

Candidate Information

Position: Research Fellow - Biologist (Future Medicines Institute)

School/Department: Faculty Office MHLS

Reference: 25/112367

Closing Date: Monday 10 February 2025
Salary: £39,922 - £43,605 per annum
Anticipated Interview Date: Tuesday 25 March 2025
Duration: 12 months in the first instance

BACKGROUND:

The newly funded Future Medicines Institute (FMI) will be a collaborative innovation centre developed as a focal point to enable industry, academia and health professionals to drive research and development in the Life and Health Sciences (LHS) sector. It will build upon and exploit Northern Ireland's recognised capabilities and strengths in oncology and digital health to accelerate the development of biomarker-led products. The Institute's vision is a partnership of Northern Ireland's leading pharmaceutical, diagnostics and health analytics companies, alongside academic institutions and government agencies.

JOB PURPOSE:

To work as an active member of a multi-disciplinary team within the FMI Institute undertaking activities in small molecule screening and target validation. The successful candidate will assist in the design, planning, implementation, and delivery of priority projects with a particular focus on development of experimental therapeutics and diagnostics in collaboration with industrial partners to the FMI.

MAJOR DUTIES:

- 1. Utilise best practice methods, to design and optimise high throughput assays suitable for small molecule and induced proximity screening. The ability to troubleshoot assay performance is critical.
- 2. Assume responsibility and be accountable for the efficient and timely delivery of assay-based results including biochemical and cellular assays for screening of small molecule induced proximity libraries and chemical probes.
- 3. Perform and analyse experiments with minimal supervision including data interpretation and relevant conclusions. Be responsible for the upload of critical data to relevant databases.
- 4. Design and conduct experiments to identify novel targets and novel compounds with potential to translate into innovative therapies.
- 5. Design, conduct and analyse experiments to elucidate small molecule mechanism of action using best practice methods including CRISPR/ Cas9. Conduct phenotypic screening through complex disease relevant model systems as well as identification and validation of associated biomarkers.
- 6. Ability to learn new techniques and work on several projects simultaneously, working within a collaborative team environment.
- 7. Maintain a high level of induced proximity /drug discovery knowledge, skills and best practices through reading of academic papers, journals etc and disseminate key findings to wider group. Attend training where appropriate to expand expertise in the field.
- 8. Actively participate in discussions and concisely present results/plans in project group meetings.
- 9. Liaise closely with other group members and establish collaborative links with project partners. Keep key project stakeholders informed on a regular basis of all relevant developments.
- 10. Develop links with relevant research groups, industries, and external bodies to enable completion of research objectives and create opportunities for future research projects and funding opportunities.
- 11. Engage and participate in Education and Public Engagement (EPE) activities of the Institute.
- 12. Write up results and contribute to the production of research lab meeting presentations, manuscripts and future grant proposals.
- 13. Carry out routine administrative duties as requested, e.g. arranging research group meetings.
- 14. Carry out undergraduate and post-graduate supervision/demonstrating/teaching duties as required.
- 15. Maintain the highest standards of HSE compliance.
- 16. Carry out any other duties designated by a line manager/ FMI Director, and which fall within the general remit of the post.
- 17. Assist in any way deemed appropriate to the overall success of the research objectives of the group and FMI.

ESSENTIAL CRITERIA:

- 1. A degree in biomedical sciences, biochemistry, pharmacy or related subject.
- 2. Have a relevant PhD.
- 3. Substantial relevant research experience working on small molecule programmes.
- 4. Experience in working with industry or industry partners.
- 5. Experience in automation and/or liquid handling.
- 6. Experience in design and optimisation of high throughput assays for drug screening including cell-based screening.
- 7. Experience in a broad range of molecular screening techniques such as qPCR, immunohistochemistry, western blotting, CRISPR/Cas9 technology and screening, immunoprecipitation, MS proteomics preparation, biophysical methods, biochemical assays (experience required in at least 6 of these techniques is required).
- 8. Track record of publications commensurate with stage of career.
- 9. Lab project supervision.
- 10. Ability to plan and manage own workload and contribute to requisite administrative tasks.
- 11. Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.
- 12. Excellent organisational and administrative skills including a proven ability to work to deadlines.
- 13. Ability to communicate complex information clearly.
- 14. Ability to build contacts and participate in internal and external networks.
- 15. Ability to assess and organise resources according to adjusting priorities.
- 16. Team player, proactive and self starter, highly motivated and supportive of other team members.
- 17. Interest in driving research focussed programmes.
- 18. Willingness to travel as required across partner sites and to engage with industry partners and collaborators.

DESIREABLE CRITERIA:

- 1. Have practical experience in early stage drug discovery.
- 2. Experience in working with multi-disciplinary teams.
- 3. Experience in working with in vivo models.