

**Imperial College London**  
**Faculty of Natural Sciences**  
**Department of Life Sciences**  
**Research Associate**  
**Structural Studies of the Complement Terminal Pathway**

**Salary £33,860- £42,830 per annum**  
**Maximum starting salary £35,640 per annum**

Applications are invited for a Research Associate to join the laboratory of Dr. Doryen Bubeck. The post, funded by Cancer Research UK, provides an exciting opportunity to work as a key member of an interdisciplinary structural biology project involving high resolution electron cryo-microscopy that has the potential to impact actively prescribed cancer therapeutics.

The project involves structural and functional characterization of protein complexes involved in the complement terminal pathway.

Complement plays an important role in monoclonal antibody (mAb)-based cancer immunotherapy through complement-dependent cytotoxicity (CDC). One mechanism of tumor clearance is by the deposition of membrane attack complex (MAC) pores on target cells. The effectiveness of CDC remains limited in some cancers due to over expression of CD59, a membrane-bound complement regulator that inhibits MAC-mediated lysis. Broadly the goal of this project is to understand how MAC pores are assembled and regulated in lipid bilayers.

The Centre for Structural Biology is a state-of-the-art electron microscopy facility equipped with two FEG electron microscopes and cutting edge detectors (4k x 4k CCD and FEI Falcon II direct electron detector). The project will involve regular access to Titan Krios facilities at eBIC (Diamond Light Source, UK) and IGBMC-CERBM (Strasbourg, France).

The post holder will be responsible for carrying out structural studies of key complexes in the complement terminal pathway and will collaborate with Membrane Biophysicists at Imperial College London and Immunologists at the Universities of Southampton and Cardiff .

You must have a PhD (or equivalent) in a structural biology or biochemistry discipline. You must also have Research experience in a structural biological laboratory environment covering either x-ray crystallography and/or Electron microscopy single particle analysis, or advanced knowledge in protein biochemistry and structural biology. Demonstrable capacity for innovative high quality structural biological research is also essential. Knowledge of macromolecular assemblies, experience in reconstituting large multi-protein complexes in lipid membranes, and writing scientific research papers are desirable.

You must have excellent organisation skills and attention to detail. Excellent verbal and written communication skills, and the ability to write clearly and succinctly for publication are essential. You must also be able to relate well with others, form positive relationships with a wide range of people and to work as part of a team, as well as independently. The ability to develop and apply new concepts and have a creative approach to problem-solving are also essential.

This is a fixed-term position, commencing 7 March 2016, for up to 45 months based at the South Kensington Campus .

Informal enquires can be made directly to Dr. Doryen Bubeck by email at:  
[dbubeck@imperial.ac.uk](mailto:dbubeck@imperial.ac.uk).

Our preferred method of application is online via our website <http://www.imperial.ac.uk/employment> (please select "Job Search" then enter the job title or vacancy reference number **NS 2016018 LP** into "Keywords"). Please complete and upload an application form as directed.

Should you have any queries about the application process please contact [dols.recruitment@imperial.ac.uk](mailto:dols.recruitment@imperial.ac.uk)

**Closing date: 17 February 2016 (Midnight GMT)**

*Committed to equality and valuing diversity. We are also an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Two Ticks Employer and are working in partnership with GIRES to promote respect for trans people.*