



**POSTDOCTORAL
RESEARCHER
SCHOOL OF
SCIENCE**

LONDON'S EVENING UNIVERSITY

WELCOME

Thank you for expressing an interest in the role of **Postdoctoral Researcher** at Birkbeck, University of London. This opportunity comes at an exciting point in Birkbeck's history, as we approach our 200th anniversary in 2023.

Birkbeck has always occupied a unique niche in the UK Higher Education landscape and we remain different to other institutions to this day: we are a world-class research and teaching institution with a tradition of providing higher education to people in work. Our classes are almost all held in the evening, so our 13,500 students are free to study, work, volunteer or just do their own thing during the day.

Our unique learning model: research-led evening teaching, blended online provision and flexible progression routes, offers people who care about their future something special: the opportunity to study at a world-class, research-intensive university and to progress their life goals, at the same time. Students can choose to study at a speed which suits them: completing an undergraduate degree in the evenings over three years full-time or four years part-time; or a Masters' degree in either one or two years.

With a global reputation for high quality research and teaching, Birkbeck is part of the prestigious University of London. Founded in 1823 to give working Londoners and learners from non-traditional backgrounds the chance of a university education, our mission remains unchanged as we approach our third century.

Historically, our unique teaching model has attracted an extremely diverse student

population: 65% of our students are part-time and 35% full-time; 42% are postgraduates and 58% undergraduates; the majority are mature and 41% are from Black and Minority Ethnic backgrounds.

In recent years, Birkbeck's full-time, three-year undergraduate evening degrees have gained popularity with school leavers. So, although we are known for educating mature learners, we are now more about attitude than age. Our students tend to be hard-working, independent and highly-motivated. They are recognised and highly valued by employers for their maturity, independent-mindedness, focus and determination. 95% of Birkbeck's students are in work or further study six months after graduating.

Birkbeck comprises five academic schools (Law; Arts; Social Sciences, History and Philosophy; Business, Economics and Informatics; and Science), over 40 research centres and a series of professional service departments.

Our main campus is in Bloomsbury, the academic heart of London and we have a shared campus in Stratford, London E15, next door to the Olympic Park.

No other university represents London as Birkbeck does. Our students are Tube drivers, fund managers, librarians and care workers. They are doctors, lawyers, taxi drivers, full-time parents and even grandparents. Without Birkbeck many of them simply wouldn't have access to study.

Birkbeck is at the same time a highly international institution, as over 100 different

countries are represented within our learning community. Indeed, the latest Times Higher Education (THE) World University rankings place Birkbeck in the top 10% of universities, based on overseas staff, students and research collaborations.

Our research is known for being cross-disciplinary, innovative and socially and politically engaged. Our findings inform public policy; push scientific, medical and technological advances; support and grow the economy; promote culture and the arts; and make a positive difference to society.

Both our alumni and staff tend to be passionate about the role Birkbeck plays in their lives. Many of our students go on to make an impact on business, the economy and society more broadly and our academic community includes important and eminent figures working alongside early career academics.

Birkbeck is a unique, complex institution.

If you choose to join us and your application is successful, I look forward to welcoming you to Birkbeck in due course.

Best of luck with your application.

Professor David Latchman, CBE
Vice-Chancellor of Birkbeck

ABOUT BIRKBECK



In 1823 George Birkbeck founded the London Mechanics' Institute, an avowedly radical institution with a vision to open up university education to working Londoners. Just under a hundred years later, in 1920, Birkbeck College was incorporated in to the University of London. Today, almost 200 years since it was founded, Birkbeck remains true to George's mission, 'to ensure the universal dissemination of the blessings of knowledge'.

Birkbeck, University of London, is a world-class research and teaching institution, a vibrant centre of academic engagement and excellence and London's only specialist provider of evening higher education. Where once we were known solely for our part-time courses and mature students, today we have a wider mix. Of our current cohort of new undergraduates, just under half are from Black and Minority Ethnic backgrounds and over a third qualify for the College's generous package of financial support for students from lower income backgrounds; students range from school leavers to retired learners, but the largest group consists of working Londoners in their 20s and 30s.

Undergraduates study in the evening for a degree at a pace that suits them, across three, four or six years, with major recent growth coming via the three-year UCAS entry route, which has grown from zero to over 3000 students in the past six years. We are also a major provider of academic and professional postgraduate education, with the sixth largest cohort of home and European postgraduate students in the UK. Like our undergraduate degrees, our Master's courses are also taught predominantly in the evenings, with one, two and in some areas, three-year pathways, and flexible payment options. We have 13,500 students studying for Certificates of Higher Education, Degrees with Foundation Years, BA/BSc/ and LLB degrees and Master's degrees across our five schools. We also have hundreds of researchers studying with us and deliver a range of over 180 short courses every year.

