ICR The Institute of Cancer Research

Job description

Postdoctoral Training Fellow: Signalling and Cancer Metabolism

Candidate Information

August 2025

Department / division:	**Cell and Molecular Biology**
Pay grade / staff group:	Postdoctoral Training Fellow
Hours / duration:	Full time (35 hours per week) Fixed term for 6 months
Reports to:	Dr George Poulogiannis

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.

Academic Services

At the ICR we aim to defeat cancer through scientific excellence, innovation and partnership. These principles also underpin our approach to scientific infrastructure, which is among the very best of any research centre in the UK. ICR benefits from our continual investment in world-leading scientific services that combine cutting-edge equipment with a highly skilled workforce.

Postdoctoral Training Fellow: Signalling and Cancer Metabolism

Candidate Information

Signalling and Cancer Metabolism Group, Division of Cell and Molecular Biology

Work in the Signalling and Cancer Metabolism Group, led by Dr George Poulogiannis, in the Division of Cell and Molecular Biology focusses on understanding the signalling and metabolic networks that are related to cell growth and malignant transformation. In particular, we are interested in deciphering the genetic and molecular pathways that underlie metabolic addiction of cancer cells to known biosynthetic pathways and/or drive cancer cell adaptation to oxygen and nutrient deprivation. In line with these efforts, we aim to explore unique metabolic nodes for novel therapeutic intervention, biomarker selection and personalise treatment.

Our mission is to make the discoveries that defeat cancer.

Postdoctoral Training Fellow: Signalling and Cancer Metabolism
Candidate Information

Main purpose of the job

We seek to appoint a highly motivated and creative postdoctoral training fellow with a strong interest in cancer metabolism to carry out a systems-level research on understanding the metabolic determinants of endocrine therapy resistance for the identification of novel metabolic vulnerabilities.

Further information

You may contact George Poulogiannis for further information by emailing George.pouligiannis@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

To perform a project aimed at understanding the role of metabolic restructurings in the response to endocrine pathway therapies, using a systems-level approach and state-of-the-art metabolomics.
To work independently and collaboratively and establish a comprehensive research plan.
To interact with the Team Leader, other members of the group and any collaborators to pursue the agreed program of work.
To maintain accurate records of experiments and reagent descriptions in laboratory notebooks.
To take an interest in the relevant scientific literature.
Be familiar with ICR's approach towards risk management including its policies and procedures, which require all staff to play an active part in identifying and managing risk.

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 10 years.

Postdoctoral Training Fellow: Signalling and Cancer Metabolism
Candidate Information

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.

Postdoctoral Training Fellow: Signalling and Cancer Metabolism
Candidate Information

Person specification

Education and Knowledge

PhD in systems biology, biochemistry, cell biology, molecular biology or similar.	E
Strong publication record in biomedical research with at least one high impact first author paper	D
Demonstrate an interest in the relevant scientific literature	E

Skills

Proven ability to work independently, and a strong desire to develop independent projects	E
Excellent communication skills, including the ability to work collaboratively as part of a team	E
High level of competence in a wide range of laboratory techniques, protocol development and optimization and trouble-shooting	E
Proven ability to organise and prioritise your workload with the ability to meet tight deadlines whilst maintaining accuracy	E
Excellent verbal and written communication skills, including the ability to analyse and present data, and write manuscripts	E
Proficient IT skills	E

Experience

Demonstrable extensive skills in in silico mathematical modelling including flux balance analysis, constraint-based modelling, and computational optimization techniques	E
Demonstrable extensive skills in molecular/cell biology (cloning, gene editing, 2D/3D cell culture) and signalling (WB, IP, IF)	E
Experience with mouse models of cancer	D
Mass spec and/or metabolomics data analysis	D

Postdoctoral Training Fellow: Signalling and Cancer Metabolism
Candidate Information

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.

Read more 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 values. 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**