

Further Information

Research Associate (Fixed Term), CRUK Cambridge Institute



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| Job title | Research associate |
| Grade | 7 |
| Salary range | £32,236 - £39,609 |
| Staff group | Research |
| Department / Institution | Cancer Research UK Cambridge Institute |

Role-specific information

Role Summary

The Rosenfeld lab pioneers new approaches for non-invasive molecular diagnostics and analysis of cancer genomes and evolution, using next-generation sequencing of circulating cell-free tumour DNA (ctDNA). Previous work in the group has shown that ctDNA analysis can be used for detection and monitoring of tumour burden in late stage disease (Forsheo et al. *Sci Transl Med.* 30;4(136):136ra68, Murtaza et al., *Nature* 497(7447):108-112, Dawson et al., *NEJM* 368(13):1199-1209). Current work focuses on clinical applications in low burden disease where ctDNA levels are currently at the limit of detection, including the optimisation of high sensitivity assays for ctDNA detection and quantification in early stage cancers.

Areas of interest include application of ctDNA for detection of low volume disease including early-stage prior to diagnosis or relapse, in lung, ovarian and breast cancer. The successful applicant will work on studies designed to investigate the proportion of newly diagnosed individuals with detectable ctDNA and identify the earliest time point before diagnosis that ctDNA can be detected. Within these studies, you will work with large numbers of clinical samples, optimising and improving DNA analysis methods, utilising advanced genomic techniques including genome-wide and / or targeted high throughput sequencing approaches, analysing large volumes of genomic data and interrogating different data sets to contribute to the development of new diagnostic approaches.

This is an exciting opportunity to join a multi-disciplinary, translational research group and contribute to the development of new diagnostic approaches. Applicants should have or be about to receive a PhD in a relevant scientific discipline, and should possess demonstrable in-depth experience in; molecular biology and / or mammalian genetics (ideally cancer genetics), quantitative genomic analysis methods and high throughput sequencing approaches. Desirable features include; experience of assay development (particularly next generation sequencing based assays), experience with assays for DNA methylation and strong bioinformatic skills. Furthermore, experience of research using human samples and / or work in clinical diagnostics would be an advantage. The candidate should be able to work independently and to manage their own workload, while at the same time interacting efficiently with the research team. Excellent communication, interpersonal and organisational skills are also required.

Funding is available for three years in the first instance.

Please send applications in the following format: a CV, including full details of previous training and research experience to date; a publication record if available; the names and contact details of two academic referees; a covering letter explaining why you want to join our team and what you will bring to the project.

Key Responsibilities

Research – 80%

- Wet-lab based work
- Basic bioinformatics and computational analysis of project work
- Conduct individual and collaborative research projects
- Work collaboratively, and assist other team members with project work where appropriate
- Write up research work for presentation and publication
- Stay up to date with the field through review of literature
- Translate knowledge of advances to the formulation of hypotheses to drive future objectives
- Assist in the preparation of proposals and applications to external bodies
- Plan the use of research resources as appropriate
- Where relevant, assist in the supervision of student projects, provide instructions to students and deliver seminars relating to own research area

Planning and organising - 10%

- Maintain awareness of current and emerging technologies specifically, including experimental techniques and bioinformatics methods and tools, by tracking the relevant scientific literature and attending training courses and scientific conferences
- Plan the use of research and computational resources as appropriate
- Plan and manage own research activity in collaboration with others
- Contribute to planning of joint research projects led by principal investigator, line manager or other team members
- Contributing to efficient functioning of the Rosenfeld laboratory

