Queen Mary
University of London



Job pack

Message from the President and Principal



Thank you for your interest in this role and in Queen Mary University of London. Working at Queen Mary means being part of a unique, world-class global University with a long, proud and distinctive history.

Our founding institutions, the London Hospital Medical College, St Bartholomew's Medical College, Westfield College and Queen Mary College, were founded to provide hope and opportunity for the less privileged and otherwise under-represented.

Today, we remain true to the vision of our founders by continuing to improve lives locally, nationally and internationally through the seamless combination of our world-leading strengths in education and research.

The Queen Mary community – our staff, students and alumni – is the heart and soul of our University. We are proud to provide an inclusive and nurturing environment so that staff and students from all backgrounds can develop, flourish and achieve their full potential.

I look forward to welcoming you to our unique University and working with you to realise our ambitions.

Professor Colin Bailey, President and Principal

qmul.ac.uk

Athena Swan Silver Award

Gender Charter

Diversity & Equality

Queen Mary

Queen Mary University of London

Our strategy 2030

In 2019, Queen Mary University of London launched a bold new Strategy with the vision to open the doors of opportunity. By 2030, we will be the most inclusive university of its kind, anywhere. We are doing this by building on our existing cultural diversity to create a truly inclusive environment, where students and staff flourish, reach their full potential and are proud to be part of the University. Continuing our long tradition of commitment to public good, we will generate new knowledge, challenge existing knowledge, and engage locally, nationally and internationally to create a better world.

We have five core values that will help us to reach this goal:

We are **inclusive**, supporting talented students and staff regardless of their background, and engaging with our local and global communities.

We are **proud** of the difference we can all make when we work collectively.

We are **ambitious**, fostering innovation and creativity, disrupting conventional thought, and responding with imagination to new opportunities.

We are **collegial**, promoting a strong community through openness, listening, understanding, co-operation and co-creation.

We are **ethical,** acting with the highest standards, and with integrity, in all that we do.

To enable our staff to flourish and to reach their full potential throughout their employment at Queen Mary, we offer a range of benefits:

Staff benefits

- Annual leave – the full-time annual leave annual entitlement is 30 working days (not including bank holidays).
- Season ticket loan scheme
- Pension scheme
- Reward and recognition schemes
- Staff Networks
- Cycle to work scheme
- Qmotion sport fitness centre
- Employee Assistance Programme
- Family friendly policies
- Flexible working practices

Job description

Job details	
Job title	Postdoctoral Research Associate in innate immunity and infection
School/Dept/Institute Centre/Faculty	Faculty of Medicine and Dentistry William Harvey Research Institute Centre for Microvascular Research
Reports to	Dr Ezra Aksoy Poister
Grade and salary	Grade 4 (£39,187-£47,550)
Hours per week	**Full-time (35 hours per week)**
Appointment period	12 months
Current location	Charterhouse Square
Work activity type	Research only

About Queen Mary University of London

Ranked joint 7th in the UK for the quality of its research in the 2021 Research Excellence Framework, Queen Mary University of London, is one of the UK's leading research-intensive higher education institutions, delivering world class education and knowledge transfer across a wide range of subjects in the Humanities and Social Sciences, Medicine & Dentistry and Science & Engineering.

About The Faculty of Medicine and Dentistry

The Faculty of Medicine and Dentistry offers international excellence in research and teaching and supports clinical service for a population of unrivalled ethnic diversity in East London and the wider Thames Gateway. At the forefront of medical research and education, with research themes in cancer, cardiovascular medicine, inflammation, trauma and population health. Queen Mary is in the top 10 universities in the UK for medicine and dentistry and 7th in the world for research citations for medicine in the QS World University Rankings by Subject 2025. In the Complete University Guide 2026, we are ranked first in London for dentistry and second in London for medicine.

Working with six NHS Trust partners in East London, the Faculty is central to delivering impact on health-related challenges for local and global populations; it has a strong commitment to public engagement through its pioneering science education centre in Whitechapel, The Centre of the Cell. The Faculty is firmly embedded in our East End and global communities, and through education and research we are committed to improving the health outcomes, the wellbeing, and the prosperity of those we serve through a strategy focused on Better Health for All.

