

Job description

Postdoctoral Training Fellow: Experimental and Translational Theranostic

Candidate Information

April 2025

Department / division:	Radiotherapy and Imaging
Pay grade / staff group:	Postdoctoral Training Fellow
Hours / duration:	Full time (35 hours per week), Monday to Friday. Fixed-term contract for 1 year initially, with the possibility of renewal.
Reports to:	Dr Kathy Chan, Group Leader

Context

The Experimental and Translational Theranostic Group, led by Dr Kathy focused on the development of next-generation 'radiotheranostics' - a combination of whole-body radionuclide-based imaging and therapy for cancer detection and treatment. The group also investigates the biological effects of radionuclide therapy to identify potential druggable targets and improve treatment outcomes. Our team is embedded within the Division of Radiotherapy and Imaging at ICR, Sutton, London. We have a highly supportive and interactive research environment, and state of the art facilities for Centre for cancer imaging, Cell biology, Molecular biology and Flow cytometry. We also closely interact with other divisions at the ICR, including Breast Cancer Research and Cancer Therapeutics, providing exposure to collaborative research. The great variety of disciplines at the ICR will ensure that the successful candidate will be exposed to fantastic research and seminars from all types of backgrounds.

A post-doctoral position is immediate available for a preclinical PET scientist within the group, ideally with experience working with cancer models. We are looking for a highly motivated and creative individual to lead discovery efforts in the development of targeted radiopharmaceuticals and explore the tumour microenvironment and immune response to targeted-radionuclide therapy *in vivo*. A strong interest in novel radiopharmaceutical development would be advantageous.

The position will be based within the Centre for Cancer Imaging (CCI), which provides an integrated environment for multi-modality pre-clinical imaging, co-locating 7T and 1T MRI systems, a PET/SPECT/CT system, multispectral optoacoustic and ultrasound imaging platforms, bioluminescence imaging systems and micro-CT. The position will provide excellent opportunities to interact within a multidisciplinary environment of staff within imaging, radiotherapy, drug development and molecular pathology, and explore new avenues of research.

Our mission is to make the discoveries that defeat cancer.

Main purpose of the job

To lead discovery efforts for new targeted radiopharmaceuticals. This individual will be responsible for the important aspect of an exciting interdisciplinary program, from radiolabelling feasibility to preclinical validation of novel radiopharmaceuticals, ultimately leading to viable diagnostic and/or therapeutic candidates for clinical translation. The ideal candidate will have experience with radiopharmaceutical development.

Further information

You may contact Dr Kathy Chan for further information by emailing Kathy.chan@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.

Duties and responsibilities

Key duties

Foster a collaborative and inclusive lab environment by working closely and efficiently with team members and key external collaborators, offering valuable scientific contributions to research projects

Design and execute experiments to demonstrate *in vitro* activities and *in vivo* efficacy as well as to define mechanism of action

Ensure that experimental projects are performed to a high standard and in a timely manner, as agreed upon with the Group Leader

Participate in the supervising and training of other staff and student members associated with projects within the group

Manage existing and develop new research projects, and contribute towards grant application proposals under the general direction of the Group Leader

Share responsibility for the effective running and maintenance of research equipment in radiochemistry and preclinical imaging labs, associated laboratory space and shared facilities

Maintain proper safety procedures and practices in respect of this work and comply with local safety rules

Strive for ongoing improvement, such as learning new technical skills and operating new equipment

Contribute to the preparation of scientific publications and local and international scientific meetings

Contribute to joint team discussions, seminars and journal clubs

Participate in, report on, and, when necessary, organise meetings for external collaborative projects

Workforce Agreement for Postdoctoral Training Fellows

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) does not exceed 7 years.

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.

Person specification

Education and Knowledge

PhD in cancer biology, molecular biology, radiochemistry, medicinal chemistry or a related discipline	Essential
Knowledge and experience in radiopharmaceutical development for preclinical cancer models	Essential
Knowledge of immuno-oncology and targeted therapies	Desirable

Skills

Essential
Essential

Experience

Expertise in cellular and molecular biology techniques, in vitro and in vivo models for target validation, efficacy and toxicology studies	Essential
Experience in radiopharmaceutical development for preclinical validation, including the radiolabelling of various radionuclides with small molecules, peptides, siRNA, ASO, and antibodies	Essential
Experience in animal model creation (orthotopic, GEM, PDX, etc). / UK Home Office licence or equivalent	Desirable
Experience in <i>ex vivo</i> tissues collection, sectioning, DNA/RNA extraction, and proper handling of immune cells for accurate analysis and reproducible results	Desirable
Experience in data analysis	Desirable
Experience in leading drug discovery projects/program management	Desirable



About our organisation

The Institute of Cancer Research, London, is one of the world's most influential cancer research institutions with an outstanding track record of achievement dating back more than 100 years. Our mission is to make the discoveries that defeat cancer.

As well as being one of the UK's leading higher education institutions in research quality and impact, the ICR is consistently ranked as one of the world's most successful for industry collaboration. As a member institution of the University of London, we also provide postgraduate higher education of international distinction.

We are also a charity and rely on the support of partner organisations, funders, donors and the general public.

<u>Read more</u> to find out about our history, culture, and achievements, and how our funders, supporters and partnerships help drive our work.

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 <u>values</u>. They are what bring us together as one team - as 'One ICR'.



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