Liaising and Networking – 10%

- Communicate often with the principal investigator, line manager and colleagues to define and achieve your key objectives and further the aims of the project
- Build internal and external contacts and participate in networks for exchange of information and to form relationships for future collaboration
- Participate in group and research meetings and journal clubs
- Present research at occasional group, internal and external meetings
- Communicate often with the other members of the group, and assist with delivery of team goals, where appropriate
- Build relationships within the CRUK CI community, including lab management and core facility staff, to ensure efficient running of the Rosenfeld laboratory

| Person Profile | | Essential/Desirable |
|--|---|---------------------|
| This section details the knowledge, skills and experience we require for the role. | | |
| Relevant experience | <ul style="list-style-type: none"> Demonstrable in-depth experience in quantitative genomic analysis methods | Essential |
| | <ul style="list-style-type: none"> Experience of research using human samples and / or work in clinical diagnostics | Desirable |
| Specialist knowledge & skills | <ul style="list-style-type: none"> Demonstrable in-depth experience in molecular biology and / or mammalian genetics (ideally cancer genetics) | Essential |
| | <ul style="list-style-type: none"> Demonstrable in-depth experience in with high throughput sequencing approaches | Essential |
| | <ul style="list-style-type: none"> Experience of assay development (particularly next generation sequencing based assays) | Desirable |
| | <ul style="list-style-type: none"> Experience with assays for DNA methylation | Desirable |
| | <ul style="list-style-type: none"> Strong bioinformatic skills | Desirable |
| Education & qualifications | <ul style="list-style-type: none"> PhD in a relevant scientific discipline (e.g. molecular biology, cancer genetics, diagnostics) | Essential |
| Interpersonal & communication skills | <ul style="list-style-type: none"> Ability to work independently and to manage their own workload, while at the same time interacting efficiently with the research team | Essential |
| | <ul style="list-style-type: none"> Ability to create internal and external contacts, building relationships for future collaboration | Essential |
| | <ul style="list-style-type: none"> Self-motivated, team player with strong communication skills | Essential |

Behavioural Attributes

This section summarises the behavioural attributes that we expect the role holder to be able to demonstrate. Full definitions are at <http://www.admin.cam.ac.uk/offices/hr/policy/behavioural/attributes/>; please review these and provide specific examples in your application of how you have demonstrated these attributes in your work, education or other experience. It will assist your application if you explain the situation, what you did and what the outcomes were.

| Behavioural Attribute | Level | Description. |
|--|-------|--|
| <u>Communication</u> | C | Level C: Communicates effectively and appropriately with a variety of stakeholders including external partners, teams, colleagues and contacts. |
| <u>Relationship Building</u> | B | Level B: Develops and maintains existing partnerships. Builds teams and identifies means of enhancing their effectiveness. |
| <u>Valuing Diversity</u> | A | Considers and respects the ideas, circumstances and feelings of others. Treats everyone with fairness and respect, adhering to the principles of diversity and inclusion. |
| <u>Achieving Results</u> | B | Level B: Identifies and manages important issues and problems effectively. Plans and monitors the work of others and takes accountability for their levels of performance and success. |
| <u>Strategic Focus</u> | C | Level C: Implements the University's strategy and planning activity within the team. Supports the University's mission and priorities. |
| <u>People Development</u> | C | Level C: Demonstrates effective people management skills. Promotes and facilitates the development of others. |
| <u>Negotiating and Influencing</u> | C | Level C: Persuades and influences peers and managers through consideration of their interests, involvement and consultation. |
| <u>Innovation and Change</u> | C | Level C: Develops and promotes new ways of working to improve performance within team and institution. |

| Terms and Conditions | |
|------------------------------|--|
| Location | Cancer Research UK Cambridge Institute, Robinson Way, Cambridge, CB2 0RE |
| Working pattern | Full-Time (Monday – Friday) |
| Hours of work | Your employment is full time. There are no formal conditions relating to hours and times of work but you are expected to work such hours and days as are reasonably necessary for the proper performance of your duties. Your times of work should be agreed between you and your head of institution. We welcome applications from individuals who wish to be considered for part-time working or other flexible working arrangements. |
| Length of appointment | Fixed-term (3 years) |
| Limited funding | This post is funded by a research grant and, in the event that this funding should cease, the post may be at risk of redundancy.. |
| Probation period | 6 months |
| Annual leave | Full time employees are entitled to annual paid leave of 6.6 weeks (or 33 days), plus public holidays. |
| Pension eligibility | Universities Superannuation Scheme (USS). Pension scheme details, including information about the legal requirement for the University to automatically enrol its eligible jobholders into a qualifying workplace pension scheme from 1 March 2013, is available at: http://www.pensions.admin.cam.ac.uk/ . |
| Retirement age | The University does not operate a retirement age for research staff. |

Screening Check Requirements

We have a legal responsibility to ensure that you have the right to work in the UK before you can start working for us. If you do not have the right to work in the UK already, any offer of employment we make to you will be conditional upon you gaining it. If you need further information, you may find the Right to Work page within the 'Applying for a job' section of the University's Job Opportunities pages helpful (please see <http://www.jobs.cam.ac.uk/right/have/>).

