



Job title	Research Fellow (Title will be 'Research Associate' where an appointment is made before PhD is completed)	Job family and level	Research and Teaching Level 4 (Appointment will be Level 4 career training grade where an appointment is made before PhD has been completed)
School/ Department	School of Medicine, Translational Medical Sciences	Location	University Park Campus

Purpose of role

The purpose of this role will be to have specific responsibility for research, for developing research objectives and proposals for a research project in "Targeting refractory and dormant stem cells in childhood leukaemia". This position is an interdisciplinary project and you will be expected to plan and conduct work using approaches or methodologies and techniques appropriate to the type of research, and will be responsible for writing up the work for publication.

You will join an established team, led by Dr Alex Thompson and Dr Claire Seedhouse, whose main areas of research interest include pre-clinical modelling of blood cancers and evaluation of novel therapies.

This post will be based within the new purpose-built expansion of the Centre for Biomolecular Sciences (CBS) (<https://www.nottingham.ac.uk/ccs/cancer-research/cancer-research.aspx>) that houses the Centre for Cancer Sciences within the University of Nottingham. This building brings together interdisciplinary groups from within and outside the Division of Cancer and Stem cells including Cancer, Stem Cells, Immunology, Pathology, Bioengineering and Pharmacy relevant to the project. In partnership with external partners, you will combine stem cell technology, 3D and in vivo modelling and clinical samples, to evaluate the efficacy of a cohort of drugs against leukaemia and other blood cancers. De-risking of such drugs will provide the basis for future development within a therapy-accelerated programme of current and future clinical trials.

You will combine excellence in research, collaboration, communication, and meeting deadlines. It is a particular need for the project that that you have experience in blood cancer, stem cell, cell and/or patient tissue culturing and analysis and an ability to learn new techniques. This may include, for example, skills in qPCR / RNA profiling, next generation sequencing, high content imaging (e.g., confocal plate reader), flow cytometry, CRISPR/Cas9 editing, generating dose response curves and use of in vivo imaging systems.

You will have the opportunity to use your initiative and creativity to identify areas for research, develop research methods and extend your research portfolio.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	<p>Research Responsibilities:</p> <ul style="list-style-type: none"> ▪ To manage, plan and conduct own research activity using recognised approaches, methodologies and techniques within the research area. ▪ To resolve problems, in meeting research objectives and deadlines in collaboration with others. ▪ To identify opportunities and assist in writing bids for research grant applications. Prepare proposals and applications to both external and/or internal bodies for funding, contractual or accreditation purposes. ▪ Develop advanced pre-clinical models of leukaemia to further validate candidate drugs and de-risk such therapies for future incorporation into clinical trials. ▪ Validate and identify existing, novel or repurposed therapies, either singly or in combination, to target blood cancers using systems involving combination drug screening approaches in current models of leukaemia 	65%
2	<p>Engagement, Communication and Continuation Responsibilities:</p> <ul style="list-style-type: none"> ▪ To write up research work for publication and/or contribute to the dissemination at national/international conferences, resulting in successful research outputs. ▪ To collaborate with academic colleagues on areas of shared interest for example, course development, collaborative or joint research projects ▪ Prepare data and regular progress reports to members of the Blood Cancer and Stem Cell Research Group, internal and external audiences and partners. Achieve milestones / deadlines, which will be continuously evaluated and reported to the funder, disseminate, and publicize research findings and actively engage with the funding agency. ▪ Read academic papers, journals and digital material to keep abreast of developments in own specialism and related disciplines and formulate, write and submit grants for fellowship awards, project and travel support to attend and present new experimental data at national and international meetings. 	25%
3	<p>Teaching:</p> <ul style="list-style-type: none"> ▪ You are expected to make a contribution to teaching that is in balance with wider contributions to research and other activities. 	10%
4	<p>Other:</p> <ul style="list-style-type: none"> ▪ Any other duties appropriate to the grade and level of the role. ▪ The School of Medicine recognises the importance of continuous professional development and therefore the importance of providing opportunities, structured support and encouragement to engage in professional development each year. 	

Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> ▪ Excellent oral and written communication skills, including the ability to communicate with clarity on complex information. ▪ Ability to creatively apply relevant research approaches, models, techniques and methods. ▪ Ability to build relationships and collaborate with others, both internally and externally. ▪ High analytical ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights. ▪ Ability to assess and organise resource requirements and deploy effectively 	
Knowledge and experience	<ul style="list-style-type: none"> ▪ Some practical experience of applying the specialist skills and approaches and techniques required for the role. ▪ Experience in use of research methodologies and techniques to work within area. ▪ Previous experience with tissue culture and in-vitro drug treatment of primary cells, stem cells or cell lines. 	<ul style="list-style-type: none"> ▪ Previous success in gaining support for externally funded research projects ▪ Experience of developing new approaches, models, techniques or methods in research area. ▪ Experience in stem cell culture and CRISPR/Cas9 genome editing. ▪ Experience of cellular analysis such as fluorescence microscopy, flow cytometry and colony assays and use of biochemical techniques such as protein analysis, cell cycle apoptosis. ▪ Previous experience in haematology/cancer biology. ▪ Experience in bioinformatics. ▪ Experience in working with industry

		<ul style="list-style-type: none"> ▪ Knowledge of GLP working procedures ▪ Experience in assay development
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ PhD or equivalent in Haematology, Oncology, Immunology, Biochemistry, Pharmacy or Biomedical Science related subject or the equivalent in professional qualifications and experience in research area OR near to completion of a PhD 	<ul style="list-style-type: none"> ▪ 1st Class undergraduate degree in science. ▪ MSc in Stem Cell, Cancer Immunology or related field.
Other	<ul style="list-style-type: none"> ▪ Willingness to adopt the vision and values of the School of Medicine 	<ul style="list-style-type: none"> ▪ Scientific memberships e.g. AACR.



Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

- Valuing people** Is always equitable and fair and works with integrity. Proactively looks for ways to develop the team and is comfortable providing clarity by explaining the rationale behind decisions.
- Taking ownership** Is highly self-aware, looking for ways to improve, both taking on board and offering constructive feedback. Inspires others to take accountability for their own areas.
- Forward thinking** Driven to question the status quo and explore new ideas, supporting the team to "lead the way" in terms of know-how and learning.
- Professional pride** Sets the bar high with quality systems and control measures in place. Demands high standards of others identifying and addressing any gaps to enhance the overall performance.
- Always inclusive** Ensures accessibility to the wider community, actively encouraging inclusion and seeking to involve others. Ensures others always consider the wider context when sharing information making full use of networks and connections.

Key relationships with others