But while Birkbeck has its roots firmly in London, we are recognised on a global stage. The Times

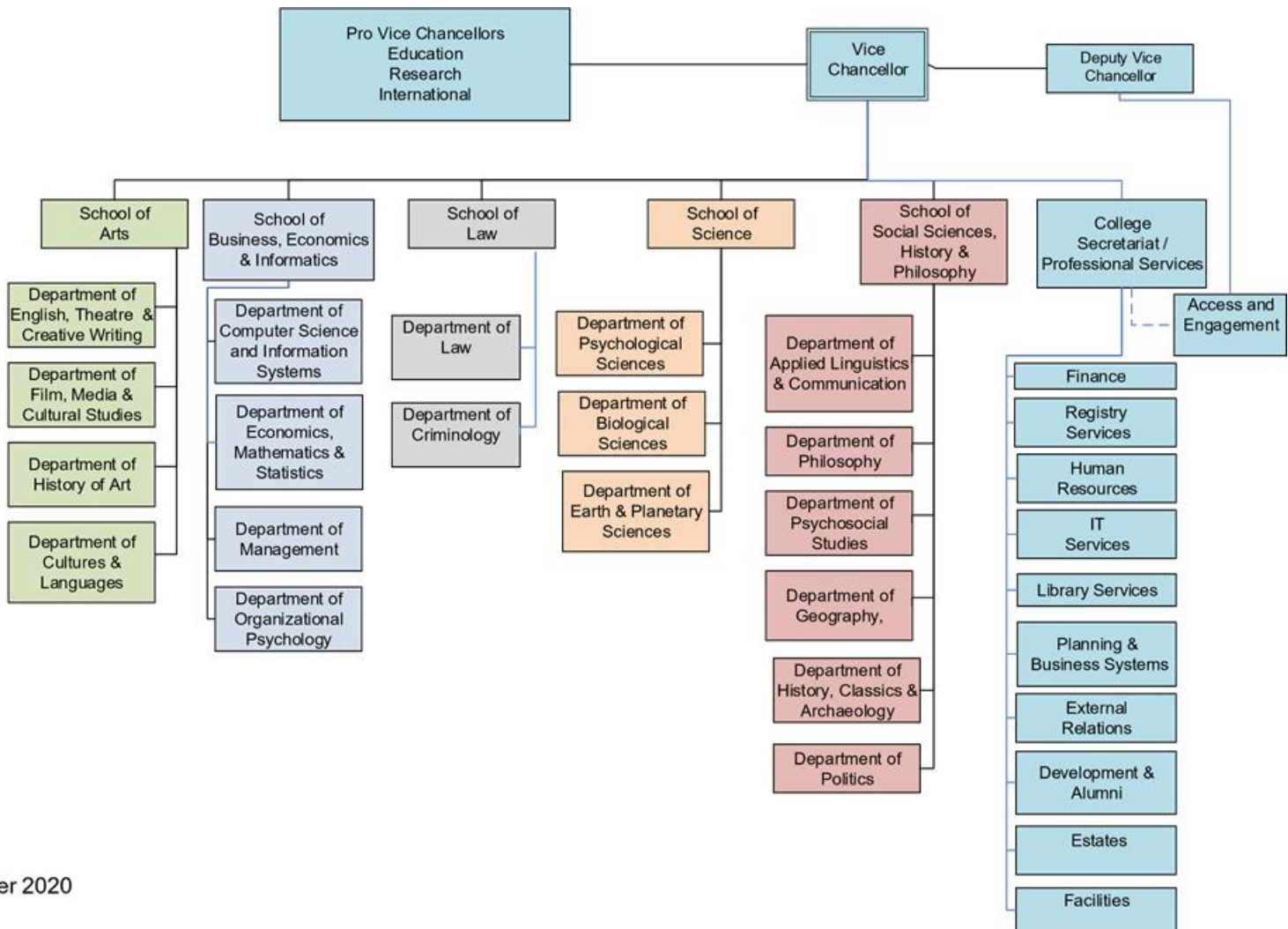
Higher Education World University rankings 2019 placed Birkbeck among the world's top 400 universities overall and we are in the top 350 universities in the QS University world rankings. Philosophy and English at Birkbeck are ranked in the world's top 100 according to QS, whilst History, Psychology and Law are all ranked in the world's top 150.

Birkbeck's reputation as a world-class research-intensive institution was cemented by the Research Assessment Framework in 2014. Birkbeck was 30th in the UK for research, with 73% of our research rated 'world leading' or 'internationally excellent'. We are home to over 40 research and specialist institutes and among the awards our research has won in recent years are the Queen's Anniversary Prize for excellence in higher education at the Centre for Brain Function and Development.

