ICR The Institute of Cancer Research

Higher Scientific Officer – Proteomics

Candidate Information

February 2022

The Institute of Cancer Research

About our organisation

We are one of the world's most influential cancer research institutes with an outstanding record of achievement dating back more than 100 years. We are world leaders in identifying cancer genes, discovering cancer drugs and developing precision radiotherapy. Together with our hospital partner The Royal Marsden, we are rated in the top four centres for cancer research and treatment worldwide.

As well as being a world-class institute, we are a college of the University of London. We came top in the league table of university research quality compiled from the Research Excellence Framework (REF 2014).

We have charitable status and rely on support from partner organisations, charities, donors and the general public.

We have more than 1000 staff and postgraduate students across three sites – in Chelsea and Sutton.

About the appointment

Two positions for Higher Scientific Officers are available from July 2024 in the Molecular & Systems Oncology Team (Huang Lab) in The Institute of Cancer Research based in Sutton. The objective of these posts are to provide high-level technical support for mass spectrometry-based proteomics projects related to soft tissue and bone sarcomas that are currently underway in the laboratory. The role will involve isolation and QC of of protein/RNA/DNA from cell lines, xenograft and patient specimens (formalin-fixed, paraffin-embedded and frozen tissue) for Omics analysis. Experience in hands-on mass spectrometry-based proteomic sample preparation workflows and data analysis is required. Furthermore, prior experience in cell culture techniques or handling of human tissue would be beneficial. The successful candidates will work as part of a multi-disciplinary team with state-of-the-art facilities.

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Applicants will hold a MSc. or PhD in Biochemistry, Cancer Biology, Molecular Biology, Analytical Chemistry or a similar discipline. Applicants holding a MSc. are expected to have significant post-qualification experience in a relevant discipline. Applicants must have good laboratory and analytical skills with experience in working in a collaborative environment. Experience in cell culture and tissue processing for proteomics, histological techniques and extraction of protein/DNA/RNA from fixed/frozen tissue is highly desirable. Prior experience in the running of mass spectrometry-based proteomic workflows and processing/analysis of proteomics data is essential.

Appointment will be on a Fixed Term Contract for 24 months in the first instance. The full salary range for the grade is £37,050 - £39,000. Appointments are normally made at the start of the range which represents the market rate for the role but consideration will be given to experience and skills. Future progression is based on annual performance review.

To apply please submit an application online on the ICR Careers site, attaching your CV with the supporting statement (addressing with specific examples where you meet the person specification, a brief description of your relevant experience and incl. the names and addresses of at least two referees).

Our mission is to make the discoveries that defeat cancer.

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Our values

The ICR has a highly skilled and committed workforce, with a wide variety of roles, each requiring different skills. But whether you work as a researcher, or work as part of our corporate team, your work and behaviour is underpinned by these six values. They are what bring us together as one team - as 'One ICR'.

Pursuing excellence

We aspire to excellence in everything we do, and aim to be leaders in our field.

Acting with Integrity

We promote an open and honest environment that gives credit and acknowledges mistakes, so that our actions stand up to scrutiny.

Valuing all our people

We value the contribution of all our people, help them reach their full potential, and treat everyone with kindness and respect.

Working together

We collaborate with colleagues and partners to bring together different skills, resources and perspectives.

Leading innovation

We do things differently in ways that no one else has done before, and share the expertise and learning we gain.

Making a difference

We all play our part, doing a little bit more, a little bit better, to help improve the lives of people with cancer.

Our values set out how each of us at the ICR, works together to meet our mission – to make the discoveries that defeat cancer. *They summarise our desired behaviours, attitudes and culture – how we value one another and how we take pride in the work we do, to deliver impact for people with cancer and their loved ones."*

Professor Kristian Helin
Chief Executive

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Job description

Department / division:	Molecular Pathology/Molecular & Systems Oncology Team
Pay grade / staff group:	Scientific Professional 5/Higher Scientific Officer
Hours / duration:	Full time (35 hours per week), Monday to Friday. Fixed term contract for 18 months
Reports to:	Dr Paul Huang (Team Leader, Molecular & Systems Oncology Team)
Main purpose of the job:	To provide high-level technical support for proteomics projects that are currently underway in the laboratory. These projects focus on cell culture- and tissue-based molecular analysis including mass spectrometry-based proteomics

