

**UNIVERSITY OF LIVERPOOL
DEPARTMENT OF BIOCHEMISTRY AND SYSTEMS BIOLOGY**

Cryo-EM STRUCTURAL BIOLOGY POSTDOCTORAL RESEARCH ASSOCIATE

Grade 7 (Salary range £38,250 - £40,521 pa)

An exciting opportunity has emerged to join the [Molecular Biophysics Group](#) to work on a BBSRC-supported collaborative project between the teams from University of Leeds and Liverpool aimed at answering fundamental questions on enzyme mechanism of quinol-dependent integral membrane nitric oxide reductases, a member of respiratory heme-copper oxidase superfamily. The project builds on our recent 2.2Å cryoEM structure of this enzyme and aims to address a number of ambitious questions through well-informed point mutations and high resolution cryoEM structures. In addition to the isolated enzyme, we also aim to obtain the first structures of CuNiR-qNOR protein-protein complexes in catalytic turnover.

We require an experienced PDRA with fluency in several elements of a structural biology project including cryoEM data collection and processing, model building and structure refinement at high resolutions. Experience with protein expression and purification of membrane proteins is desirable. The PDRA will be assisted by a full-time research associate/research technician for producing wild-type and mutant qNOR membrane bound proteins in sufficient quantities for functional and cryoEM studies. The RA would also support in producing CuNiRs and its mutants following the established protocols in our laboratories.

You should also be able to work in a team and previous experience of working at multiple sites would be an advantage. The PDRA is expected to spend significant time (typically one week per month) at Leeds where you would be fully integrated into Muench's group. Excellent verbal and written communication skills are essential. The post is available for immediate start for nearly 3 years.

Please send your CV and cover letter to Professor Samar Hasnain (s.s.hasnain@liverpool.ac.uk), Dr Stephen Muench (s.p.muench@leeds.ac.uk) and Dr Svetlana Antonyuk (s.antonyuk@liverpool.ac.uk)