This unique combination of ground-breaking research and innovative teaching provides an inspirational learning experience for our students; we have consistently ranked in the top five in London for teaching and student satisfaction in the National Student Survey.

Birkbeck's main Bloomsbury campus is in the heart of academic London, home to a number of other universities and colleges of the University of London, including University College London and the School of Oriental and African Studies. We are situated among beautiful, leafy squares in one of the world's greatest concentrations of libraries, including the British Library and Senate House Library. Across the city in east London, we offer courses at University Square in Stratford. Both our campuses are well-served by public transport.

BIRKBECK ORGANISATIONAL STRUCTURE



October 2020

ABOUT THE DEPARTMENT OF BIOLOGICAL SCIENCES

This department was created in 2009 from the merger of the School of Crystallography and the School of Biological and Chemical Sciences (<http://www.bbk.ac.uk/biology/>). It houses the ISMB Biophysics Centre, the ISMB Cryo-EM facility, and the ISMB X-ray Crystallography facility.

Birkbeck is a world-class institution, a vibrant centre of academic engagement and research excellence. The cryo-EM group at Birkbeck College provides an exciting and dynamic environment to perform cutting edge research. Our in-house facility displays state-of-the art equipment for all stages of sample preparation, data collection and processing, including a Titan Krios equipped with a K3 detector.

Our lab is at the forefront of cryo-tomography and subtomogram averaging approaches to study protein structure in complex environments and is the ideal place to learn and make a contribution to this fast-growing field of cryo-EM.

JOB DESCRIPTION

Job title:

Postdoctoral Researcher

School or Department:

School of Science / Department of Biological Science

Reports to:

Dr Giulia Zanetti

Responsible for:

NA

PURPOSE OF THE JOB

To carry out research in the field of coat proteins, specifically on in situ cryo-EM studies of COPII. To introduce tissue culture work in the lab, and collaborate with neighbouring institutes to develop and optimise cryo-FIB milling and cryo-tomography. To contribute to the development of research proposals and/or objectives, and to conduct and write up both individual and collective research projects for publication.

MAIN DUTIES

Research and Scholarship

- To set up tissue culture work in the lab, develop and optimize cell lines aimed at visualization of ER-Golgi transport.
- To perform fluorescence microscopy, and cryo-FIB milling on cultured cells, in collaboration with neighbouring labs.
- For both experimental design and interpretation of results, extensive scientific interactions with other lab members and the collaborating laboratories will be essential.
- To conduct individual and collaborative research projects and write up research for publication
- To translate knowledge of advances in the subject area into research activity.

- To ensure that research content and the methods used are in accordance with equal opportunities.

Teaching & Learning

- To contribute to the assessment of master and PhD student knowledge and supervision of their projects.
- To assist in the development of student research skills.

Communication

- To deal with routine communication using a range of media.
- To communicate complex information, and material of a specialist or highly technical nature orally, in writing, and electronically.
- To prepare proposals and applications to external bodies, for example, for funding and contractual purposes.

The above list of duties is not exhaustive and is subject to change. The post holder may be required to undertake other duties within the scope and grading of this post

WORKING RELATIONSHIPS & CONTACTS

People Management and Teamwork

- To manage own research and administrative activities, with guidance if required.
- To work with colleagues on joint projects, as required
- To collaborate with academic colleagues on areas of shared research interest.
- To attend and contribute to relevant meetings.

Liaison and Networking

- To liaise with colleagues and students.
- To build internal contacts, and participate in internal networks for the exchange of

information and to form relationships for future collaboration.

- To join external networks to share information and identify potential sources of funds.

DIMENSIONS

Problem Solving and Impact

- To use new research techniques and methods.
- To use own initiative and creativity to identify areas for research, develop new research methods, and extend the research portfolio.
- To use creativity to analyse and interpret research data and draw conclusions on the outcomes.
- To contribute to collaborative decision making with colleagues in areas of research.
- To understand equal opportunity issues as they may impact on areas of research content and methods.

Resource Management

- Plan and manage own research activity in collaboration with others.
- To use research resources, laboratories and workshops as appropriate.

Working Environment

- To balance, with help the competing pressures of research and administrative demands and deadlines.
- To carry out tasks that require the learning of certain skills.
- To engage in continuous professional development.
- To be aware of the risks in the work environment and their potential impact on their own work and that of others.

GENERAL RESPONSIBILITIES

(These are universal to all Birkbeck roles)

- To adhere to the College's Equal Opportunities policy in all activities, and to actively promote equality of opportunity wherever possible.
- To be responsible for your own health and safety and that of your colleagues, in

accordance with the Health and Safety at Work Act (1974) and relevant EC directives.

