



Candidate Information

Position:	Research Fellow
School/Department:	Wellcome-Wolfson Inst for Experimental Medicine
Reference:	22/110292
Closing Date:	Monday 14 November 2022
Salary:	£35,333 per annum
Anticipated Interview Date:	Wednesday 30 November 2022
Duration:	Fixed term for 36 months

JOB PURPOSE:

To join the GPCR research team led by Dr Bianca Plouffe within the Wellcome-Wolfson Institute for Experimental Medicine to investigate the spatial properties of Gq signalling at the subcellular level. This study will employ the state-of-the-art modern pharmacology techniques (BRET, nanoBRET, NanoBiT, FRET, TR-FRET, HTRF, STED microscopy, CRISPR/Cas9 gene editing) to investigate the trafficking properties of phospholipase C β and identify the molecular mechanism underlying the signalling transduction of endosomal Gq signalling leading to cellular events.

The post is suited to a highly ambitious individual with strong background in GPCR signalling and pharmacology and is available for 36 months.

MAJOR DUTIES:

1. To be actively involved in the existing research programme as directed by the line manager and to ensure adequate planning and progression of the investigation so that the overall research objectives for the project are met.
2. To design pipelines for data analysis and statistical assessment.
3. Carry out experimental design, critical evaluation of results, and interpretation using methodologies and other techniques appropriate to area of research.
4. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
5. Prepare, in consultation with supervisor, material for publication in peer-reviewed journals and presentations for international conferences.
6. Carry out routine administrative tasks associated with the research project to ensure that project milestones are completed on time and within budget. These might include organisation of project meetings and documentation, risk assessment of research activities.
7. To assist grant holders in the preparation of progress reports, scientific manuscripts, funding proposals and applications to external bodies.

ESSENTIAL CRITERIA:

1. Have or about to obtain a PhD in Experimental Medicine, Molecular Biology, Cell Biology, or a closely related area of Biomedicine.
2. At least 3 years' experience with cell-based assays and cell culture.
3. At least 3 years recent, hands-on, experience that will demonstrate relevant laboratory skills that are relevant for this project.
4. Ability to learn and optimise new assays/techniques.
5. Knowledge of the principles, particularities and applications linked to all the modern pharmacology techniques (BRET, nanoBRET, nanoBiT, FRET, TR-FRET, HTRF, nanobodies) and experience with at least 3 of them.
6. Strong experience in confocal microscopy.
7. Evidence of a key role in publications. This list should be commensurate with stage of career and experience.
8. Experience in supervising undergraduate or graduate students in the laboratory.
9. Methodical approach to project management in regards to experimental procedures and record keeping.
10. Strong knowledge of GPCR pharmacology and signalling.

11. Experience with Prism GraphPad software, non-linear regressions and statistical analyses.
12. Ability to communicate complex information clearly.
13. Evidence of having presented at conferences (poster and/or oral presentations).
14. Demonstrate Intellectual ability.
15. Team worker, highly motivated, supportive of colleagues within the group.
16. Demonstrate a clear interest in working at the crossroads of pharmacology, cellular biology, and medicine.
17. Strong problem solving skills.
18. Must be prepared to work outside normal office hours if required.
19. Willing to attend and present at national and international meetings.

DESIRABLE CRITERIA:

1. PhD in Pharmacology.
2. Work with primary cell cultures.
3. Experience with STED microscopy and CRISPR/Cas9 editing.
4. Clear long-term goals in research