



Senior Trial Statistician Candidate Information

March 2025

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. 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 are consistently in the top performing universities in the league table of university research quality compiled from the Research Excellence Framework (REF 2014 & 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.

The Clinical Trials and Statistics Unit (ICR-CTSU)

Under the Directorship of Professor Emma Hall, the ICR-CTSU is an internationally recognised, methodologist-led academic clinical trials unit (CTU), with over 30 years' experience in the design, conduct and analysis of cancer clinical trials. ICR-CTSU receives programmatic core funding from Cancer Research UK and is a UK Clinical Research Collaborative Registered CTU.

ICR-CTSU translates cutting-edge science into quality clinical trials that can transform cancer care, by:

- Leading patient-centred trials of smarter, kinder therapies that treat cancer more precisely
- Transforming how we design and conduct trials with innovations in trial methodology
- Learning as much as we can with integrated translational research and data science
- Championing purposeful and inclusive patient and public involvement
- Embedding research to improve the sustainability of our trials
- Supporting interdisciplinary training to empower the next generation of trialists

Senior Trial Statistician

Candidate Information

ICR-CTSU's portfolio of national and international phase II and III trials covers a wide range of disease sites from common cancers (e.g. breast, prostate, lung) through to rarer malignancies (e.g. ovarian, testicular, penile). Our expertise in intervention assessment includes novel targeted drugs and immunotherapy, hormonal therapies and chemotherapy, radiotherapy (including advanced targeted technologies), drug-drug and drug-radiotherapy combinations, imaging technologies and diagnostics/companion diagnostics. Our cross-cutting Integrative Genomic Analysis team facilitates interrogation of the wealth of emerging trial data to further understand mechanisms of action and markers of treatment sensitivity or resistance and to translate novel diagnostic, prognostic and therapeutic strategies into clinically relevant biomarker-driven trial designs. Our Early Phase and Adaptive Trials team provide methodology leadership to an expanding number of early phase trials.

Recent publications highlighting the breadth and impact of our portfolio include:

- PACE: radiotherapy in five larger daily doses is as good as the standard 4-week therapy for patients with low/favourable intermediate risk prostate cancer ([New Engl J Med 2024](#)); the most recent of our long-standing portfolio of phase III radiotherapy trials to report practice changing results.
- plasmaMATCH: pioneering evidence to support the use of liquid biopsy ctDNA mutation detection to inform targeted treatment selection for breast cancer patients thus avoiding the need for invasive tumour biopsies ([Lancet Oncol 2020](#)).
- POUT: adjuvant chemotherapy improves outcomes for patients with upper tract urothelial cancer ([J Clin Oncol 2024](#))
- NICAM: a phase II study demonstrating activity of nilotinib in a rare form of melanoma with a mutation in the *KIT* gene ([Cell Rep Med 2024](#)).

Our methodology work includes the [DEFINE study](#) - SPIRIT and CONSORT extensions for early phase dose-finding trials – to enhance transparency and reproducibility for trial protocols and reports ([BMJ 2023](#); [BMJ 2023](#)), a review of clinical trial designs for evaluating and exploiting cancer evolution ([Canc Treat Rev 2023](#)) and use of routine collected data as an alternative to hospital based follow-up ([preprint](#)).

We are a multi-disciplinary CTU, with more than 90 staff including statisticians/methodologists, clinical trial programme management, trial management, data management, research IT programming and administrative support staff. We are based at ICR's Sutton site.

We have over 75 multi-centre trials in set up, open to recruitment, or in active or long-term follow-up. Our senior management team hold leadership roles shaping clinical research at the local, national and international level.

Further information is available at:

ICR www.icr.ac.uk | Facebook www.facebook.com/theinstituteofcancerresearch

ICR-CTSU www.icr.ac.uk/research-and-discoveries/centres-and-strategic-collaborations/clinical-trials-and-statistics-unit-icr-ctsu | Bluesky [@icr-ctsu.bsky.social](https://bsky.app/profile/icr-ctsu.bsky.social)

Senior Trial Statistician

Clinical Trials and Statistics Unit

Candidate Information

Job Description

Department / division:	Clinical Trials and Statistics Unit (ICR-CTSU), Division of Clinical Studies
Pay grade / staff group:	Research Training Fellow 2
Hours / duration:	Full time (35 hours per week), Monday to Friday. Fixed term contract for 1 year in the first instance. This post is eligible for discretionary hybrid working.
Reports to:	ICR-CTSU Scientific/Methodology Lead or Principal/Lead Statistician
Main purpose of the job:	To work as part of a multidisciplinary team on the statistical development, oversight and analysis of a number of clinical trials within the ICR-CTSU's portfolio and analysis of the related translational research projects.

