



JOB DESCRIPTION

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|---------------------------|--------------------------------|
| DATE: | September 2019 |
| POSITION: | NMR Scientist/Senior Scientist |
| BUSINESS UNIT: | Discovery |
| LOCATION: | Belfast |
| REPORTING TO: | Director, Medicinal Chemistry |
| RESPONSIBLE FOR (PEOPLE): | N/A |

OVERALL ROLE OBJECTIVE:

The post holder will be responsible for leading the application and development of state-of-the-art NMR techniques for fragment screening and for biophysical characterisation of proteins of therapeutic interest to Almac Discovery. The post holder will be a key member of an integrated drug discovery team focused on the identification and characterisation protein-ligand interactions to support a small-molecule drug discovery programmes. Daily responsibilities include hands-on NMR sample preparation, data collection and analysis to assess ligand/protein interactions, hit validation, and QC. Importantly, the role will also involve the continued strategic development of the NMR fragment screening platform within Almac Discovery. This is an exciting opportunity to work as part of a cross functional team incorporating both industrial and academic colleagues to apply NMR methods to facilitate drug discovery.

JOB SPECIFIC RESPONSIBILITIES:

The jobholder will:

1. Apply and develop NMR methods for fragment-based drug discovery for *de novo* hit identification on novel target classes. Perform follow-up studies and hit deconvolution activities when necessary.
2. Be directly involved in all research programmes as part of a collaborative team, ensuring optimal progression of projects by applying NMR methodologies.
3. Perform hit validation activities to confirm ligand binding using 1D and 2D NMR techniques. Troubleshoot and identify spurious mode of inhibition/binding (e.g. protein aggregation, protein instability, compound aggregation, non-specific mode of binding etc.).
4. Establish and perform profiling experiments by NMR to elucidate the mode of inhibition and/or mode of binding of novel inhibitors (e.g. reversible binding, kinetic characterisation, competitive studies with substrate, binding site mapping etc.).
5. Apply multidimensional NMR methods for protein characterisation/assignment, in collaboration with partners where required.
6. Manage NMR facility (Bruker system), including hardware/software maintenance, troubleshooting, automation/cryoprobe management, and cryogen maintenance.
7. Routinely provide advice to NMR users on available experiments and interpret spectra as required.
8. Maintain up-to-date knowledge of advances in NMR instrumentation and apply advanced NMR based strategies to current projects.
9. Present regular progress reports/data analysis to members of the research project team and, as appropriate, to other internal or external audiences to disseminate and publicise research findings. This may include attendance and presentation of new experimental data at national and international meetings as appropriate.
10. Write up results in a timely manner and take a leadership role in writing research manuscripts for publication in high impact journals.
11. Carry out administrative tasks associated with the research project/s as required, to ensure that project/s are completed on time and within budget.

GENERAL ROLE RESPONSIBILITIES:

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| Health & Safety | Understand Company's Health & Safety Policy and follow all company HSE procedures. Report all accidents or any unsafe conditions in the work place. |
| Training and Development | Ensure training has been received before undertaking specific duties and that all training is recorded in training records. |
| Human Resource Management | Adhere to all HR policies and procedures, to include all absence policies and procedures. |
| Communication | Communicate within your own department to ensure that all relevant information is forwarded to the appropriate personnel on a regular and timely basis. Provide regular updates to your line manager regarding progress on required duties and the status of any projects. |
| Equal Opportunities | Observe and adhere to the company's Equal Opportunities and Dignity at Work policies ensuring that a neutral and harmonious work environment is maintained in which bullying and/or harassment does not occur. |
| Core Competency Framework | Ensure that all job specific responsibilities relating to the overall role objective are carried out in accordance with the requirements outlined within the Almac core competency framework. |

By signing this Job Description I accept that I have received and read the Job Description and have accepted the responsibilities identified therein.

