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| THE UNIVERSITY OF NOTTINGHAM  RECRUITMENT ROLE PROFILE FORM |

**Job Title:** Research Technician (fixed term)

**School/Department:** School of Medicine - Division of Cancer and Stem Cells

**Salary:** £22,029 - £26,274 per annum, depending on skills and experience. Salary progression beyond this scale is subject to performance.

**Job Family and Level:** Technical Services Level 3

**Contract Status:** This post is available from 1st February 2015 to 31st January 2016

**Hours of Work:** Full-time, 36.25 hours per week

**Location:** Clinical Oncology, Renal Oncology Building, City Hospital

**Reporting to:** Head of Radiation Biology Group

**Purpose of the New Role:**

To provide technical support to the Translational and Radiation Biology Research Group, led by Dr Martin, on a 12 month research project funded by Pancreatic Cancer UK (PCUK). The role holder will oversee the day to day running of the research labs, allocating resources and providing technical supervision/training in the use of equipment and techniques in the area of translational and radiation biology to relevant staff/students to ensure objectives are met.

The role holder will be responsible for the upkeep of designated research laboratories as well as the use and maintenance of equipment.

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|  | **Main Responsibilities** | **% time per year** |
| 1. | **Provide specialist technical support:**  A variety of techniques and equipment are involved, including in vitro tissue culture, histopathology and general molecular biology. These will include Western blotting and real time polymerase chain reaction techniques.   * Optimise and perform in-vitro tissue culture to ensure consistent results * Optimise and perform histopathology and general molecular biology techniques to ensure consistent results * Conduct cell irradiations and drug-radiation cytotoxicity/clonogenic survival assays using specialist equipment * Supervise laboratory areas as required * Assist staff and students undertaking research based projects * To support additional duties as required both with the research group and unit | 55% |
| 2. | Use specialist technical skills to assist in various research projects. Contribute to the development of new or improved methods/techniques/equipment and to undertake further training to develop skills and techniques base in radiation/translational research area. | 15% |
| 3. | Production of preliminary data for meetings with Principal investigator | 10% |
| 4. | Routine maintenance, fault diagnosis and repair of equipment | 5% |
| 5. | Ensure reagents and consumables are kept at required stock levels | 5% |
| 6. | **Health & Safety:**   * Produce and maintain standard operating procedures for lab processes * Ensure they are accurate and reviewed regularly to ensure high quality reproducible results * Ensure students and new researchers are trained in techniques and the safe and effective use of equipment to ensure compliance with relevant health and safety regulations. | 5% |
| 7. | Any other duties as required by the post holder | 5% |

**Knowledge, Skills, Qualifications & Experience**

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|  | **Essential** | **Desirable** |
| **Qualifications/ Education** | A minimum of a HNC in a relevant subject, or equivalent qualifications plus considerable work experience in relevant role **or**  Substantial work experience in relevant role | Additional qualifications in laboratory skills e.g. Health and Safety |
| **Skills/Training** | Enthusiasm for research and training of researchers  Understanding of regulations governing laboratory work  Excellent oral and communication skills including the ability to communicate with clarity on complex information  Ability to work accurately in order to maintain high standards, with the ability to work effectively under pressure.  Ability to adopt a methodical approach to work in order to achieve work deadlines.  Ability to build relationships and collaborate with others internally and externally. | Knowledge of Q-RT-PCR  Proven report writing skills  Capability to organise own and other’s activities to meet set deadlines.  ‘Drive for results’ the ability to coach and motivate others to meet and exceed set objectives. |
| **Experience** | Experience of in vitro cancer cell tissue culture and Western blotting  Previous laboratory experience in biological sciences research  Experience with Immunohistochemistry and Histopathology  Experience of clonogenic survival assays and cytotoxicity endpoints | Experience of supervising junior staff and students  Experience with confocal microscopy  Experience with flow cytometry  Experience with Radiation Biology and cell irradiations  Experience with drug-radiation interactions and assays used to asses.  Knowledge of statistical analysis software (SPSS) |

