ICR The Institute of Cancer Research

Postdoctoral Research Fellow

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

Thoracic Oncology & Immunotherapy Group, Division of Cancer Therapeutics

The Thoracic Oncology & Immunotherapy Group, led by Dr. Astero Klampatsa, investigates the immunobiology and CAR-T cell immunotherapy of thoracic malignancies (lung cancer and mesothelioma), with a special interest in the mechanisms governing CAR-T cell activity within the tumour microenvironment. Ongoing projects include elucidating the role of NK cells in mesothelioma, engineering and optimizing novel CAR-T constructs, and dissecting the mechanistic underpinnings of CAR-T cell function. We employ a multidisciplinary toolkit—encompassing proteomics, advanced flow cytometry, T cell engineering, and both in vitro and in vivo model systems—to drive preclinical discoveries with strong translational potential.

The Division of Cancer Therapeutics brings together a wide variety of disciplines, including cell and molecular biology, pharmacology, tumour modelling, computational and structural biology, and medicinal chemistry, in order to select promising drug targets, design effective

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prototype drugs and biomarkers, and develop strategies to counter drug resistance.

We are seeking an experienced and motivated scientist to join the Thoracic Oncology & Immunotherapy Group as a Postdoctoral Training Fellow. The successful candidate will lead a project focused on re-engineering CAR constructs to enhance therapeutic efficacy through modulation of the tumour microenvironment. This position offers the opportunity to work at the interface of cutting-edge immunotherapy and translational cancer research within a highly collaborative team.

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:	Cancer Therapeutics
Pay grade / staff group:	Scientific Professional
Hours / duration:	Full time (35 hours per week), Monday to Friday. Fixed term contract for 3 years
Reports to:	Group Leader
Accountable to:	
Main purpose of the job:	Preclinical development of CAR-T cell therapy

Duties and responsibilities:

- **Design and Engineering:** Construct novel CAR-T cell therapies, including vector design, gene editing, and the development of innovative receptor constructs.
- **In Vitro and In Vivo Studies:** Undertake a wide range of experiments to assess the functionality and efficacy of CAR-T cells. This includes:
- **Cell Culture:** Aseptic culturing of primary T cells, tumour cell lines, and other relevant cell types.
- **Functional Assays:** Perform cytotoxicity assays, cytokine release assays (ELISA), and immunophenotyping (flow cytometry).
- **In vivo:** Evaluate the in vivo anti-tumour activity, persistence, and safety of CAR-T cell candidates in established xenograft models of mesothelioma.
- **Molecular and Cellular Biology:** Employ techniques such as multiparameter flow cytometry, PCR, qPCR, Western blotting, and viral and non-viral gene delivery methods.
- **Data Analysis and Interpretation:** Analyze experimental data, interpret results, and present findings to internal lab meetings and at scientific conferences.
- **Collaboration and Communication:** Work in collaboration with other group members and have the opportunity to contribute to other research projects within the lab. Maintain clear and detailed experimental records and contribute to the writing of publications, regulatory submissions, and funding applications.
- **Innovation:** Stay abreast of the latest advancements in the CAR-T cell therapy field and actively contribute to the development of novel technologies and methodologies.

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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.

Workforce Agreement

The ICR has a workforce agreement stating that Postdoctoral Training Fellows can only be employed for up to 7 years as PDTF at the ICR, providing total postdoctoral experience (including previous employment at this level elsewhere).

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Person specification

Education and Knowledge

Ph.D. in Immunology, Biotechnology, Cell Biology, Molecular Biology, or a closely related field	Essential
Postdoctoral or industry experience in a CAR-T cell therapy or immuno-oncology/immunology setting	Desirable
Knowledge of CRISPR/Cas9 gene editing	Desirable
Proficiency in bioinformatics tools for data analysis	Essential

Skills

Proficiency in primary T cell isolation, culture, and genetic modification	Essential
Prior experience with viral transgene delivery	Essential
Strong foundation in molecular biology techniques	Essential
Demonstrated experience with in vitro functional assays	Essential
Hands-on experience with multicolour flow cytometry	Desirable
Prior experience with in vivo models	Desirable

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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 Astero Klampatsa for further information by emailing astero.klampatsa@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.