This role requires an *Agenda security screening check*. Any offer of employment we make to you will be conditional upon the satisfactory completion of this/these check(s); whether an outcome is satisfactory will be determined by the University.

Application Process

Please ensure that you upload your Curriculum Vitae (CV) and a covering letter in the Upload section of the online application. If you upload any additional documents which have not been requested, we will not be able to consider these as part of your application.

To submit an application for this vacancy, please click on the link in the 'Apply online' section of the advert published on the University's Job Opportunities pages. This will route you to the University's Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.

The closing date for applications is Monday 25th February 2019 with the interview date TBC.

If you have any questions about this vacancy or the application process, please contact Rosenfeld.LabAdmin@cruk.cam.ac.uk

General Information

The University of Cambridge

The University of Cambridge is one of the world's oldest and most successful Universities, with an outstanding reputation for academic achievement and research. It was ranked fourth in the 2016 QS World University Rankings and its graduates have won more Nobel Prizes than any other university in the world. The University comprises more than 150 Departments, Faculties, Schools and other institutions, plus a central administration and 31 independent and autonomous colleges.

The University and the Colleges are linked in a complex historical relationship. The Colleges are self-governing, separate legal entities which appoint their own staff. They admit students, provide student accommodation and deliver small group teaching (supervisions). The University awards degrees and its faculties and departments provide lectures and seminars for students, determine the syllabi for teaching and conduct research.

There is much more information about the University at <http://www.cam.ac.uk/univ/works/index.html> which we hope you will find helpful.

The Cancer Research UK Cambridge Institute (CRUK CI)

The Cancer Research UK Cambridge Institute (CRUK CI), housed in the Li Ka Shing Centre, focuses on tackling questions relating to cancer diagnosis, treatment and prevention, supported by world-class core scientific facilities.

Our aim is to be a focus for the practical application of high-quality basic research, forming a bridge between the world-class science of the [University of Cambridge](#) and its environment, and [Addenbrooke's Hospital](#).

The Institute's location on the [Cambridge Biomedical Campus](#), to the south of Cambridge, and its membership of many collaborative initiatives are vital in helping us to achieve our goals.

The Cambridge Biomedical Campus is home to Addenbrooke's Hospital, the University of Cambridge teaching hospital, and many of our collaborating institutes, including the [MRC Laboratory for Molecular Biology](#), the [Hutchison/MRC Research Centre](#), the [Strangeways Research Laboratories for Genetic Epidemiology](#) and the [Cambridge Institute for Medical Research](#). In the wider Cambridge area we also have extensive links with the [Wellcome Trust Sanger Institute](#), and the [European Bioinformatics Institute](#). The CI is also a member of the [Organisation of European Cancer Institutes \(OECI\)](#).

Institute funding

The CI is core funded by Cancer Research UK, which allows our researchers to focus on answering challenging research questions. In addition group leaders apply for grants from external funding agencies to support their work, and around 50% of our PhD students and postdocs are externally funded.

In addition, the CI contributes to many of the collaborative centres and initiatives that Cancer Research UK helps to support, including the [Cambridge Biomedical Research Centre](#), the [Experimental Cancer Medicine Centre](#), and the [Cambridge Pancreatic Cancer Centre](#).

School of Clinical Medicine

The University of Cambridge School of Clinical Medicine aims to provide leadership in education, discovery and healthcare. The School will achieve this through: inspirational teaching and training, outstanding basic and clinical research and integration of these to improve medical practice for both individual patients and the population.