**Decision Making**

i) taken independently by the role holder

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| Manage own workload.  Prepare and undertake established experimental protocols.  Maintain appropriate laboratory consumables required for project.  Advise and solve routine queries.  Organise and prioritise routine workload in the laboratory. |

ii) taken in collaboration with others

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| Advice on unfamiliar procedures.  Co-ordination and delivery of support and materials for named projects.  Supervision and training of junior staff and students.  Purchase of high value lab consumables.  Health and Safety issues. |

iii) referred to the appropriate line manager by the role holder

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| Interpretation of experimental results and project direction with Dr Stewart Martin.  Resolution of complex problems. |

**Additional Information**

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| The new role will support the research team on a Pancreatic Cancer UK Research Innovation Fund project entitled ‘Targeting the thioredoxin system in pancreatic cancer to improve radiotherapeutic response.’  The concepts and data generated by this project will be strictly confidential to the Principal Investigator (Stewart Martin) and funding body (Pancreatic Cancer UK). |

**Appendix 1**

**The University of Nottingham**

The University of Nottingham is a global-leading, research-intensive university with campuses in the UK, Malaysia and China. Our reputation for world-class research has yielded major scientific breakthroughs such as Nobel-winning MRI techniques, drug discovery, food technologies and engineering solutions for future economic, social and cultural progress.

Already ranked among the UK’s elite universities and global polls for research excellence, our reputation for world-class research has been further enhanced with the 2008 results of the Research Assessment Exercise (RAE).

In addition to scoring highly in quality rankings covering major disciplines in science, engineering, the social sciences, medicine, business and the arts, it is Nottingham’s increase in research power rankings which demonstrate the impressive volume of excellent research which is carried out. We are now ranked in the Top 7 of all British universities and are one of only two institutions to move into the UK Top 10 since 2001 – an increase of seven places, making us the highest mover of any university.

Following the RAE results, 90% of all research at Nottingham has been classified of an ‘international standard’ and 60% as ‘world-leading’ or ‘internationally excellent’.

The main University campus is set beside a lake, in an extensive belt of woodland, parks and playing fields. The 330 acre University Park Campus is the focus of life for more than 32,000 students and houses the majority of the University’s academic schools and many of the central Services. The Jubilee campus is situated 2 miles away from the University Park, and provides extra capacity. The University Medical School is situated next to the University Park. Together with the University Hospital, it forms the Queen’s Medical Centre (QMC).

**University of Nottingham Medical School**

Nottingham has a strong reputation for both clinical medicine and teaching. As one of the most popular medical schools in the country, it is able to select excellent students and produce and attract good junior doctors.

**The School of Medicine** was formed following Faculty reconfiguration on August 1st 2013. The new School of Medicine comprises the Divisions of Cancer and Stem Cell Sciences, Child Health, Obstetrics and Gynaecology; Clinical Neuroscience; Epidemiology and Public Health; Primary Care; Psychiatry and Applied Psychology; Rehabilitation and Ageing; Medical Sciences and Graduate Entry Medicine; Respiratory Medicine; Rheumatology, Orthopaedics and Dermatology and the Nottingham Digestive Diseases Centre. The School also hosts the Medical Education Centre, the Centre for Interprofessional Education and Learning, the Clinical Research Facility, the Clinical Skills Centre, NIHR design Service East Midlands, Nottingham Clinical Trials Unit, PRIMIS and Medical Imaging Unit.

The new School of Medicine brings together in one School staff undertaking research for the benefit of the health of patients. It includes all primary care and hospital-based medical and surgical disciplines, principally in the Queen’s Medical Centre and City Hospital Nottingham Campuses, Royal Derby Hospitals NHS Foundation Trust and also at the University’s main campus and at the King’s Meadow and Jubilee Campuses. Most of our School’s Senior Researchers and Teachers are also clinicians who dedicate 50% of their time to patient care within the Nottingham University Hospitals NHS Trust & Royal Derby Hospitals NHS Trust. This close juxtaposition brings cutting-edge clinical care to our patients and clinical relevance to our research and teaching. We are closely integrated with our full time NHS clinical colleagues, many of whom are themselves leaders in research and teaching and who work closely with the University and this increases the mutual benefit from integration between the University and NHS.