Role Summary:

The post-holder will have a dual role: (a) developing novel methodologies in the design and analysis of clinical trials, and (b) applying efficient methods in new and ongoing trials. They will work as part of a multi-disciplinary team on trials methodology research, as well as the statistical development, oversight and analysis of a number of clinical trials within ICR-CTSU's portfolio and the early phase portfolio in collaboration with the Drug Development Unit and external organisations.

We seek an experienced and highly motivated statistician with an interest in researching new statistical methods to improve efficiency in clinical trials and who is looking for opportunities to apply their statistical knowledge across various therapeutic areas in oncology. Effective oral and written communication skills, along with enthusiasm for collaborating with others from different disciplines, are essential.

Duties and responsibilities:

The post-holder will be a member of the statistical team at ICR-CTSU. They will work under the guidance of Principal/Lead Statisticians and/or the ICR-CTSU Scientific/Methodology Lead for each trial. The post-holder will work across a varied portfolio including different trial phases and cancer types. They will be supported in their career development with a range of formal courses and on-the-job training as appropriate. Specific duties and responsibilities will include some or all of the following either directly or supervised by a principal statistician or Group Leader:

Senior Trial Statistician

Clinical Trials and Statistics Unit

Candidate Information

Duties and responsibilities

Initiation and Design of Clinical Trials

Provide high quality statistical input in design of clinical trials

Contribute to development and defining of the study question; this will often include a review of the available literature and analysis of data available from other sources

Develop the study protocol as part of the Protocol Development Group, particularly the statistical considerations of sample size and analysis strategy

Contribute to the design of (electronic-) Case Report Forms and trial databases to ensure data are collected and stored to meet the requirements of statistical monitoring and analysis, and in line with relevant guidelines and legislation (e.g. Data Protection Act, Research Governance Framework, ICH Statistical Principles for Clinical Trials, Good Clinical Practice)

Support IT programming/database staff to set-up, test and maintain trial databases (including randomisation systems)

Analysis and Management of Clinical Trials

Develop statistical analysis plans ensuring compliance with relevant guidelines

With trial managers, model recruitment predictions, providing advice to the Trial Management Group for proactive intervention where necessary

Assist and advise the trial managers/data managers to ensure completeness and correctness of data during both recruitment and follow-up phases of trials

With the trial manager, ensure accurate and consistent coding of clinical data

Undertake central statistical monitoring of data to assist audit and quality control

Assist the trial manager in the preparation of data for regular safety reporting to the competent authority, ethics committees and Sponsor

Assist the trial manager in the preparation of reports for Trial Management Group and Trial Steering Committee meetings

Undertake interim analyses and produce reports for submission to the Independent Data Monitoring Committee

Undertake final analyses and compilation of reports for presentation and publication

Undertake additional analyses, exploring novel methodologies as required

Liaise and work with bioinformaticians, translational analysts and clinical investigators, to understand the biological background for each analysis and apply or modify the appropriate statistical methodology (e.g. modelling of clinical outcome data integrating complex biological data structures)

Work with statistical colleagues to develop or modify novel statistical methodology as required by each analysis (e.g. modelling of biological data, including some genetic/genomic data). This may include

Senior Trial Statistician

Clinical Trials and Statistics Unit

Candidate Information

collaboration with others with similar interests (e.g. through the MRC-NIHR Trials Methodology Research Partnership or the UKCRC Registered Clinical Trials Units) to develop professional specialism

Keep up to date with the related medical and statistical literature

Contribute to manuscript writing of clinical trial results

Other duties

Contribute to ICR scientific output by drafting clinical trial and methodology abstracts and papers in conjunction with ICR-CTSU Methodology Leads, trial team and external chief investigators

Promote the work of ICR-CTSU by presenting methodology outputs at national/international symposia

