

# Research Role Profile Job Title: Research Fellow A in Leukaemia and Cell Signalling Responsible to: Head of research group, or principal investigator Responsible for: Not applicable

#### **Job Summary and Purpose:**

To undertake research in accordance with the specified research project(s) under the supervision of the principal investigator.

#### Main Responsibilities/Activities

To undertake a range of research activities within a specified research area, assuming responsibility for specific areas of projects and making use of new research techniques and methods, in consultation with the research award holder or supervisor. This may include fieldwork, interviews, laboratory experimentation, critical evaluation and interpretation, computer-based data analysis and evaluation or library research.

Using initiative and creativity to identify areas for research develop new research methods and extend the research portfolio. Analysing and interpreting results of own research. Write up results and prepare papers for submission to appropriate journals and conferences, and other outputs as required and/or appropriate. Attend appropriate conferences for the purpose of disseminating research results of personal development. The post holder may also contribute to writing bids for research grants and will contribute to collaborative decision making with colleagues in areas of research.

Continually to update knowledge and develop skills, and translate knowledge of advances in the area into research activity.

To plan and manage own research activity in collaboration with others. To carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting and financial control.

To contribute to teaching in the Faculty by carrying out student supervision and/or demonstrating within the post holder's area of expertise and under the direct guidance of a member of departmental academic staff, as appropriate.

The post holder may occasionally be required to supervise more junior research staff.



# **Person Specification**

#### The post holder must have:

A doctoral degree in a relevant discipline (although individuals who have almost completed a doctoral degree may be appointed). Consideration may also be given to individuals who do not hold a doctoral degree but have required skills based on a number of years experience in specified / relevant fields

The post holder will have authority over some aspects of project work and must be capable of providing academic judgement, offering original and creative thoughts and be able to interpret and analyse results.

#### **Relationships and Contacts**

Direct responsibility to the principal investigator or academic supervisor. The post holder may be asked to serve on a relevant Faculty committee. There may be additional reporting and liaison responsibilities to external funding bodies or sponsors. The post holder may work on original research tasks with colleagues in other institutions.

#### **Special Requirements**

To be available to participate in fieldwork as required by the specified research project

#### All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities policy.
- Help maintain a safe working environment by:
  - Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand
  - Following local codes of safe working practices and the University of Surrey Health and Safety Policy
- Undertake such other duties within the scope of the post as may be requested by your Manager.



### **Addendum**

This document provides additional information relating to both specific aspects of the post/faculty and any post specific person specification criteria. The information contained within this document should always be read in conjunction with the accompanying generic Job Purpose.

Job Title:

Research Fellow in Leukaemia and Cell Signalling

## **Background Information/Relationships**

Acute myeloid leukaemia (AML) is the second most common leukaemia in children and adolescents and the leading cause of childhood leukemic mortality. With the current treatment, based on chemotherapy and allogeneic hematopoietic stem cell transplantation (HSCT), 65-75% of patients will achieve long-term survival, however too many children with AML will die from direct complications of the harsh treatment or relapse, whereas the survivors suffer unacceptably high rates of long-term morbidity resulting from chemotherapy exposure or sequelae of bone marrow transplantation. As a result, the identification of new targeted therapy and cell therapy to improve overall survival in these children remain an unmet clinical need and one of the goals of Dr Maria Teresa Esposito's research team. Dr Esposito's team has recently discovered that high level of expression of the gene SET significantly correlates with worse overall survival in adult and paediatric AML. Strikingly, silencing SET abrogates the clonogenic potential of AML cells carrying various cytogenetic abnormalities and decreases the expression of genes belonging to the AML epigenetic signature that are highly predictive of poor outcomes and relapse in AML. As a postdoctoral researcher, you will join a CCLG/Little Princess Trust funded project, to further investigate SET as a dependency and therapeutic target in paediatric AML, by employing an integrated molecular approach encompassing RNA-seq, ChiP-seq and mouse modelling coupled with gene silencing technology.

We are looking for a candidate who has completed or is near to completing a PhD in biochemistry, molecular biology, cell biology or related areas and has experience of working in the cancer signalling or related fields. You will have expertise in working with mice, flow cytometry, mammalian cell culture and molecular biology techniques. Experience with ChiP and Cut&Run or in leukaemia/ haematopoietic stem cells would be advantageous.

You will have a good track-record of high-quality peer reviewed research and excellent communication skills with a very high level of written and spoken English. You will be a self-motivated, collaborative, independent thinker with excellent organisational skills needed to drive the project forward, and a genuine passion for research and for contributing to a supportive an inclusive research environment.



# **Person Specification**

This section describes the sum total of knowledge, experience & competence required by the post holder that is necessary for standard acceptable performance in carrying out this role. This is in addition to the criteria contained within the accompanying generic Job Purpose.

| Requirements  | Essential/<br>Desirable |
|---|-------------------------|
| PhD in cancer biology or related discipline   | E                       |
| Knowledge of cancer biology   | Е                       |
| Knowledge of leukaemia  | D                       |
| Knowledge of haematopoiesis   | D                       |
| Knowledge of epigenetics  | D                       |
| Significant research laboratory experience in mice, flow cytometry, mammalian cell culture and molecular biology techniques | E                       |
| Research experience in ChIP   | D                       |
| Research experience in CUT&Run  | D                       |
| Research experience in leukaemia/haematopoietic stem cells  | D                       |
| Research experience in gene silencing/gene editing  | D                       |
| Proven laboratory bench skills and ability to maintain accurate and up to   | E                       |
| date lab records  |                         |
| A good publication record with at least one publication as first author.  | Е                       |
| Ability to work with colleagues with a positive, flexible, collegial and  | Е                       |
| collaborative approach.   |                         |
| Ability to discuss, clarify and agree objectives  | Е                       |
| High level of personal organisation and efficiency  | Е                       |
| Experience of prioritising workloads and organising research in a fast-   | D                       |
| paced dynamic environment   |                         |
| Positive, resilient and determined attitude   | Е                       |
| Willingness to learn new skills and techniques  | Е                       |
| Willingness to work flexibly in order to achieve project demands  | D                       |
| Ability to present confidently and in an engaging manner, both in writing   | D                       |
| and verbally  |                         |



# **Key Responsibilities**

This document is not designed to be a list of all tasks undertaken but an outline record of any faculty/post specific responsibilities. This should be read in conjunction with those contained within the accompanying generic Job Purpose.

To study the effect of silencing SET in vivo on leukaemia onset in appropriate animal models, and in vitro, focusing on the impact of SET silencing on gene expression and chromatin biology. You will undertake the experiments, assisted by technical staff. You will analyse the data and be involved in report writing up for scientific papers and bids for research.

N.B. The above is not exhaustive.