

Candidate Information

Position:	Research Fellow
School/Department:	Patrick G Johnston Centre for Cancer Research
Reference:	23/110647
Closing Date:	Monday 6 March 2023
Salary:	£35,333 per annum
Anticipated Interview Date:	Thursday 16 March 2023
Duration:	Fixed term, available until 31 December 2023

JOB PURPOSE:

To work as an active member of the multi-disciplinary nanomedicine cancer group in the Patrick G Johnston Centre for Cancer Research. Successful candidate will assist in the design, planning, implementation, and delivery of currently funded projects with a particular focus on development of experimental therapeutics for cancer.

MAJOR DUTIES:

1. Design and development of nanoformulations and antibody-targeted formulations.
2. Design, implement and deliver experiments using nanoformulations.
3. Conduct numerous and varied biochemical and immunological assays.
4. Perform magnetic cell isolation/sorting, cell culture and co-culture assays.
5. Conduct critical evaluation and interpretation, computer-based data analysis / evaluation or library research in consultation with the line manager/supervisor.
6. Present regular journal clubs and progress reports on research to members of the research group and to external audiences to disseminate and publicise research findings.
7. Carry out routine administrative duties as requested, e.g. arranging research group meetings.
8. Write up results of own work and contribute to the production of research lab meeting, manuscripts and future grant proposals.
9. Carry out undergraduate and post-graduate supervision/demonstrating/teaching duties under direction as deemed necessary and appropriate.
10. Read academic papers, journals and textbooks to keep the team abreast of new and novel developments.
11. Comply with Health and Safety procedures affecting self and others and ensure the Work area is clean and safe at all times.
12. Carry out any other duties designated by a line manager and which fall within the general remit of the post.
13. Assist in any way deemed appropriate to the overall success of the research objectives of the group and the Cancer Research Centre.

ESSENTIAL CRITERIA:

1. Degree in Biomedical Sciences or related subject.
2. Normally have or be about to obtain a relevant PhD.
3. At least 3 years relevant research experience.
4. Experience in nanoparticle formulation including drug entrapment, antibody or other targeting moiety conjugation.
5. Experience in nanoparticle characterisation including dynamic light scattering and nanoparticle tracking analysis.
6. Experience in cell culture and associated assays including cell viability and clonogenics.
7. Experience in molecular biology – DNA cloning and recombinant protein expression.
8. Flow cytometry experience.
9. Phage display library screening experience.
10. Surface plasmon resonance expertise.
11. Ability to contribute to broader management and administrative processes.
12. Contribute to the School's outreach programme by links with industry, community groups etc.

13. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
14. Ability to communicate complex information clearly.
15. Ability to build contacts and participate in internal and external networks.
16. Demonstrable intellectual ability.
17. Ability to assess and organise resources.

DESIRABLE CRITERIA:

1. Experience with cross linking chemistries.
2. Organic chemistry experience and analytical techniques such as NMR and HPLC.
3. Experience in working with industry.