



PARTICULARS OF APPOINTMENT

Ref: MI/18/104_2

Job Title: Postdoctoral Scientist

1. The Institute invites applications for the above post.
2. Salary will be within the range £31,604 – £41,929 per annum according to relevant experience and qualifications.
3. Informal enquiries can be made to Dr Esther Baena, email: esther.baena@cruk.manchester.ac.uk.
4. Applications should be returned to the Human Resources Department via email (jobs@cruk.manchester.ac.uk) by the closing date as stipulated in the advert. For applicants who wish to return their application by post, please contact HR department on Tel: (00 44) 0161 306 6098 / 0161 306 6091 or via email: jobs@cruk.manchester.ac.uk for further information.
5. To apply for this position please provide a completed CV cover sheet which includes the names and contact details of three referees, CV and Equal Opportunities Form. A cover letter is optional. No further information will be taken into consideration as part of your application.
6. All applicants should complete an equal opportunities form with their application.
7. If you have not been contacted within four weeks of the closing date you should assume that, on this occasion, your application has not been successful. We would, however, like to take this opportunity to thank you for your interest in the Cancer Research UK Manchester Institute, and we hope that this will not deter you from applying for other positions in the future.
8. During The Paterson Building's recovery following the fire in April 2017, you may be required to travel between/or be based at any of the following CRUK Manchester Institute locations: Alderley Park, University of Manchester, The Oglesby Cancer Research Building, The Christie.
9. The Institute will endeavour to contact shortlisted candidates promptly; however there may be occasions where a high volume of applications are received therefore applicant's patience is appreciated.



COPY OF THE ADVERTISEMENT

The University will actively foster a culture of inclusion and diversity and will seek to achieve true equality of opportunity for all members of its community.

Postdoctoral Scientist – Prostate Oncobiology

- Salary within the range of £31,604 - £41,929 per annum (dependent upon qualifications and experience)
- Job Ref: MI/18/104
- Duration: Fixed term for 3 years

About the role:

We are looking for a highly-motivated Postdoctoral Scientist to join Dr Baena's Prostate Oncobiology group to study the role of inflammation on prostate tumour initiation and how to prevent their progression to metastatic prostate cancer.

Prostate cancer (PCa) is the second leading cause of cancer-related mortality in men worldwide, accounting for 15% of all male cancer deaths. PCa patients exhibit a high heterogeneity both clinically and biologically highly variable clinical behaviour; some have indolent disease whilst in others it is lethal. Although the initial response to androgen deprivation therapy is almost universal, progression to castration resistant state is inevitable and lethal.

Previous work from our laboratory shows the importance of further understanding molecular events leading to castration-resistant prostate cancer as they're key for the development of improved therapies for such patients (Barros-Silva et al., 2018; Parry et al., 2018; Baena et al., 2013).

Thus, the post holder will work on defining the role of tumour-driven inflammatory pathways, and its impact on tumour microenvironment to promote tumour-initiation and progression to castration-resistant stage. This study will provide new avenues to prevent prostate tumour progression and metastasis by molecular and immune-based interventions for prostate cancer patients.

About you:

You will have a PhD in a relevant related subject and have research laboratory experience. You will also have profound knowledge in cellular and molecular biology and have experience of working with *in vivo* cancer models. You will have significant experience of cell culture, particularly *in vitro* 3D culture systems and handling primary cells. Profound experience in FACS analyses and lineage tracing work is also essential for this position.

This is an exciting opportunity for you to be involved in developing and driving the project as well as writing up work for presentation and publication.

Why choose Cancer Research UK Manchester Institute?

The Cancer Research UK Manchester Institute (www.cruk.manchester.ac.uk), an Institute of The University of Manchester (www.manchester.ac.uk), is a world-leading centre for excellence in cancer research. The Institute is core funded by Cancer Research UK (www.cancerresearchuk.org), the largest independent cancer research organisation in the



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world. We are currently situated at the internationally-renowned life sciences campus at Alderley Park in Cheshire England, 15 miles from Manchester, a vibrant and dynamic city surrounded by beautiful countryside.

We are partnered with The Christie NHS Foundation Trust (adjacent to the CRUK Manchester Institute, Paterson Building) in South Manchester (www.christie.nhs.uk), one of the largest cancer treatment centres in Europe. These factors combine to provide an exceptional environment in which to pursue basic, translational and clinical research programmes.

