



Higher Scientific Officer Biobanking and Digital Pathology

Candidate Information

September 2024

The Institute of Cancer Research

About the role

We are seeking a dedicated and highly skilled **Higher Scientific Officer (HSO)** to manage biological specimens for a large-scale prospective cohort study, <u>The Generations Study</u>, which tracks over 100,000 women across the UK to investigate breast cancer causes and progression. This role is essential for ensuring the proper handling, quality control, and storage of valuable biological materials, including blood samples and pathology specimens, with a focus on breast cancer research.

The candidate will lead the management of biological specimens and digital pathology processes for the Generations Study. This role combines hands-on specimen oversight with cutting-edge digital pathology, ensuring the collection, curation and processing of high-quality samples which will contribute to groundbreaking cancer research. The candidate will play a key role in establishing workflows and quality control metrics for scanning, storing and analysing the tissue slides that will be used for research, including advanced research methods such as AI image analysis that are part of our ongoing digital pathology initiative. They will work closely with the **Generations Study Team** in Sutton and the **Pathology Core Facility** at the **Royal Marsden Hospital** in Chelsea to develop Standard Operating Procedures (SOPs) and implement Quality Control (QC) frameworks.

This role requires collaboration with pathologists, data scientists, and research administrators, and offers opportunites for **professional development and on-the-job training**.

The candidate should have a degree in **Biomedical Sciences**, **Histopathology**, **Molecular Biology**, or a related field. The position will be based in the **ICR's Sutton campus** with frequent visits to the Pathology Core Faciliaty in Chelsea. The position is funded for 24 months initially and is available immediately. Salary will be £37,050 -

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£45,732 p.a. depending on skills and experience.

In addition to annual performance related pay awards, salary scales are reviewed annually to consider cost of living expenses.

Annual leave entitlement is 28 days per annum. There is an additional entitlement to 8 bank/public holidays and 3 ICR-set privilege days.

About the Group and the Generations Study

The Integrative Cancer Epidemiology Group at The ICR uses integrative analyses of large-scale data in epidemiological studies to investigate the causes of cancer, understand carcinogenic processes and improve risk assessment for precision prevention. The Team is part of the newly formed Cancer Epidemiology and Prevention Research Unit https://www.icr.ac.uk/our-research/centres-and-collaborations/strategic-collaborations/the-cancer-epidemiology-and-prevention-research-unit-(CEPRU), a research partnership between The ICR and Imperial College London. Reserch includes understanding how risk factors are related to different types of breast cancer using molecular and digital pathology approaches, as well as identifying tissue biomarkers of transformation from benign breast disease to breast cancer.

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 as member institution of the Universit 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 ou work.

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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

Job description

Department / division:	Integrative Cancer Epidemiology Group, Division of Genetics and Epidemiology
Pay grade / staff group	: Higher Scientific Officer
Hours / duration:	Full time (35 hours per week), Monday to Friday. Fixed term contract for 2 years
Reports to:	Professor Montserrat Garcia-Closas
Main purpose of the job:	To lead the management of biological specimens and digital pathology processes for the large-scale Generations Study. This role combines hands-on specimen oversight with cutting-edge digital pathology, ensuring high-quality samples and contributing to groundbreaking cancer research.

Duties and responsibilities

Biological Specimen Management:

- Oversee the collection, storage, and handling of blood samples, FFPE blocks, and tissue slides from the Generations Study cohort.
- Manage the secure transfer and processing of pathology specimens between hospitals and the ICR Pathology Core Facility.
- Maintain accurate and detailed records of biospecimen inventories and usage for research projects.

Digital Pathology & Imaging:

- Lead the scanning, QC, and digital storage of histopathology tissue slides, ensuring high-quality images for analysis.
- Implement and maintain digital workflows for pathology image processing and integration into research databases.
- Work with research teams on digital image analysis and interpretation.

Quality Control & Standard Operating Procedures (SOPs):

- Develop and enforce SOPs for specimen handling, digital pathology workflows, and quality control measures.
- Ensure all biological specimens and digital images meet rigorous research and clinical standards.

Collaboration & Communication:

 Work closely and coordinate work across the research team and Pathology Core Facility to streamline specimen processing and digital pathology efforts.

Project and Data Management:

- Coordinate the storage, tracking, and usage of biological and digital data across multiple research studies.
- Ensure compliance with data protection and research governance standards.

Training & Development:

- Stay updated on advancements in biobanking and digital pathology.
- Provide training and support to junior staff and collaborators in specimen handling.

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.

Person specification

Education and Knowledge

BSc in a biomedical science subject	Essential
MSc or higher degree in biomedical sciences, molecular biology, histpathology, biobanking or experience of demonstrable equivalence	Desirable
In-depth knowledge of biological specimen management , such as blood sample processing and handling of FFPE blocks and tissue slides.	Essential

Experience

Proven experience in biological specimen management , such as blood samples and pathology specimens (FFPE blocks, tissue slides).	Essential
Experience in developing and implementing Standard Operating Procedures (SOPs) and monitoring Quality Control (QC) measures.	Essential
Demonstrated ability to collaborate effectively with research teams, biobanks and pathology facilities	Essential
Experience in managing large cohort studies or biobank operations.	Desirable
Experience of digital imaging and image analysis in a histopathological environment	Desirable
Previous experience working on cancer research, especially in breast cancer and/or ovarian cancer.	Desirable
Familiarity with multi-institutional collaborations in a research or clinical environment.	Desirable
Working knowledge of data protection regulations for biological specimens and digital pathology image management	Desirable

Skills

Strong project management and organizational skills for coordinating sample handling, QC, and data management.	Essential
Excellent communication skills for collaborating with researchers, pathology core facilities, and external partners.	Essential
Ability to develop and enforce SOPs and ensure QC compliance.	Essential
Excellent interpersonal skills with the ability to communicate efficiently, work flexibly and establish effective working relationships	Essential
Experience in digital pathology image processing, slide scanning, and digital image analysis tools	Desirable

General

Proven ability to work independently as well as part of a multidisciplinary team, and to consult when appropriate	Essential
Commitment to maintaining high standards in data protection and research governance	Essential
Proven ability to work to deadlines and prioritize effectively	
Demonstrable interest in clinical research, including the ability to critically evaluate and extract relevant information from scientific publications and protocols	

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 Professor Montserrat Garcia-Closas for further information by emailing montse.garcia-closas01@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.