With statistical colleagues, review research projects submitted to the ICR/Royal Marsden Hospital Committee for Clinical Research; this includes review of sample size calculations and statistical methodology

Be familiar with trials randomised via ICR-CTSU in order to provide a competent randomisation service

Contribute to meetings of ICR-CTSU statisticians, joint meetings of ICR-CTSU and Royal Marsden based statisticians and other relevant team research meetings

Provide occasional consulting advice to clinical and scientific colleagues and occasional teaching lectures to ICR-CTSU staff, ICR students and other undergraduate/postgraduate medical and nursing courses run locally

Attend statistical and clinical meetings both locally and externally, as appropriate

Adhere to relevant standard operating procedures and work within the guidelines laid out by the ICR-CTSU Quality Management System

Contribute to relevant ICR committees as required

Contribute to wider clinical trials national "citizenship" e.g. through membership of Data Monitoring Committees, Trial Steering Committees and/or peer reviewing

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

Senior Trial Statistician

Clinical Trials and Statistics Unit

Candidate Information

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 developments

Senior Trial Statistician

Clinical Trials and Statistics Unit

Candidate Information

Person specification

Education and knowledge

MSc in medical statistics/biostatistics or an allied field (e.g. public health, epidemiology, data science) or (for otherwise exceptional candidates) first degree in statistics and relevant work experience	Essential
PhD in medical statistics/biostatistics or an allied field	Desirable
A sound understanding of the concept of all phases of clinical trials	Essential
A good grasp of the scientific background to clinical trials	Desirable
A good understanding of cancer and its treatment modalities	Desirable
Knowledge of Good Clinical Practice, the EU Clinical Trials Directive, Research Governance Framework, ICH Statistical Principles for Clinical Trials	Essential

Skills and qualities

Extensive proficiency in utilising the statistical programming languages R or STATA	Essential
Excellent knowledge of PC based Windows and Microsoft Office software	Essential
Excellent written and spoken English	Essential
Effective oral and written communication skills; the post holder will be required to communicate statistical concepts and the scientific rationale for clinical trials to clinicians and other health care professionals	Essential
Excellent organisational and time management skills; ability to work to deadlines and organise and prioritise both personal and project workload	Essential
Ability to work accurately, with a strong attention to detail	Essential
Excellent interpersonal skills to facilitate liaison with colleagues and collaborators	Essential
Research interest in statistical clinical trial or closely related methodology (e.g. adaptive designs, biomarker-driven designs, enrichment designs, analysis of quality of life data, methods for evaluating rapidly changing technologies, dose-response modelling)	Desirable

Experience

Applying statistical methods to real data	Essential
Handling and processing large/complex datasets	Essential
Survival analysis methods	Essential
Familiarity with clinical trials procedures	Essential
Working in clinical trials, epidemiology or an allied research field in a statistical capacity	Essential

Senior Trial Statistician

Candidate Information

Sample size calculations	Desirable
Analysing longitudinal data sets	Desirable
Analysing biomarker or genetic/genomic data and associated clinical data	Desirable
Statistical and critical review of clinical trial documents	Essential
Experience in presenting scientific work, both written and oral	Essential
Experience of working effectively with collaborators from different disciplines and/or statistical consulting	Essential
Experience in line management, supervising or mentoring	Desirable
Demonstrable contribution to high-quality scientific publications and/or other outputs	Essential
Experience of handling sensitive and confidential information	Desirable
Experience in teaching or training statistical concepts to a non-statistical audience	Desirable

General

A desire to apply existing and novel statistical methods to the requirements of a diverse range of statistical problems	Essential
Ability to work independently and as part of a team	Essential
Ability to project a positive and professional image of the ICR-CTSU to both ICR and external collaborators	Essential
Ability to maintain adherence to written procedures and clinical and regulatory standards applicable to ICR-CTSU clinical trials	Essential

Senior Trial Statistician

Candidate Information

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

Senior Trial Statistician

Candidate Information

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. All positions at ICR-CTSU are eligible for discretionary hybrid working. 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

For general queries about the recruitment process, please contact ICR-CTSU, email: ctsu@icr.ac.uk.

This job description reflects the current position and is subject to review and alteration in detail and emphasis in the light of future changes or development.