EMPLOYEE'S SIGNATURE:

PRINT NAME:

DATE:

This job description should not be regarded as conclusive or definitive. It is a guideline within which the individual jobholder works. It is not intended to be rigid or inflexible and may alter as the Company's strategic direction changes.



PERSON SPECIFICATION

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| RESPONSIBLE FOR (PEOPLE): | N/A |

| | ESSENTIAL REQUIREMENT | DESIRABLE REQUIREMENT | ASSESSMENT METHOD |
|-----------------------|--|--|---|
| QUALIFICATIONS | Degree (or equivalent) in a relevant scientific discipline | A PhD (or equivalent) in a relevant scientific discipline | Application Form and Documentary Evidence |
| EXPERIENCE | <p>Significant relevant experience to include hands on experience in the use of relevant NMR techniques.</p> <p>Previous experience in the screening and/or characterisation of small molecule inhibitors by NMR.</p> <p>Experience of troubleshooting NMR instruments.</p> <p>Sufficient breadth and depth of specialist knowledge in the discipline and of research methods and techniques to work within established research programmes.</p> | <p>Experience in multi-dimensional bio-NMR methods for characterising proteins and protein-ligand interactions.</p> <p>Experience in protein assignment and structural determination.</p> <p>Experience in the investigation of protein / peptide dynamics using NMR relaxation.</p> <p>Previous NMR experience within industry (i.e. pharmaceuticals/biotech).</p> <p>Working knowledge and experience of complimentary biophysical techniques (e.g. SPR, thermophoresis) would be advantageous.</p> <p>Commitment to professional development, as evidenced by membership of scientific societies.</p> | Application Form and Interview |
| KEY SKILLS | <p>Ability to design and interpret data from advanced NMR experiments.</p> <p>Must display clarity of thinking, organisation and attention to detail and ability to work</p> | <p>Ability to prioritise research experiments in order to meet deadlines and targets.</p> <p>Good communication and verbal skills with an ability to explain and rationalise chemical challenges and experimental results to a non-specialist audience.</p> | Application Form and Interview |

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| | <p>autonomously within tight deadlines.</p> <p>Ability to communicate complex information clearly.</p> <p>Team worker, highly motivated, supportive of junior colleagues within the group.</p> <p>Must demonstrate a true commitment to and interest in research.</p> <p>Must be willing to work irregular hours when necessary for the progress of the research project.</p> <p>Must be willing and able to travel to external meetings and/or conferences when required.</p> <p>The ability to think creatively, will be stimulated by innovation and will be able to consider original solutions to problems.</p> <p>A positive attitude, self motivation and a strong focus on delivery.</p> | <p>Good interpersonal skills.</p> | |
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ALMAC CORE COMPETENCIES

| COMPETENCY | BEHAVIOUR | ASSESSMENT METHOD |
|-------------------------------|---|-------------------|
| RESULTS DELIVERY | Delivers results on time, within constraints and in line with company policy and procedure and organisational strategy. Demonstrates a continuous drive for quality and a commitment to excellence. | Interview |
| PROACTIVE SOLUTIONS | Analyses and uses experience and logical methods to make sound decisions which solve difficult problems. Seeks practical/workable and innovative methods to deliver solutions. | Interview |
| LEADS BY EXAMPLE | Promotes a clear vision and mission. Acts as a positive role model for the organisation, fostering a climate of teamwork and development. | Interview |
| COMMUNICATION | Communicates clearly and effectively. Promotes the exchange of ideas and information across the organisation. Fosters dialogue to ensure everyone understands what is going on. | Interview |
| CUSTOMER FOCUS | Strives to exceed the expectations and requirements of internal and external customer; acts with customers in mind and values the importance of providing high-quality customer service. | Interview |
| JOB SPECIFIC KNOWLEDGE | Demonstrates required job knowledge and understanding to successfully and competently fulfill or exceed the requirements of their post. Follows correct procedures and guidelines (SOPs). Proactively demonstrates a desire to enhance and develop their job knowledge. | Interview |