Job context

The William Harvey Research Institute (www.qmul.ac.uk/whri) is a world-leading centre for research, with a vibrant, multidisciplinary scientific environment devoted to therapeutic innovation in cardiovascular, endocrine and inflammatory diseases. With over 600 staff members, the Institute consists of 8 Research Centres, 7 of which are based at Charterhouse Square.

Job purpose

This postdoctoral position will investigate host-microbe interactions and innate immune regulation during enteric infection, building on the Aksoy lab research into bacterial pathogenesis, Type VI Secretion System (T6SS)-mediated host-microbiota interactions, and the role of the lipid kinase PI3Kδ in microbial surveillance and immune tolerance (Hong et al., 2025; Wood et al., 2020; Gonzalez Nuñez et al., 2025).

The project will investigate how bacterial virulence mechanisms and host signalling pathways influence bacterial fitness, colonisation, and intestinal immune responses. The successful candidate will develop advanced human and avian intestinal infection models, including 2D and 3D epithelial cultures and organ-on-chip technologies, to study host-pathogen interactions, T6SS effector activity, microbial competition and innate immune responses. The postholder will lead experimental design and execution, analyse and interpret complex datasets, contribute to manuscript and grant development, and work collaboratively across research programmes while supporting undergraduate and postgraduate research training.

Selected publications:

- Gonzalez Nuñez, M. et al. (including Aksoy, E.) (2025). *Lipid kinase PI3Kδ: Role in Microbial Surveillance and Immune Tolerance*. bioRxiv. doi:10.1101/2025.05.13.653657.
- Hong, G. et al. (including Aksoy, E.) (2025). *The unfolded protein response is a critical mediator in Campylobacter jejuni pathogenesis and host defence*. Microbes and Infection, 27(8), 105582.
- Wood, T.E., Aksoy, E. & Hachani, A. (2020). *From Welfare to Warfare: The Arbitration of Host-Microbiota Interplay by the Type VI Secretion System*. Frontiers in Cellular and Infection Microbiology, 10, 587948

Main duties and responsibilities

1. Contribute towards the intestinal innate immunity and bacterial pathogenesis project at all stages where relevant by applying agreed research principles, protocols and assisting in the planning and delivery of the programme of research.

2. Responsible, under the general guidance of Dr. Ezra Aksoy, for undertaking specific research activities relating to the programme of work.

3. Prepare reports of research results for public presentation through seminars and conferences. Contribute to writing papers summarising research findings for publication in peer-reviewed journals (of high international standing where appropriate) and other reports where required.

4. Conduct empirical research as required by the research programme. Initiate and assist research and make original contributions to the research programme wherever possible, and contribute freely to the team research environment in a manner conducive to the success of the research programme as a whole.

5. Develop, in collaboration with Dr. Ezra Aksoy and project external collaborators, such new techniques as may be necessary to achieve the objectives of the research.

6. Collate data and undertake any appropriate analysis of data as requested by Dr. Ezra Aksoy.

7. Maintain appropriate databases, keeping accurate written and computerised records and ensuring that these records are stored in a secure place, and to maintain confidentiality of all electronically stored personal data in line with the provisions of the Data Protection Act.

8. Undertake literature and database searches for the research project, and to be able to interpret and present the findings of the literature searches and advise the research teams appropriately regarding potential projects as required by Dr. Ezra Aksoy.

9. Work closely with colleagues to assist with, and ensure delivery of, the administrative aspects of the research activities as required by the needs of the research programme.

10. Keep up to date with subject-related and appropriate academic/professional matters, in particular, developments in the specific subject area.

11. Provide oversight/support for, and assist in the supervision of, student projects, as required.

12. To undertake shared laboratory responsibilities, which may include cleaning and maintenance tasks.

13. The duties of the post outlined above are not exhaustive, and the postholder will be expected to be co-operative and flexible, undertaking such administrative and other duties as may from time to time be reasonably expected of a member of research grade staff in a university.