- To work in accordance with Birkbeck's data protection policies, and relevant current data protection legislation.
- To undertake such other duties as may be reasonably expected.

PERSON SPECIFICATION

ATTRIBUTES	ESSENTIAL CRITERIA	DESIRABLE CRITERIA	METHOD OF ASSESSMENT
Knowledge	Possess sufficient breadth or depth of specialist knowledge of research approaches to work within a structural, molecular and cell biology research programme.	Knowledge in membrane trafficking and cryo-EM	Application Presentation Interview Test
Technical and/or work based skills	<p>A background in biochemistry, cell and molecular biology.</p> <p>Experience with tissue culture, genome editing, fluorescence microscopy</p> <p>Effective oral and written communication skills, to write up complex research findings and to convey specialist/technical material.</p>	<p>Experience with freezing cells and FIB/SEM</p> <p>Familiarity with cryo-tomography data collection</p>	Application Presentation Interview Test
General skills and attributes	<p>Initiative and creativity to ensure research is effective</p> <p>Effective presentation skills. Organisation and administration skills</p> <p>Commitment to working with diversity</p> <p>Good networking and interpersonal skills</p> <p>Ability to work independently but also to co-operate and interact with other group members and outside collaborators</p> <p>Willingness to travel for research, meetings and workshops Willingness to teach on workshops</p>	Contributing to the writing of research proposals	Application Presentation Interview Test

Experience	Experience of utilising research methods and techniques.	Experience in FIB/SEM and cryo-EM	Application Presentation Interview Test
	Experience of developing and troubleshooting tissue culture, genome editing and fluorescence microscopy protocols.		
	Previous experience of contributing to research.		
Qualifications	PhD (or equivalent) in a relevant subject area.		Application

FURTHER PARTICULARS

Salary:

£38,594 rising to £44,113 per annum (Grade 7)

The salary quoted is on the College's London Pay Scale which includes a consolidated Weighting / Allowance which applies only to staff whose normal contractual place of work is in the Greater London area.

Hours:

35 hours per week (1.0 FTE)

Working pattern:

TBC

Probation period:

12 months

Duration of post:

Fixed-term 3 years

BENEFITS

Birkbeck has a number of benefits which includes, but is not limited to:

- 25 days annual leave per annum, plus an additional six days when the College is closed during the spring and winter breaks. This is in addition to the eight bank holidays.
- Defined benefit pension scheme
- Flexible working
- Season ticket loan
- Lifelong Learning Contribution for staff scheme

HOW TO APPLY

Closing date for applications:

Midnight on 20 December 2020

Interview date:

TBC

Start date:

Date to be confirmed following interview

To apply for this position please go to our online [recruitment portal](#) and search for reference **746**.

Please ensure your application includes full details of your employment history, education and qualifications, and recent development. For some roles, this will be collected in the application form, for others you will be asked to include this in a professional CV which can be uploaded.

All applicants are asked to provide a statement on their suitability for the role. This is a key piece of information which will help us determine your suitability for the role, so please:

- Align your skills and experience with both the job description and person specification.
- Be specific about projects you've worked on or managed. What was the outcome? How did you measure success?
- If you've had a leadership role, tell us about it. How big was the team? What was the scope of your work?
- If you're a recent graduate or have limited work experience, reference projects or coursework that demonstrate relevant skills and knowledge.
- Keep it short; the application form or the CV should contain all the additional information that we need during the selection process.

In addition to your application statement you may be asked to answer specific questions in areas that we consider essential to the role.

INFORMAL ENQUIRIES

Informal enquiries can be made to:

Dr Giulia Zanetti, g.zanetti@mail.cryst.bbk.ac.uk

HELP & ASSISTANCE

If you are having difficulties accessing this site
please email jobs@bbk.ac.uk

OUR COMMITMENT TO EQUALITY & DIVERSITY

The College is committed to providing the highest quality academic and working environment where all staff, students, visitors and contractors are welcomed respected and treated in a fair, consistent and non-discriminatory manner. The College is proud of its diversity and welcomes applications from all sections of the community. No one will be treated unfairly because of their sex, race, disability, sexual orientation, age, religion or belief, carer status, political belief, pregnancy/maternity, social class, gender identity or marital/civil partnership.

Birkbeck is a member of the 'positive about disability' Disability Confident scheme and will interview all candidates who both declare a disability within the meaning of the Equality Act 2010 and meet the minimum essential criteria for the post, subject to any limits on the overall number of interviews.

Birkbeck is a member of Advance HE, holds an institutional Bronze level Athena SWAN award, is a Mindful Employers Charter signatory and subscribes to Stonewall's Diversity Champions.