

# **Candidate Information**

**Position:** Research Fellow

**School/Department:** Pharmacy 23/111041

Closing Date: Monday 3 July 2023 Salary: £36,333 per annum Anticipated Interview Date: Friday 14 July 2023

**Duration:** Fixed term for 18 months or until 31 January 2025, whichever is sooner

## JOB PURPOSE:

To be an active member of the Buckley research group with the goal of conducting hypothesis-driven research and developing as an outstanding research scientist with an emphasis on personal and scientific integrity. This position will involve the identification and assessment of cancer antigens using in silico and digital/molecular pathology approaches. It will also involve the development and characterisation of novel in vitro and in vivo models to support the development of a therapeutic mRNA vaccine for the treatment of Prostate cancer.

#### **MAJOR DUTIES:**

- 1. Develop and execute research plans within the remit of the Innovate UK funded project with the aid of the PI.
- 2. Analysis of gene and proteins expression inpatient cohorts to identify and characterise expression of appropriate antigens using bioinformatics and molecular pathology approaches.
- 3. Development of novel syngeneic cell line models to support the development of a therapeutic mRNA vaccine for the treatment of Prostate cancer.
- 4. Carry out analyses, critical evaluations, and interpretations using methodologies and other techniques appropriate to area of research.
- 5. Present regular progress reports on research to members of the research group, funders or to external audiences to disseminate and publicise research findings.
- 6. Prepare, often in consultation with supervisor, material for IP protection and publication. If appropriate present at national/international conferences.
- 7. Assist grant holder in the preparation of funding proposals and applications to external bodies.
- 8. Carry out routine administrative tasks associated with the research project/s to ensure that project/s are completed on time and within budget. These might include organisation of project meetings and documentation, financial control, risk assessment of research activities.
- 9. Carry out occasional undergraduate supervision, demonstrating or lecturing duties within the post holder's area of expertise and under the direct guidance of a member of academic staff.
- 10. Read academic papers, journals and textbooks to keep abreast of developments in own specialism and related disciplines. Development of a literature base.

### **ESSENTIAL CRITERIA:**

- 1. Have or about to obtain a PhD in cancer biology, or biomedical sciences.
- 2. Relevant experience in standard molecular biology assays (e.g. tissue culture of human and/or murine cancer cell lines, western blot, qPCR, flow cytometry).
- 3. Experience in the development and characterisation of novel cell line models.
- 4. Experience in analysis of IHC-based biomarker and correlation with clinical/pathological/molecular data.
- 5. Hold a valid UK home office personal licence for in vivo studies.
- 6. Publication record commensurate with experience.
- 7. Experience in Preparing material for publication and presentations at national/international conferences.
- 8. Experience of final year undergraduate student supervision.

- 9. Wiliness to assist early stage PhD students establish core assay technical competence.
- 10. Ability to carry out routine administrative tasks associated with the research projects and laboratory maintenance.
- 11. Ability to communicate effectively, both verbally and in writing,
- 12. Practical problem-solving skills, and independence of thought are required.
- 13. Ability to present scientific arguments and data in a clear, concise and confident manner.
- 14. Ability to present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
- 15. A calm and conscientious scientist, able to work in a disciplined manner within a team environment.

#### **DESIRABLE CRITERIA:**

- 1. PhD with a focus on biomarkers and immune-oncology.
- 2. Knowledge/Experience in application of nucleotide-based therapeutics.
- 3. Experience in the application of Digital pathology to biomarker assessment.
- 4. Competent in the design and successful execution of small animal in vivo studies.
- 5. Experience of assisting in preparation of funding proposals and applications to external bodies.
- 6. Experience in supervision of postgraduate students.