

## **JOB DESCRIPTION**

<b>JOB TITLE</b>	Post-doctoral Research Associate	
<b>SCHOOL/DEPARTMENT</b>	School of Science, Institute of Structural and Molecular Biology	
<b>REPORTS TO</b>	Dr Amandine Maréchal	
<b>SUPERVISES</b>	Students and technicians, as required	
<b>POST REFERENCE</b>	11584	
<b>GRADE</b>	Research, Grade 7	<b>DATE</b> May 2015

Birkbeck is a world-class institution, a vibrant centre of academic engagement and excellence and the UK's leading provider of part-time, evening education for mature students.

There are nearly 19,000 students studying short courses, certificates, diplomas, first degrees, postgraduate taught and postgraduate research degrees. Birkbeck provides Londoners with the unique opportunity to fit study around their busy lives.

### **PURPOSE OF THE JOB**

To carry out biochemical and biophysical characterisation of yeast cytochrome c oxidase using a combination of advanced spectroscopic techniques and mutant forms of the purified enzyme, to conduct and write up both individual and collective research projects for publication and to interact with external and internal collaborators.

### **Main Duties of the Jobholder**

#### Research and Scholarship

- To develop research objectives and proposals for own or joint research, with the assistance of the PI if required.
- For both experimental design and interpretation of results, extensive scientific interactions with the collaborating laboratories will be essential.
- To conduct individual and collaborative research projects and write up research for publication.
- To update knowledge and understanding in terminal oxidases and respiratory chains.
- To translate knowledge of advances in the subject area into research activity.
- To ensure that research content and methods used are in accordance with equal opportunities.

#### Teaching and Learning

- To contribute to the assessment of 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 reports to external bodies, for example, for funding and contractual purposes.

### **Working Relationships and Contacts**

#### People Management and Teamwork

- To manage own research and administrative activities, with guidance if required.
- To work with colleagues and external collaborators, as required
- To collaborate with academic colleagues on areas of shared research interest.
- To attend and contribute to relevant meetings.
- To ensure that the work is conducted in accordance with equal opportunities

#### 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.

### **Dimensions**

#### Problem Solving and Impact

- To use new research techniques and methods.
- To use own initiative and creativity to 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 equipment 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 standard to all Birkbeck Job Descriptions:

- 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 the Data Protection Act and to ensure that all new systems are reported to your Data Protection Controller.
- To undertake such other duties as may be reasonably expected.
- To provide a healthy and comfortable working environment, smoking is prohibited throughout the College, except in specially designated areas.

## FURTHER PARTICULARS & INFORMATION ON THE POST

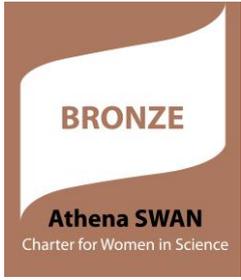
In partnership with the recognised trade unions, these terms are under review as part of the development of a new pay and grading structure. Staff will be notified of changes once they are agreed.

<b>JOB TITLE:</b>	Postdoctoral Research Associate
<b>POST REFERENCE:</b>	11584
<b>SALARY:</b>	£32,277 rising to £37,394 per annum on Grade 7 of the salary scales, plus £3,066 London Allowance per annum, pro-rata. <i>The initial salary award will be dependent on the skills and experience of the successful applicant.</i>
<b>PROBATION:</b>	The appointment will be subject to a probationary period of 12 months.
<b>DURATION OF POST:</b>	Fixed term appointment, up to 5 years.
<b>HOURS:</b>	Full-time, 35 hours per week.
<b>ANNUAL LEAVE ENTITLEMENT:</b>	25 days per year, 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.
<b>SUPERANNUATION:</b>	The post is superannuable under the USS scheme (Universities Superannuation Scheme).
<b>START DATE:</b>	As soon as possible
<b>CLOSING DATE:</b>	5 July 2015
<b>INTERVIEW DATE:</b>	TBC