14. These duties will be subject to review in line with the changing requirements of the School/Institute/University, and with the development needs of the postholder as identified through regular review/appraisal processes.

***Please note that PhD candidates who have not yet received their PhD award, including candidates who have completed their oral exam and are in the process of corrections, will be appointed with a salary within the junior training zone (Grade 4 spinal points 25-26). The salary will increase to the appropriate point upon receipt of a copy of the formal award letter or award certificate.**

The above list of responsibilities is not exhaustive, and the jobholder may be required to undertake other duties commensurate with the level of the role as reasonably requested by their line manager.

This job description accurately reflects the duties and responsibilities of the role at the time the job description was written. These duties and responsibilities may change over time without significantly impacting on the character of the role, the overall level of responsibility, or its grade.

Depending on strategic or operational needs, the jobholder may in the future be required to work for another existing or new organisational unit and/or at a different site within Queen Mary. This may be on a temporary or indefinite basis and may involve a change in line management and / or regularly working at more than one site.

Citizenship

The Faculty of Medicine and Dentistry is committed to an action plan that supports the cultivation of a diverse and nurturing staff and student community, at the heart of which sits the commitment to equality of opportunity and equity in our processes and structures.

It is the expectation of all staff that they undertake citizenship responsibilities within the Faculty. As part of the appraisal and probation process, your line manager will discuss the expectations of you to lead or participate in citizenship projects/initiatives as set out in the Faculty's EDI Strategy. These responsibilities will be commensurate with the seniority of the role and the expertise and experience of the individual.

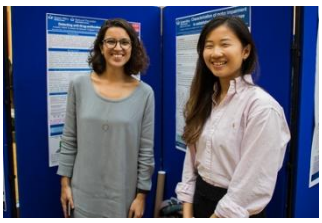
Queen Mary University of London

Person specification

This table lists the essential and desirable requirements needed in order to perform the job effectively. Candidates will be shortlisted based on the extent to which they meet these requirements.

Essential: Requirements without which the job could not be done.
Desirable: Requirements that would enable the candidate to perform the job well.

Qualifications	Essential	Desirable
PhD (or close to completion) in Immunology, Biochemistry or Cellular Microbiology	☒	☐
Current UK Home Office Personal Licence (Categories A, B, and C)	☐	☒
Organoid biology, organoid or 3D cell culture, and/or microbiology	☐	☒
Experience/Knowledge		
Relevant knowledge and experience in immunology, cellular microbiology and inflammation biology	☒	☐
Understanding of the research process and knowledge of appropriate research protocols	☒	☐
Experience in immunobiological, biochemical and molecular biology techniques (|ELISA, Flow cytometry, 2D cell cultures, western blotting and RT PCR)	☒	☐
Experience in planning and delivery of own work allocation, to agreed timescales and quality standards	☒	☐
Experience of collaborative team working to achieve a common goal/objective	☐	☒
Experience in collating, maintaining and deploying datasets to produce, interpret and present data reports and analysis.	☐	☒
Experience in maintaining accurate and up to date records	☒	☐
Track record of high-quality scientific productivity (publications and/or presentations at international conferences)	☒	☐
Experience in coding (e.g., R, Python)	☐	☒
Skills/Abilities		
Effective report-writing, written and verbal communication skills. Able to adapt style/approach appropriately to suit the audience. Effective team working with a collaborative style.	☒	☐
Proven ability to maintain accurate and up to date records	☒	☐
Ability to organise and prioritise own work and organise research within the project timetable	☒	☐
Experience of using data analysis, presentation and graphic design software, including Microsoft Office (Word, Excel, Outlook and PowerPoint), GraphPad Prism, and Adobe Illustrator.and scientific data analysis, 2D graphing, and nonlinear regression programs	☒	☐





Able to identify appropriate solutions from a set of principles and/or prior experience rather than from a specific set of procedures	☐	☒
Able to apply appropriate judgement in a range of non-routine research situations, prioritise competing tasks effectively, and work efficiently under pressure.	☐	☒
Advanced IT, numeracy and analytical skills with a high level of accuracy and attention to detail	☒	☐
Other		
Willingness to work flexibly to achieve the demands of the research programme	☐	☒
Self-motivated and able to work without close supervision	☐	☒
Organised and methodical, and able to use own initiative where appropriate	☒	☐
Ability to maintain confidentiality when handling sensitive data	☒	☐
*The ability to meet UK 'right to work' requirements.	☒	☐

* The University has a legal responsibility to ensure that all potential employees can provide documentary evidence of their legal right to work in the UK prior to commencing employment.

