



Higher Scientific Officer Proteomics Core Facility – Professor Jyoti Choudhary Candidate Information

April 2025

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 second in the league table of university research quality compiled from the Research Excellence Framework (REF 2021). We have charitable status and rely on support from partner organisations, charities, donors and the general public.

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

Proteomics Core Facility

The Proteomics Core Facility led by Professor Jyoti Choudhary, is among the most sophisticated in the UK, providing a highly-skilled specialist service cutting edge mass spectrometry-based proteomics analysis as well as conducting research to develop innovative quantitative proteomics workflows for the characterization of multiple aspects of protein function and structural attributes. Find out more about the Proteomics Core Facility here: www.icr.ac.uk/research-and-discoveries/other-facilities-and-technology/proteomics-core-facility

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Higher Scientific Officer

The Higher Scientific Officer (HSO) will support collaborative research as well as development of new analysis methods. The post holder will undertake end-to-end analysis of a variety of samples to characterize proteome features in a quantitative fashion. The main experimental analysis pipelines will include isobaric labelling and DIA quantitation, chromatography fractionation and enrichment of post-translational modifications followed by mass spectrometry analysis using tribrid systems. In addition, data analysis using statistical approaches and pathway analysis will be conducted.

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

Proteomics Core Facility – Professor Jyoti Choudhary

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Job description

Department / division:	Proteomics Core Facility
Pay grade / staff group:	Scientific Professional Pay Grade 5
Hours / duration:	Full time (35 hours per week), Monday to Friday. Fixed term contract for 6 months.
Reports to:	Professor Jyoti Choudhary
Main purpose of the job:	Provide high quality proteomics analysis including isobaric labelling and DIA quantitation, chromatography fractionation and enrichment of post-translational modifications

Duties and responsibilities:

- Determine and use appropriate techniques to carry out proteomics analysis including quantitative mass spectrometry with label and label-free approaches, with an understanding of study designs and their importance in final data quality
- Perform sample preparation for proteomics with skills in establishing robust workflows
- Develop and optimise proteomics methods to study diverse protein attributes such as post-translational modifications, interactions and turnover
- Troubleshoot methods and instrumentation to achieve best analytical performance
- Utilise mass spectrometry computational tools for spectrum assignment, quantitation and preparation of data for biological interrogation
- Perform data analysis including pathway analysis with appropriate statistical methods
- Prepare oral and written scientific reports and draft manuscripts for publications in scientific journals and patents
- Generate preliminary data and data analysis for grant applications
- Maintain accurate records in laboratory notebooks
- Maintain specialised laboratory equipment and mass spectrometry instruments
- Initiate laboratory procedures to ensure smooth running of experimental work and with others to ensure that housekeeping tasks are performed on a regular basis
- Initiate purchase of consumable items and minor equipment within budgetary limits
- Work in a flexible but organised manner to meet objectives/deadlines
- Work and communicate effectively with other members of the team and external collaborators
- Take an interest in the general literature. Provide domain expertise with the team
- Work independently on a defined project and to consult when appropriate

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- Contribute to the supervision and training of junior staff
- Ensure that work conforms to the requirements of COSHH, Local Rules for Health and Safety, Home Office regulations and other Codes of Practice as required by the ICR Safety Policy

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

PhD in biological or chemical science	Essential
Additional qualification/training in cancer research	Desirable

Skills

Ability to troubleshoot LC-MS platforms and optimise performance	Essential
Ability to design and implement proteomics experiments using state-of-the-art techniques	Essential
Ability to perform statistical analysis, data integration and visualisation to a high level	Essential
Proficiency in proteomics data analysis encompassing spectrum assignment, quantitation and preparation of data for biological interrogation.	Essential
Familiarity with coding in R or scripting	Desirable
Ability to conduct large scale data analysis	Essential
Ability to present proteomics data to a high standard	Essential

Experience

Solid expertise in quantitative proteomics including SILAC and TMT labelling as well as label-free	Essential
Expertise in biochemical and protein purification techniques	Essential
Demonstrated expertise in proteomics data analyses including quantitative analysis, statistical methods and pathway analysis	Essential
Proteomics method development and optimisation, encompassing complete workflows of experimental and computational approaches	Essential
Conduct end-to-end analysis using diverse proteomics techniques	Desirable
Publication of own research	Essential

General

Enthusiasm to work in an interdisciplinary environment towards the goal of developing improved cancer therapies	Essential
Good collaborative and communication skills	Essential

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Highly motivated and strong desire for excellence	Essential
Can prioritise work to meet deadlines	Essential
Attention to detail and accuracy	Essential
Ability to work independently and as part of a team	Essential
Proficient use of PCs (e.g. Microsoft Word, Excel and Powerpoint) and databases	Essential

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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. All staff receive an additional three days at Christmas.

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 Professor Jyoti Choudhary for further information by emailing Jyoti.Choudhary@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.