



Microscopist & Image Analyst

Candidate Information

19/04/2021

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 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.

The ICR is committed to attracting, developing and retaining the best minds in the world to join us in our mission – ***to make the discoveries that defeat cancer.***

Core Research Facilities, 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.

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ICR benefits from our continual investment in world-leading scientific services that combine cutting-edge equipment with a highly skilled workforce. We are proud to have a number of core facilities within the ICR that provide this resource to our researchers:

- Breast Cancer Now Histopathology
- Flow Cytometry
- Light Microscopy and Confocal Microscopy
- Mechanical Workshop
- Proteomics and Metabolomics
- Genomics

Light Microscopy Facility and the Role

A Higher Scientific Officer position is available from July 2021 in the Light Microscopy Facility, based in Chelsea. You would be joining an enthusiastic light microscopy team in supporting/implementing world class microscopy experiments at the ICR.

The light microscopy facility in Chelsea is equipped with state of the art instruments including a lattice light sheet microscope, a diSPIM microscope, a TIRF microscope equipped for super-resolution, two spinning disk confocal systems, one laser scanning confocal microscope, two high content imaging systems and three wide field microscopes. The facility will be expanding over the next year and is set to receive two new state of the art lightsheet microscopes in the coming year; an Oblique Plane Microscope and a cleared tissue microscope.

The objective of this post is to provide microscopy support within this cutting-edge facility, as well as image analysis support, to facility users. This will include: performing regular quality control and maintenance of the microscopes; advising facility users on the best techniques and providing applications advice; giving detailed one to one training sessions to our researchers on how to use the advanced instrumentation for their studies; and designing detailed image analysis protocols. In addition, microscopy support and image analysis assistance will be required at the Sutton site at certain times, to be arranged in a flexible manner.

Applicants should have a BSc in the physical or biological sciences and documented experience of contemporary microscopy is essential. Further training and development will be provided within the post. Proven knowledge in advanced image analysis will be essential. Previous experience working in a shared resource laboratory is desirable. This role requires great communication and interpersonal skills and rewards with an involvement in world-leading cancer research.

Our mission
is to make the
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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 represent a shared understanding of our desired behaviours, attitudes and culture. They guide how we make decisions and treat each other. They make it clear how each and every one of us work together to meet our mission – to make the discoveries that defeat cancer.”

Professor Paul Workman FRS
Chief Executive

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Job description

Department / division:	Core Research Facilities
Pay grade / staff group:	Higher Scientific officer
Hours / duration:	Full time (35 hours per week), Monday to Friday. Fixed term contract for 3 years
Reports to:	Kai Betteridge, Light Microscopy Facility Manager
Main purpose of the job:	To provide microscopy and image analysis support to members of the Institute of Cancer Research

Duties and responsibilities:

Experimental Laboratory Work

To provide support in microscopy.
To provide training in using advanced microscopy systems to users of the facility.
To design and implement advanced image analysis pipelines for users of the facility.
To operate and maintain several microscopy platforms under the supervision of Kai Betteridge & Louise Howell
To interact with the members of the institute to advise on experimental design and data analysis.
To maintain accurate records of the work in the facility.
To perform regular QC and maintenance of microscopes to ensure continued operation and keep logs.
To liaise with service engineers when required for instrument maintenance and while they are on site.

General Laboratory Management and Work

To take day-to-day responsibility for maintaining supplies, stocks and equipment in the facility.
Ensure that work conforms to the requirements of COSHH, Local Rules and other Codes of Practice as required by the ICR Safety Policy.
To work in a flexible, organised, and independent manner.
To plan and prioritise work and meet objectives within pre-determined timescales
To work as part of a team, be enthusiastic about learning, and take an interest in the relevant literature and their personal development.

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To maintain and improve skills in microscopy and advanced image analysis

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

BSc. in Molecular Biology/Analytical Chemistry/Biochemistry/Physics/Bio informatics, preferably in a discipline related to optics / computing or related subject	Essential
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Skills

Demonstrated good laboratory and analytical skills	Essential
Meticulous attention to detail for record keeping and proven ability to keep accurate records	Essential
Proficient use of IT and bioinformatic databases	Essential

Experience

Previous experience in/knowledge of advanced microscopy methods	Essential
Documented experience in at least some of the advanced image analysis software available, ranging from commercial software to the main open source tools and custom scripts in MatLab will be essential.	Essential
Proven knowledge of contemporary microscopy is essential	Essential
Previous experience in working in a shared facility	Desirable
Previous use of Lightsheet or super-resolution microscopy technology and its analysis	Desirable
Knowledge and practical experience of working with health & safety regulations e.g.COSHH	Desirable

General

Excellent interpersonal skills with the ability to establish effective working relationships	Essential
Proven ability to work flexibly and independently	Essential
Proven ability to plan, organise and prioritise a busy workload to meet deadlines and maintain a high degree of accuracy	Essential
Proven good verbal and written communication skills	Desirable
Proven ability to follow instructions, protocols and guidance	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 Kai Betteridge for further information by emailing kai.betteridge@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.