Duties and responsibilities:

Experimental laboratory work

Extraction and isolation of protein/DNA/RNA from biological material including cell culture and fresh, frozen and formalin fixed material for molecular analysis.
Undertake mass spectrometry-based proteomics experiments and data analysis
Process, store and track histological specimens for research project in line with current guidelines, including the use of FreezerPro.
Immunohistochemical staining of tissue sections.
Undertake cell culture experiments, including drug response and other phenotypic assays.
Perform molecular biology analysis of specimens including, transcriptomics, qPCR and DNA sequencing.
Ordering the necessary consumables, stocks and equipment for research projects and tissue collection.
To maintain accurate records of experiments and reagent descriptions in laboratory handbooks.

General Laboratory Management

To work in a flexible but organised manner.
To prepare reports of results for publication and take an interest in the relevant literature.
To meet objectives within pre-determined timescales.

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General

All staff must ensure that they familiarise themselves with and adhere to any ICR policies that are relevant to their work and that all personal and sensitive personal data is treated with the utmost confidentiality and in line with the General Data Protection Regulations
Any other duties that are consistent with the nature and grade of the post that may be required.
To work in accordance with the ICR's Values.
To promote a safe, healthy and fair environment for people to work, where bullying and harassment will not be tolerated.
This job description is a reflection of the present position and is subject to review and alteration in detail and emphasis in the light of future changes or development.

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Person specification

Education and Knowledge

MSc. in Biochemisty/Cancer Biology/ Molecular Biology/Analytical Chemistry or related subject	Essential
PhD in Biochemisty/Cancer Biology/ Molecular Biology/Analytical Chemistry or related subject	Desirable

Skills

Good laboratory and analytical skills	Essential
Meticulous attention to detail for record keeping	Essential
Demonstrable skills for proficient evaluation and documentation of research data	Desirable
Proficient use of PC and bioinformatic databases	Desirable
Excellent interpersonal skills with the ability to work flexibly and to establish effective working relationships	Essential
Good organisational skills	Essential
Ability to plan, organise & prioritise a busy workload	Essential
Ability to work effectively & efficiently, both independently & as part of a team (with limited supervision)	Essential
Good communication skills	Essential

Experience

Extensive experience in cell culture and tissue handling, histological techniques and isolation of biomolecules (DNA/RNA/proteins) from cell culture, clinical or mouse tissue specimens.	Desirable
Mass spectrometry-base proteomics sample preparation workflows, data acquisition and data analysis pipelines	Desirable
Hands-on experience in running samples on mass spectrometers and associated instrumentation (e.g. HPLC) - including data-dependent acquisition and data-independent acquisition approaches.	Desirable
Hand-on experience in sample preparation for genomics and transcriptomics experiments	Desirable
Molecular biology techniques - qPCR, DNA sequencing	Desirable
Cell culture technique – cell viability, drug screens and phenotypic assaus.	

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Benefits

We offer a fantastic working environment, great opportunities for career development and the chance to make a real difference to defeat cancer. We aim to recruit and develop the best – the most outstanding scientists and clinicians, and the most talented professional and administrative staff.

The annual leave entitlement for full time employees is 28 days per annum on joining. This will increase by a further day after 2 years' and 5 years' service.

Staff membership to the Universities Superannuation Scheme (USS) is available. The USS is a defined benefit scheme and provides a highly competitive pension scheme with robust benefits. The rate of contributions is determined by USS and details of the costs and benefits of this scheme can be found on their website. If staff are transferring from the NHS, they can opt to remain members of the NHS Pension Scheme.

We offer a range of family friendly benefits such as flexible working, a parents' group, and a maternity mentoring scheme. Other great benefits include interest free loans for discounted season tickets for travel and bicycle purchases, access to the NHS discounts website, a free and confidential Employee Assistance Programme which offers a range of well-being, financial and legal advice services, two staff restaurants, and access to a gym and sporting facilities at our Sutton site.

Further information

You may contact Dr Paul Huang for further information by emailing paul.huang@icr.ac.uk. This job description is a reflection of the current position and is subject to review and alteration in detail and emphasis in the light of future changes or development.