The CRUK Manchester Institute is a key part of the Belfast-Manchester Movember Centre of Excellence for Prostate Cancer. As well as bringing together expert researchers and clinicians, the Movember Centres of Excellence will also provide a world-class training ground for the scientists of the future, building a legacy of top prostate cancer researchers in the UK, as well as establishing international collaborations for the brightest minds to tackle the most important questions in prostate cancer research – now and into the future.

How to apply?

To apply for this position please complete an equal opportunities form and submit along with a CV and accompanying CV cover sheet to jobs@cruk.manchester.ac.uk. Please ensure you detail the names of three referees and quote the job reference number above. A cover letter is optional.

For any informal enquiries about this post, please contact Dr Esther Baena, email: esther.baena@cruk.manchester.ac.uk.

Additional Information:

On the 26th April 2017 The Paterson Building, which housed most of the Cancer Research UK (CRUK) Manchester Institute, caught fire resulting in significant damage. We shall be rebuilding our world-class research facilities and we would like to make you aware that in the meantime, the primary place of work for this position will be at the internationally-renowned life sciences campus at Alderley Park, which has excellent facilities to carry out research. We anticipate that this will be for a few years, after which we will return to our original site in Withington, Manchester, next to The Christie NHS Foundation Trust (Wilmslow Road, M20 4BX).



**CANCER RESEARCH UK MANCHESTER INSTITUTE
JOB DESCRIPTION**

JOB DETAILS

Job Title: Postdoctoral Scientist
Department: Prostate Oncobiology Group
Division: Cancer Research UK Manchester Institute (CRUK MI)

ORGANISATIONAL ARRANGEMENTS

Accountable to: 1. Group Leader Prostate Oncobiology

JOB PURPOSE

To contribute to the success of a research programme by undertaking specific research project(s) on behalf of and guided by the Group Leader.

PROJECT

Prostate cancer (PCa) is the second leading cause of cancer-related mortality in men worldwide, accounting for 15% of all male cancer deaths. PCa patients exhibit a high heterogeneity both clinically and biologically highly variable clinical behaviour; some have indolent disease whilst in others it is lethal. Although the initial response to androgen deprivation therapy is almost universal, progression to castration resistant state is inevitable and lethal.

The post holder will work on a project delineating the role of ETV1-driven stress and inflammatory pathways promoting tumour-initiation and resistance to androgen-deprivation. The characterisation of their impact on tumour microenvironment will provide new avenues for molecular intervention and will provide immune-based targets for cancer patients.

DUTIES AND RESPONSIBILITIES

It is recognised that the post holder is in training to develop their academic independence.

- To be inquisitive.
- To develop and drive an independent project within a multidisciplinary group.
- To pursue a program of work agreed with the Group Leader.
- To ensure successful completion of the project and maximise publication output.
- To prepare manuscripts for publication; to address referees comments.
- To keep up with the scientific literature.
- To design and execute experiments.
- To use established procedures and develop new approaches; to acquire new skills.
- To maintain accurate records of experiments and reagents.



- To ensure that all items that are used during the course of a program of work are replaced before being used up by directly ordering the relevant items.
- To interact with CRUK MI and other groups within the Movember Centre of Excellence for prostate cancer.
- To prepare and present work at and attend weekly laboratory meetings.
- To present work at the Institute, and at domestic and international meetings.
- Mandatory attendance at Institute seminars.
- To attend the Institute retreat, space permitting.
- To supervise graduate students, visiting scientists and others as necessary.
- To interact with collaborators and companies.
- To conform to COSHH, Codes of Practice, and Local and Institutional Rules.
- To adhere to the rules and regulations of any facilities, in house or external, that needs to be accessed during the course of the work programme.
- To perform other functions consistent with the position, nature of the post and as determined by the Group Leader.

STANDARDS OF PERFORMANCE

- ◆ Work efficiently, cost-effectively and in a flexible manner.
 - ◆ To meet objectives within pre-determined timescales.
 - ◆ Effective communications to be maintained with staff at all levels.
 - ◆ Strict adherence to protocols and Institute policies.
 - ◆ To comply with Health & Safety requirements, including having an awareness of personal responsibilities to maintain a safe working environment.
 - ◆ To maintain confidentiality of information in line with data protection requirements and University policy.
 - ◆ Familiarise themselves with the University's Equality and Diversity policies and to actively support these wherever possible.
 - ◆ Be a team player.
 - ◆ To strive to accomplish high quality of work.
 - ◆ To contribute to the University's agenda for social responsibility, including sustainability.
 - ◆ The post holder may be offered Hepatitis B immunisation by a vaccination programme; although this is dependent on the nature of the work and the availability of vaccine.
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PERSON SPECIFICATION

The person specification should set out the qualifications, experience, skills, knowledge, personal competencies and other requirements which the post holder requires to perform the job to a satisfactory level.