To apply for this post please visit [www.bbk.ac.uk/jobs](http://www.bbk.ac.uk/jobs) (**Search using Ref No. 11584**)

If you have difficulty applying for a post, please contact Human Resources quoting the Post Reference number. Tel: 020 7079 0735 or Fax: 020 7631 6521 or Email: [humanresources@bbk.ac.uk](mailto:humanresources@bbk.ac.uk)

Informal enquiries can be made to: Dr Amandine Maréchal, ISMB, University College London, Darwin Building, Gower Street, London WC1E 6BT (tel: 020 7679 3522, e-mail: [a.marechal@ucl.ac.uk](mailto:a.marechal@ucl.ac.uk))  
ISMB web page: <http://www.ismb.lon.ac.uk/index.html>



The Department of Biological Sciences is working towards a Bronze Athena Swan Award and we support the Athena beliefs that:

- The advancement of science, engineering and technology (SET) is fundamental to quality of life across the globe.
- It is vitally important that women are adequately represented.
- Science cannot reach its full potential unless it can benefit from the talents of the whole population.

Further information on Athena Swan is at <http://www.athenaswan.org.uk/>



## PERSON SPECIFICATION

**Job Title:** Postdoctoral Research Associate  
Molecular Biology

**Post Reference:** 11584

**Dept/School:** Institute of Structural and

Attributes	Essential	Desirable	Method of Assessment
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>• Possess sufficient breadth or depth of specialist knowledge in the discipline and of research methods and techniques to work within an established biochemistry and biophysics research programme.</li> </ul>	<ul style="list-style-type: none"> <li>• A background in physicochemistry and spectroscopy.</li> <li>• A background in structure/function studies of enzyme catalysis and redox proteins.</li> </ul>	<ul style="list-style-type: none"> <li>• Application Form</li> <li>• Panel interview</li> <li>• Presentation</li> </ul>
<b>Technical/Work-based Skills</b>	<ul style="list-style-type: none"> <li>• Skills in a range of biochemical and biophysical methods.</li> <li>• Skills in microorganism culture, protein expression and purification.</li> <li>• Effective oral and written communication skills, to write up complex research findings and to convey specialist/technical material.</li> <li>• Computer proficiency in standard packages (e.g. word processing, spreadsheets, e-mail and internet use)</li> </ul>	<ul style="list-style-type: none"> <li>• Skills in chromatography and FPLC</li> <li>• Skills in vibrational or other advanced spectroscopy, solution biophysics</li> <li>• Familiarity with electrochemistry</li> </ul>	<ul style="list-style-type: none"> <li>• Application Form</li> <li>• Panel interview</li> <li>• Presentation</li> </ul>
<b>General Skills/Attributes</b>	<ul style="list-style-type: none"> <li>• Initiative and creativity to ensure research is effective.</li> <li>• Commitment to high quality research.</li> <li>• Effective presentation skills.</li> <li>• Ability to work both collaboratively and</li> </ul>	<ul style="list-style-type: none"> <li>• Willingness to travel for meetings, workshops or to meet with external collaborators</li> </ul>	<ul style="list-style-type: none"> <li>• Application Form</li> <li>• Panel Interview</li> <li>• Presentation</li> </ul>

	<p>independently.</p> <ul style="list-style-type: none"> <li>• Willingness to learn and specialise in new techniques</li> </ul>		
<b>Experience</b>	<ul style="list-style-type: none"> <li>• Previous experience in structure/function studies of protein and spectroscopy.</li> <li>• Previous experience of contributing to research.</li> </ul>	<ul style="list-style-type: none"> <li>• Experience of working with membrane proteins</li> <li>• Experience with protein purification to crystallisation quality</li> </ul>	<ul style="list-style-type: none"> <li>• Application Form</li> <li>• Panel interview</li> <li>• Presentation</li> </ul>
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>• PhD (or equivalent) in a relevant subject area.</li> </ul>		<ul style="list-style-type: none"> <li>• Application Form</li> </ul>