



**THE BREAKTHROUGH TOBY ROBINS BREAST CANCER RESEARCH CENTRE  
AT THE INSTITUTE OF CANCER RESEARCH, CHELSEA, LONDON**

**The Breakthrough Breast Cancer Research Centre is the first centre in the UK entirely devoted to breast cancer research. Our goal is to advance research into the causes, diagnosis and treatment of breast cancer. We are located in new laboratory space with excellent core facilities and funding. We currently have a number of vacancies in the Centre, headed by Professor Alan Ashworth, FRS.**

**Senior Bioinformatics Officer – Next Generation Sequencing**

We are seeking an experienced and motivated Senior Bioinformatics Officer to support Next Generation Sequencing (NGS) based projects within the Breakthrough Centre. The successful post holder will actively participate in (i) the design of novel NGS analysis pipelines and (ii) the analysis of NGS data. The post holder will be expected to use these skills to become involved in a wide variety of projects associated with the dissection of cancer.

The NGS facility at the Breakthrough Centre, ICR works closely with ICR scientists and external collaborators. This post would give the successful applicant the opportunity to apply NGS analysis to projects with both translational and basic biological impact.

Experience in biologically relevant programming as well as experience in analysis of NGS data is essential. The successful post-holder will be expected to have a publication record in the field that demonstrates this experience. Mathematical and/or statistical background is also desirable.

Applicants should hold a post-graduate qualification in Bioinformatics or a relevant area with extensive programming experience and understanding of the UNIX/Linux environment. Experience in working with relational databases is desirable.

The starting salary will be in the range £39,143 – £48,354 p.a. inclusive and the position will be offered initially on a fixed-term contract of up to 3 years.

Informal enquiries are welcome and can be made to Dr. Chris Lord (Chris.Lord@icr.ac.uk). Please note – this address is for enquiries only and CVs must be submitted in line with the instructions below.

**To apply please email your CV and covering letter (addressing where you meet the person specification and incl. the names and addresses of two referees), to: [recruitment@icr.ac.uk](mailto:recruitment@icr.ac.uk), quoting job reference number C361.**

**In a separate email, please send your completed equal opportunities monitoring form [http://www.icr.ac.uk/jobs/current\\_vacancies/4959.doc](http://www.icr.ac.uk/jobs/current_vacancies/4959.doc) to the same email address quoting the job reference number above.**

**Closing date: 10<sup>th</sup> January 2011**

**THE INSTITUTE OF CANCER RESEARCH  
JOB DESCRIPTION**

**JOB TITLE:** Senior Bioinformatics Officer

**SECTION:** Breakthrough Centre

**TEAM:** Gene Function Laboratory

**GRADE:** IS2F

**RESPONSIBLE TO:** Senior Staff Scientist

**LOCATION:** Chelsea, London, UK

**OBJECTIVE OF THE POST**

The post holder will play a pivotal role in 'bespoke' NGS pipelines design, development and implementation. The postholder is expected to assist whenever required in analysis of genomic, transcriptomic and epigenomic NGS data sets.

He/she will also participate in translating NGS data into scientific publications in support of a large number of different projects. In addition, the post will provide an opportunity for independent pipeline and analysis methods' development.

**RESPONSIBILITIES/DUTIES**

- Develop novel pipelines for the analysis of NGS data
- Implement existing pipelines for the analysis of NGS data
- Develop, optimize and integrate prototyped code into production-stage NGS pipelines.
- Develop analysis methods for new platforms and technologies
- Integrate data from different platforms
- Analyse and report quality control data from NGS sequencing
- Collaborate with Bioinformatics teams within Breakthrough/ICR
- Report progress in analysis of projects to lab meetings, and translational research committee meetings
- Publish finalized pipelines and analysis in high-quality peer-reviewed journals
- Present Breakthrough data and platforms at national and international meetings

**Any other duties which may be required which are consistent with the nature and grade of the post.**

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**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.**

## APPOINTMENT DETAILS

Appointment will be on a Fixed Term Contract for up to 3 years in the first instance, with a starting salary in the range of £39,143 - £48,354 p.a. inclusive, based on relevance of skills and experience. In addition to annual performance related pay awards, the salary scales are reviewed annually to reflect cost of living increases.

Annual leave entitlement is 25 days per annum. This will rise by one additional day for every two years of completed service up to a maximum of 30 days in total. There is an additional entitlement to 8 bank/public holidays and 3 Institute-set privilege days.

Person Specification	Essential or Desirable?
<b><i>Education &amp; Knowledge</i></b>	
Postgraduate degree or equivalent qualification in Bioinformatics	E
Extensive programming and scripting knowledge	E
Code development and deployment in a UNIX/Linux environment	E
Knowledge of cancer biology	D
Familiarity with NGS technologies	E
Familiarity with relational databases	D
Mathematical statistical modelling	D
<b><i>Experience</i></b>	
Experience in Perl programming	E
Experience in Bash scripting	E
Experience with open source software	E
Experience in C/C++ programming	E
Experience in genomics/genome annotation	E
Experience in NGS data analysis	E
Experience with the Ensembl and BioPerl APIs	D
Experience in Sun Grid Engine scripting	D
Experience in MPI programming	D
Proven publication record in NGS analysis and pipeline development	E
<b><i>Skills</i></b>	
Ability to integrate with existing programmer/bioinformaticist teams	E
Excellent organisational skills and attention to detail	E
Ability to act as service provider to principal investigators	E
<b><i>General</i></b>	

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Interest in breast cancer research	E
Good communication/presentation skills	E
Ability to keep good and accurate records of work	E
Motivated to publish independent research	E