Mission:

Our mission is to improve human health and quality of life locally, nationally and internationally through outstanding education, research and patient care.

Priorities:

1. **Teaching and learning**, particularly training tomorrow’s doctors and teaching specialised postgraduates
2. **Research and research training:** We will perform and support the highest quality “big” research which impacts on human health and disease
3. **Partnership with the NHS** and other healthcare providers
4. **Visibility and profile of the School of Medicine:** We will do what we do better, and we will tell others about it

Ethos and principles:

1. **Having people and patients at the heart of all we do**: our teaching and learning, our research and our patient care
2. **Contribution within the School of** **Medicine and to society** beyond our immediate roles; helpfulness and service
3. **Openness and fairness**, with particular emphasis on communication (both internal and external) and on equality and diversity among students and staff
4. **Personal and group responsibility** for all aspects of our work, within a culture of opportunity and reward

Our research spans 11 major themes, ranging from cancer to vascular medicine. We work closely with industry and the NHS. Our world-leading research ranges from basic and translational science through to clinical trials, epidemiology, and health services research. Our clear theme is improving human health, underpinning a vibrant postgraduate research training programme leading to PhD or DM. Many of our academics are clinicians, using their expertise to provide cutting edge specialised treatment to NHS patients; reflecting our ethos that patients are at the heart of all we do.

Our major research themes are in Cancer and Stem Cells; Child Health, Obstetrics & Gynaecology; Clinical Neurosciences; Digestive Diseases; Epidemiology and Public Health; Mental Health; Musculoskeletal and Dermatology; Primary Care; Rehabilitation and Ageing; Respiratory Medicine and Vascular and Renal Medicine.

The School of Medicine trains tomorrow’s doctors on a vibrant undergraduate medical course with a unique intercalated BMedSci, as well in a specialised graduate-entry programme built around clinical problem solving. We teach medicine and related disciplines at both undergraduate and postgraduate level. We have a dedicated clinical academic training programme and are committed to training PhD and doctoral research students and to supporting postdoctoral clinicians and scientists in their research.

Professor John Atherton is Dean of the School of Medicine.

For further information, please see our website <http://www.nottingham.ac.uk/medicine>

**Nottingham**

Central within the East Midlands, Nottingham is a vibrant and prosperous city with something to offer everyone. It is one of the UK’s leading retail centres and has a huge variety of restaurants, bars and nightclubs which attract people from all over the UK. Culturally, it has good theatres, an arena which attracts both national and international performers and a range of historical interests relating to subjects such as the lace industry, Lord Byron and DH Lawrence. Nottingham is also known for sport, being the home of Trent Bridge Cricket Ground, Nottingham Forest and Notts County Football Clubs, the National Water Sports Centre and the Nottingham Tennis Centre. There is a good network of roads with easy access to the M1 and the A1, a fast frequent rail service to London and other major cities. Nottingham East Midlands Airport is only eighteen miles away.

The city is set within a county of outstanding natural beauty which includes Sherwood Forest, Wollaton Park, lively market towns and wonderful historic buildings. Housing is relatively inexpensive and, in addition to the two Universities, there are excellent schools and colleges available.

**To find out more about Nottingham, use the following links:**

Nottingham County Council – Tourism <http://www.experiencenottinghamshire.com/>

University of Nottingham <http://www.nottingham.ac.uk>

Zoopla (Guide to local properties) <http://www.zoopla.co.uk/>

**My Nottingham** (information on schools, term dates, school transport etc.)

<http://www.nottinghamcity.gov.uk/index.aspx?articleid=8524>