all sections of the community, regardless of age, disability, ethnicity, gender identity, religion or belief, sexual orientation, or socioeconomic background. All appointments are made on the basis of merit.

Key areas of responsibility

- Design and carry out experiments, including studies of low-biomass microbiomes and applications of Oxford Nanopore Technologies (ONT) sequencing.
- Analyse short and long read sequencing data, including whole genome sequencing and metagenomics using a range of appropriate bioinformatics tools.
- Prepare manuscripts for publication, ensure adherence to project timelines, share and publicise data.
- Collaborate with partners to explore and identify intersections between genomics, particularly phylogenetics and the humanities.
- Work with partners to discover and characterise novel antimicrobial compounds derived from medicinal plants.
- Contribute to the training postgraduate students.

- Proactively identify sources of research funding opportunities and contribute to the development and submission of competitive funding proposals.

In addition to the above areas of responsibility the post-holder maybe required to undertake any other reasonable duties relating to the broad scope of the position, commensurate with the post, and in support of the University.

Dimensions / background information

The University of West London (UWL) is widely recognised for its commitment to advancing human health and wellbeing, as well as for fostering an excellent research environment. Over the past five years, the University has made significant investments in cutting-edge equipment, enabling the pursuit of world-leading research. By working collaboratively with a range of external partners, UWL provides strong leadership and support across a broad spectrum of research activities, including the coordination of projects funded by Innovate UK, UKRI, and various charitable and international funding bodies. UWL is dedicated to supporting all staff and cultivating a nurturing and inclusive research culture.

School of Medicine and Biosciences continues to deliver high-quality, internationally recognised research through strategic academic and industry partnerships and competitive international collaborations. The school places a strong emphasis on fostering multidisciplinary research across a range of scientific domains.

The **Centre for Innovation in Genomics and Microbiome Sciences (CIGMiS)** undertakes research aimed at addressing complex, systems-level questions in microbiome science. Its work spans fundamental investigations, such as elucidating the genetic makeup of microbiomes and pathogens and their interactions to applied research, including the development of novel therapies, technological and methodological innovations, and contributions to public health policy.

Person Specification

	Criteria	Essential or Desirable ¹	Demonstrated ²		
			Application	Interview	Test / Exercise
Qualifications and/or membership of prof. bodies	PhD in Microbial Genomics and Bioinformatics (or relevant experience)	Essential	X		
Knowledge and experience	Knowledge and experience of ONT and Illumina sequencing (whole genome and metagenomics sequencing)	Essential	X	X	
	Use of appropriate bioinformatics tools	Essential		X	
	Big data analysis, AI & ML	Essential	X	X	
	Knowledge and experience in the isolation and purification of antimicrobial compounds from plants	Desirable		X	
Specific skills to the job	Preparing manuscripts	Essential	X	X	
	Excellent communication skills	Essential		X	
	Good level of independence and creativity	Essential		X	
	First author of high-quality refereed journal publications	Essential		X	
General skills	Team working	Essential		X	
	Able to take initiative, work flexibly to meet deadlines within tight time schedules and solve problems.	Essential		X	
	Develop research objectives and proposals	Essential		X	
Other	This is 24 months contract				

Disclosure and Barring Scheme Is a DBS Check required: (Please Select from drop down list)

Before making a selection, please refer to the University's [Disclosure and Barring Checks Guidance for Staff](#) and [Criminal Convictions, Disclosures and Barring Staff Policy and Procedure](#). If a DBS check is required for the role, a **Check Approval Form** will need to be completed.