The School will:

 **through inspirational teaching and training, educate individuals who:**

- will become exceptional doctors or biomedical scientists
- combine a depth of scientific understanding with outstanding clinical and communication skills
- demonstrate a caring, compassionate and professional approach to patients and the public
- and are equipped to become future international leaders of their profession.

 **through its commitment to the pursuit of excellence, support scientists of international standing in basic and clinical research aiming to:**

- understand fundamental biology and thereby the mechanisms underlying disease
- integrate basic and clinical research
- apply a rigorous mechanism-based approach to clinical problems and
- innovate to solve the health challenges of our society.

 **The School's core values are:**

- to uphold the rights of the individual to freedom of thought, freedom of expression, access to education and access to appropriate healthcare
- to respect the diversity of our students, academics, non-academic staff, patients and volunteers and value their different expertise and contributions to the life of the School
- to instil in our graduates, staff and alumni a life-long passion for the pursuit of excellence in the service of society and an understanding of their responsibility to engage with the public about their research.

Remit Statement

The University of Cambridge School of Clinical Medicine aspires to change the practice of medicine and improve biological understanding in a wide range of clinical specialties and scientific disciplines. Collaborative research, both within biomedicine and crossing the boundaries to the mathematical, physical and social sciences, is key to our approach. The School also supports key enabling technologies and facilities in imaging, bioinformatics and biological systems. The main areas of research interest are:

- Cancer Research
- Cardio-Respiratory Medicine
- Cellular mechanisms of disease
- Diabetes, Endocrinology and Metabolism
- Epidemiology, Public Health and Primary Care
- Genetics and Genetic Medicine
- Haematological and Transplantation Medicine
- Infection and Immunity
- Neurosciences and Mental Health
- Stem Cells and Regenerative Medicine

What the University can offer you

One of our core values at the University of Cambridge is to recognise and reward our staff as our greatest asset. We realise that it's our people who have built our outstanding reputation and that we will only maintain our leading position in the academic world by continuing to attract and retain talented and motivated people. If you choose to come and work with us, you will find that we offer:

Excellent Benefits

You will be eligible for a wide range of competitive benefits and services, including numerous discounts on shopping, health care, financial services and public transport. We also offer defined benefits pension schemes and tax-efficient bicycle, car lease and charity-giving schemes.

We will help you balance your home and work life by providing you with generous annual leave entitlement and procedures for requesting a career break or flexible working arrangements if you need them. You will also have access to a range of well-being support services, including in-house Occupational Health and Counselling services. If you have childcare responsibilities, you may also benefit from the enhanced maternity/adoption pay, two nurseries and a holiday play scheme that we provide.

| <u>Cambridge</u> | <u>Travel to work</u> | <u>Relocation assistance</u> |
|---|--|---|
| Local discounts Cambridge Festival of Ideas Cambridge Science Festival Open Cambridge | CAMBens Cycle/Cars Travel to Work Loan Trains (season ticket) U bus discount | Relocation Expenses (at the discretion of the Department.) University of Cambridge Accommodation Service Newcomers Service Sanctuary – for Addenbrooke's accommodation North West Cambridge Rental Deposit Scheme |
| <u>Family-friendly</u> | <u>Careers and career development</u> | <u>Financial</u> |
| Childcare Service Leave/Flexible Working Career breaks Nurseries/play schemes Returning Carers Scheme My Family Care | Study/sabbatical leave Unpaid leave Careers Service Institute for Continuing Education Personal Development | CAMBens discounts Payroll giving Shared Equity Scheme Contribution Rewards |
| <u>Cambridge Biomedical Campus</u> | <u>Health & Wellbeing</u> | <u>Recreation</u> |
| Frank Lee Leisure and Sports Centre Concourse/shops/restaurants | Private Medical Insurance Dental Discount Eye Test Occupational Health Counselling Service Mentoring Chaplaincy Clinical School Wellbeing Program | University Sports University Social Club College Entry Local Attractions |

New to Cambridge

We are keen to welcome new employees from other parts of the UK and other countries to Cambridge. If you will be relocating to Cambridge on a centrally funded appointment of two years or more, you may be eligible for our relocation expenses scheme. The University [Accommodation Service](#) (<http://www.accommodation.cam.ac.uk/>) will also be available to help you find suitable rented

accommodation and to provide advice on renting arrangements and local facilities, if required. In addition, certain academic and academic-related appointments are eligible for the Shared Equity Scheme which offers financial assistance with the purchase of living accommodation.