Visa Sponsorship

For those who do not have a right to work in the UK, the University is a UKVI licensed sponsor and is able to issue a Certificate of Sponsorship (CoS) to successful candidates who are offered skilled roles and meet the eligibility criteria. The CoS enables candidates to apply for a Skilled Worker visa. Further information on the Skilled Worker visa can be found via: www.gov.uk/skilled-worker-visa

Global Talent Visa Route

The Global Talent visa is an alternative route to sponsorship, directly applied for by the applicant. It is open to those wishing to work in the UK and who are a leader or potential leader in the fields of academia or research, arts and culture, and digital technology. Further information on the Global Talent Route can be found via: https://www.gov.uk/global-talent

For additional information on both visa sponsorship and non-sponsorship visa routes, please visit the UK Visas and Immigration website: https://www.gov.uk/browse/visas-immigration/work-visas

Academic Technology Approval Scheme (ATAS)

Academics and Researchers applying for Skilled Worker visas and Sponsored Researchers applying for Government Authorised Exchange visas who will be undertaking research activities, at PhD level or above, in the one of the ATAS listed subject areas will be required to obtain an ATAS certificate before they can apply for a visa to work in the UK.

Exemptions will exist for nationals from the EEA, Australia, Canada, Japan, New Zealand, Singapore, South Korea, Switzerland and USA and those applying for Global Talent Visas. For further information on this, please visit the UK Visas and Immigration website: https://www.gov.uk/guidance/find-out-if-you-require-an-atas-certificate.






EDI Initiatives

Queen Mary is committed to advancing Equality, Diversity and Inclusion (EDI). We hold a Silver Institutional Athena SWAN award for advancing gender equality and champion a number of EDI initiatives across the University. We also offer a number of development programmes including Springboard, Aurora and B-MEntor.
We are committed to championing EDI relating to all protected characteristics and other underrepresented and marginalised groups under the Equality Act 2010. We offer 'Introducing Inclusion' training for staff to give them an understanding of EDI related issues and provide them with the tools needed to champion inclusivity and embed best inclusive practice in all the work they do. EDI is built into everything we do at Queen Mary, and is championed through a well-established governance structure. If you are interested in learning more about Equality, Diversity and Inclusion at Queen Mary and how to get involved then please contact hr-equality@qmul.ac.uk.

Flexible Working

Queen Mary is proud of the diversity of its staff and students. We encourage inclusive practices in everything that we do, to ensure that everyone who works here feels valued and enabled to have a positive working experience. We are therefore open to considering applications from candidates wishing to work flexibly, balanced against business need. Our Flexible Working Policy includes examples of some of the flexible working arrangements that could be considered. If you feel that this is something that may be of benefit to you, please do ask.

Family Friendly Policies

Queen Mary recognises the commitments that staff have to their family and the importance of work-life balance. To support this Queen Mary offers a range of family friendly policies with enhanced rates of pay available for family-related leave, following a qualifying period of service

Further Information

Details about the school can be found at:

https://www.qmul.ac.uk/whri/
https://www.qmul.ac.uk/whri/people/academic-staff/items/aksoyezra.html

Informal enquiries should be made to:

Name: Dr. Ezra Aksoy

Tel: +44 207 882 5920

Email: e.aksoy@qmul.ac.uk

General Information

Please note that we advertise our salaries on a range to indicate the trajectory of progression that can be made. Appointments are usually made at the start of the salary range. The Queen Mary salary structure includes automatic pay progression within the published grades, subject to service, funding and performance. In addition to this, there are performance related annual pay review schemes in place.

