



Data Scientist

Cancer Genomics Group

Candidate Information

Start date November 2023 or as agreed

The Institute of Cancer Research

Description of the role

We are looking for a data scientist to join the Cancer Genomics Group led by Prof Richard Houlston FRS at the ICR in Sutton, Surrey. Our goal is to further our understanding of cancer and improve patient outcome.

We implement state-of-the-art informatics to analyse large-scale datasets to characterise genomic changes influencing the development and evolution of cancer. Our research is supported by grants from Cancer Research UK, MRC and The Wellcome Trust, and we have an excellent track record in generating high-impact publications in Nature Genetics, Nature and Science.

You will be part of a highly collaborative team of computational and experimental scientists from diverse backgrounds including mathematics, physics, and molecular biology. Prior experience in a biological science is not a prerequisite for the position. You will have the opportunity to develop your career through cutting edge research, national and international collaborations and through advancing your knowledge of cancer biology and genomics. You will lead projects, apply problem-solving skills, and be supported in overcoming challenges. The work will include application of existing tools and the development of novel computational and statistical methods to analyse large-scale datasets.

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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 one of 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 public.

We have more than 1,000 staff and postgraduate students across two sites – in Chelsea and Sutton.

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.

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Job description

Department / division: Cancer Genomics /Division of Genetics and Epidemiology

Pay grade / staff group: Analytical Scientist (2)

Hours / duration: Full time (35 hours per week), Monday to Friday. Fixed term contract for 3 years

Reports to: Prof Richard Houlston

Main purpose of the job: The post-holder will work independently and as a part of a multi-disciplinary team of analytical scientists, to identify genomic changes influence the development and evolution of cancer through analysis of large-scale genomic datasets. The successful post holder will be involved in the design, analysis, interpretation and scientific writing of results for high-impact journals.

Duties and responsibilities:

To contribute to ongoing studies to identify and characterise genomic aberrations influencing the development and evolution of cancer including, but not restricted to:

Running high intensity computational algorithms

Statistical analyses using R programming language

Analysis of large-scale datasets

Automation and scripting of common analytical tasks

Develop new analytical methodologies where appropriate

Interact with other members of the group and collaborators to pursue the agreed program of work

Report progress in lab meetings

Preparation of data/manuscripts for presentations and publications

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Workforce agreement for Postdoctoral Training Fellows

The ICR has a workforce agreement stating that Postdoctoral Training Fellows can only be employed for a maximum of 7 years, including any previous postdoctoral employment elsewhere.

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.

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Person specification

Education and Knowledge

BSc or equivalent qualification in mathematics/ physics/statistics/computer science	Essential
PhD in computational mathematics / mathematics/ physics/statistics/computer science	Essential

Skills

Ability to work independently, collaboratively and as part of an interdisciplinary team	Essential
Ability to work accurately, with a strong attention to detail	Essential
Excellent interpersonal skills to facilitate liaison with colleagues and collaborators	Essential

Experience

Experience in analysis of large-scale data	Essential
Experience of using compute clusters	Essential
Experience in analysis of large-scale data or other complex data	Essential

General

Interest in cancer research	Essential
Good presentation skills	Essential
Effective verbal and written communication	Essential
Committed to publish and collaborative and independent research	Essential

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

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Benefits

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 Richard Houlston FRS for further information by emailing richard.houlston@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.