

Job Description

Research Associate

Salary:	Grade 7
Contract:	Full time, fixed term
School/Department:	School of Biosciences
Location:	Canterbury Campus
Responsible to:	Mohinder Pal

Job purpose

The Research Associate will join the PAL group/lab within the School of Biosciences at the University of Kent. It is a three-year post funded by Action for A-T and BrAshAT Ataxia Telangiectasia for investigating the assembly of multi-protein complexes.

The successful candidate will work on a cutting-edge experimental research project involving the assembly of multi-protein complexes. The project involves a combination of biochemistry, biophysics, and structural biology work. The structural biology part of the project will involve single-particle cryo-electron microscopy (cryo-EM) and X-ray crystallography. The role will also involve developing research objectives, conducting research, writing research work for publication, and liaising with national and international collaborators.

Key accountabilities

- Undertake research at an internationally competitive level.
- Contribute to the development of the research project, specifically
- Disseminate research results through peer-reviewed publications and conference presentations.

Key duties

The following are the main duties for the job. Other duties, commensurate with the grading of the job, may also be assigned from time to time.

- Carry out the research program described in the grant application
- Monitor and study literature related to the project
- Work closely with the supervisor and, as necessary, with collaborative partners
- Design and execute the necessary experiments, maintaining an up-to-date log of the research activity undertaken and of the obtained results
- Carefully plan the research activity, making sure the milestones of the project are achieved within the expected timeframe
- Regularly update the supervisors on the progress of the research
- Write up the research outcomes for publication in high-quality peer-reviewed journals.
- Attend and present research findings at relevant national and international conferences
- Disseminate findings to a wider audience, including non-scientists
- Contribute to further applications for funding an extension of this project or related work
- Assist in the supervision of undergraduates and postgraduate student research projects
- Be committed to your own personal career development, including continually updating knowledge and understanding in fields related to this research project.

Internal & external relationships

Internal: Dr Mohinder Pal is the project supervisor; the post is situated within the Pal group, part of the School of Biosciences, which encourages interactions in a dynamic interdisciplinary research environment.

External: Progressing relevant research by working with external collaborators in the UK and overseas.

Health, safety & wellbeing considerations

This job involves undertaking duties which include the following health, safety and wellbeing considerations:

- Regular use of Screen Display Equipment
- Working with machinery (low-temperature apparatus, including liquid nitrogen and liquid ethane)
- Working with chemicals (inc. requirement to wear latex gloves and inc. work with CO₂ or N₂ gasses)
- Working with radiation (Apparatus)

Person specification

The person specification details the necessary skills, qualifications, experience or other attributes needed to carry out the job. Applications will be measured against the criteria published below.

Selection panels will be looking for clear evidence and examples in an application, or cover letter (where applicable), which back-up any assertions made in relation to each criterion.

Essential Criteria:

- PhD in Biochemistry, structural biology or related relevant discipline or equivalent (or to be in the final stages of obtaining such a qualification and able to evidence that the PhD viva will be held as soon as possible) (A,I)
- Experience in molecular biology, biochemistry, especially protein expression, purification (A,I)
- Experience in X-ray crystallography (A,I)
- Ability to carry out research independently (I)
- Proven research skills in protein expression and purification. (A,I)
- Protein crystallography and associated data processing. (A,I)
- Good written and oral communication skills (I)
- Good team working skills (I)
- Ability to meet deadlines (I)
- Good skills with computers for instrument control and data analysis (I)
- Enthusiasm and motivation for research (I)
- Firm commitment to achieving the University's vision and values, with a passion for a transformative student experience and multidisciplinary, impactful research (I)
- Commitment to deliver and promote equality, diversity and inclusivity in the day to day work of the role (I)

Desirable Criteria:

- Experience in protein expression in insect cells and, mammalian culture (A,I)
- Experience in cryo-EM or negative staining data analysis (A,I)
- A track record of publications as first author in high quality peer review journals (A)
- A track record of presentations at national and international conferences (A,I)
- Experience in supervision or management of research projects (A,I)
- Experience in writing research papers (A,I)
- Negative staining as well as cryo-grid preparation (A,I)
- Ability to generate new research ideas (I)

- A commitment to your own continuous professional development. (I)

Assessment stage: A - Application; I - Interview; T - Test/presentation at interview stage