Job Description

Job title	Research Fellow
Department	School of Life Sciences
Grade	6

Job purpose (a brief summary of the role)	Undertake research in order to support the work of the Asally Research Group and the School of Life Sciences in order to develop and enhance its reputation, both internally and externally. Assist the Project Leader and, where appropriate, project collaborators in the successful execution of the project.
Duties and responsibilities	**Research** • Help establish a sound research base within the department in order to assist the development of research objectives and proposals for own or joint research. • Conduct individual and collaborative research projects. • To publish research outcomes in appropriate journals of international standing and to publish and disseminate the result of research to other reputable outlets. • Translate knowledge of advances in the subject area Physics of Life, Electrophysiology, Cell Physiology and Quantitative Biology into research activity. • May contribute to preparing proposals and applications to external bodies, e.g. for funding and contractual purposes, to support a developing research agenda. • May present information on research progress and outcomes to bodies supervising research, e.g. steering groups. • May contribute to the preparation of papers for steering groups and other bodies. • Communicate complex information (orally and in writing) and material of a specialist or highly technical nature. • Continually update own knowledge and understanding in Bacterial Electrophysiology. **Teaching and Learning Support** • Could be expected to contribute to the teaching and learning programmes in the department. • Assist in the supervision of student projects and the development of student research skills. • May be involved in the assessment of student knowledge and supervision of projects. **Administration and Other Activities** • May be required to attend departmental meetings and to participate (where necessary) in other committees and working groups within the department, the faculty and the University. • Ensure compliance with health and safety in all aspects of work. • Work within budget constraints. The duties and responsibilities outlined are not intended to be an exhaustive list but provide guidance on the main aspects of the job. You will be required to be flexible in your duties.

Person Specification

The Person Specification focuses on the essential and desirable knowledge, skills, experience and qualifications required to undertake the role effectively. This is measured by (a) Application Form, (b) Test/Exercise, (c) Interview, (d) Presentation.

Essential Criterion No.	Essential Criterion Description	Measured by
E1	Good honours degree and possession of a PhD or equivalent in Biological Science, Biophysics, Biochemistry or Engineering.	A & C
E2	Proficiency in fluorescence microscopy, image analysis, and common scientific data analysis.	A,C & D
E3	A developing research profile with the ability to publish and/or produce high quality research output.	A,C & D
E4	Breadth or depth of specialist knowledge/expertise in electrophysiology, biophysics, and quantitative biology.	A,C & D
E5	Experience of research methods and techniques to work within established research programmes.	A,C & D
E6	Evidence of research ability/experience and high-quality research output (publications) in quantitative biology, cell physiology or biophysics including any experience gained during PhD studies and post PhD qualification (where appropriate).	A,B,C & D
E7	Effective communication skills (oral and written), including the ability to articulate and present research results to an expert audience or a lay audience (outreach) and to ensure you are complying with and communicating on Health & Safety requirements.	A,C & D
E8	Ability to work independently and/or as part of a team on research programmes.	A,C & D
E9	Have an awareness of general Health and Safety requirements and how you would apply safe practices at work for yourself and others.	A,C & D

Desirable Criterion No.	Desirable Criterion Description	*Measured by*
D1 (Mandatory)	Expertise in project specific skills in fluorescence microscopy and image analysis and fundamental knowledge of electrophysiology.	A,C & D
D2 (optional)	Knowledge of ion channels and ion channel blockers.	A,C & D
D3 (optional)	Experience working in microbial cell physiology and/or deep-learning-based image analysis.	A,C & D
D4 (optional)	Proficiency in scientific programming (e.g. python) for data analysis.	A,C & D
D5 (optional)	Evidence of ability or potential to contribute to the development of funding proposals in order to generate external funding to support research projects.	A & C