If you are relocating to Cambridge, you and your family will be welcome to attend the Newcomers and Visiting Scholars Group, which provides an opportunity to find out more about Cambridge and meet other people new to the area.

A range of information about living and working in Cambridge is also available to you within the University's web pages at <http://www.jobs.cam.ac.uk/living/> and <https://www.hr.admin.cam.ac.uk/hr-services/relocating-uk>

A welcoming and inclusive environment

We will help you settle into your new role and working environment through a central [University induction event](#), local induction activities and our online induction package. Where appropriate to your role, you will have a probation period to provide a supportive framework for reviewing your progress and discussing your training and development needs.

Extensive development opportunities

The encouragement of career development for staff is one of the University's core values. We put this into practice through various services and initiatives, including:

- A [wide-range of training courses](#) and online learning packages.
- The [Clinical School appraisal](#), which is designed to enhance work effectiveness and facilitate career development post-probation.
- [Leave for career and personal development](#), including long-term study leave for assistant staff and sabbatical leave for academic staff.
- The [CareerStart@Cam programme](#), which supports assistant staff roles without higher education qualifications to develop their skills, experience and qualifications. Assistant staff may also apply for financial assistance for study which results in a qualification.
- [Reduced staff fees](#) for University of Cambridge graduate courses.
- The opportunity to attend [lectures and seminars](#) held by University departments and institutions.
- Policies and processes dedicated to the career development of researchers and the implementation of the principles of the Concordat, which have led to the University being recognised with an HR Excellence in Research Award by the European Commission.

You can find further details of the benefits, services and opportunities we offer can be found in our CAMBens Employee Benefits web pages at <http://www.hr.admin.cam.ac.uk/pay-benefits/cambens-employee-benefits>.

Equality of opportunity at the University

We are committed to a proactive approach to equality, which includes supporting and encouraging all under-represented groups, promoting an inclusive culture and valuing diversity. We make selection decisions based on personal merit and an objective assessment against the criteria required for the post. We do not treat job applicants or members of staff less favourably than one another on the grounds of sex (including gender reassignment), marital or parental status, race, ethnic or national origin, colour, disability (including HIV status), sexual orientation, religion, age or socio-economic factors.

We have various diversity networks to help us progress equality; these include the Women's Staff Network, the Disabled Staff Network, the Black and Minority Ethnic Staff Network and the Lesbian, Gay, Bisexual and Transgender Staff Network. In addition, we were ranked in the top 100 employers for lesbian, gay and bisexual (LGB) staff in Stonewall's Workplace Equality Index 2013 and we hold an Athena SWAN Silver award at organisation level for promoting women in Science, Technology, Engineering and Medicine.

We are supportive of staff with caring responsibilities (including elder care), such as through our flexible working, career break and returning carers schemes. We encourage individuals to include details of any breaks in employment due to caring responsibilities in applications for employment so that these can be taken into consideration in assessments made, where appropriate.

Information if you have a disability

The University welcomes applications from individuals with disabilities and we are committed to ensuring fair treatment throughout the recruitment process. We will make adjustments to enable applicants to compete to the best of their ability wherever it is reasonable to do so, and, if successful, to assist them during their employment. Information for disabled applicants is available at <http://www.admin.cam.ac.uk/offices/hr/staff/disabled/>.

We encourage you to declare any disability that you may have, and any reasonable adjustments that you may require, in the section provided for this purpose in the application form. This will enable us to accommodate your needs throughout the process as required. However, applicants and employees may declare a disability at any time.

If you would prefer to discuss any special arrangements connected with a disability, please contact the HR Recruitment Team, who are responsible for recruitment to this position by email on csrecruitment@medschl.cam.ac.uk.