Job Title: **Postdoctoral Scientist**

	<u>ESSENTIAL</u> The qualities without which a post holder could not be appointed	<u>DESIRABLE</u> Extra qualities which can be used to choose between candidates who meet all the essential criteria	METHOD OF ASSESSMENT
QUALIFICATIONS	<ul style="list-style-type: none"> PhD* in cell biology, biochemistry, genetics or a relevant field <p>*(as a minimum requirement candidates must have submitted their thesis** by the start date of their employment and awarded their PhD within the specified probationary period)</p>	<ul style="list-style-type: none"> Home Office Personal Licence 	CV and Presentation of certificate
EXPERIENCE	<ul style="list-style-type: none"> Demonstrable experience in molecular biology, genetics, and cell biology Demonstrable experience in defining and solving research questions in relation to the project Experience in cancer, specifically solid tumours Experience of <i>in vivo</i> models of cancer or lineage-tracing Significant experience in cell culture, particularly <i>in vitro</i> 3D culture systems and handling primary cells Experience in lineage-tracing 	<ul style="list-style-type: none"> Demonstrated ability to generate top quality publication(s) Experience in prostate cancer Experience in genomics/next generation sequencing Experience across several disciplines Experience of analysing tumour samples Evidence of technology development and problem solving 	CV, references, publications and interview
SKILLS	<ul style="list-style-type: none"> Cell biology - FACS analysis, sorting, transfections (transient and stable), microscopy, etc Molecular biology – including DNA and interfering RNA manipulation (transient and stable), cloning, DNA and RNA extractions (tissues and cells), qPCR, cloning Protein biology - including protein preparation, immunoprecipitation, western 	<ul style="list-style-type: none"> Ability to inspire and motivate colleagues and any students and technicians with whom interactions are necessary Chromatin biology - including ChIP, copy number analysis (tissues and cells) 	CV, references, publications and interview



	<p>blotting, immunofluorescence (tissues and cells)</p> <ul style="list-style-type: none"> • Tumour xenograft work – including transplants • Ability to share ideas and information and communicate clearly and concisely • Ability to interact with colleagues and learn new skills • Ability to engage in constructive debate and work as part of a team to support laboratory objectives • Ability to prioritise and discriminate the critical from the trivial • Innovative approach to problem solving • Ability to work independently with minimal supervision • Computer literate, familiarity with MS office package • To set goals, respond to challenges and take the initiative • A demonstrated ability to perform research and to develop novel ideas 		
KNOWLEDGE	<ul style="list-style-type: none"> • Profound knowledge of the essentials of molecular biology, genetics, cell biology or tissue stem cell biology • Knowledge of cancer, specifically solid tumours 	<ul style="list-style-type: none"> • Ability to rapidly assimilate new information into a comprehensive view of the development of the field • Knowledge of next generation sequencing or proteomics • Knowledge of prostate cancer 	CV, references, publications and interview
OTHER	<ul style="list-style-type: none"> • Willingness to travel • Self-motivated • Meticulous • Interactive • Organised • Ability to work to strict deadlines • Ability to work well within a team framework as well as on an individual project • Technically focused • Willingness to learn new experimental techniques • Willingness to implement new management and experimental 		Interview Referees comments



	<p>techniques</p> <ul style="list-style-type: none">• To show commitment to equality and fairness and integrity in dealing with others• To be willing to work across organisational boundaries• To seek new knowledge and share ideas• To be open and responsive to change and innovation		
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** It is essential that thesis submission takes place prior to the individuals start date. Written confirmation is required by the University where the PhD is being studied that a submission has taken place. The successful candidate has to be awarded their PhD qualification within the Probation period in place for a Postdoctoral Scientist otherwise this will not meet the requirements for the grade.



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THE CITY OF MANCHESTER AND THE REGION

Manchester is one of the great European cities and the Cancer Research UK Manchester Institute is located a short distance from the city centre and is serviced by regular public transport to the city centre. The city's architecture represents one of the high points of Victorian achievement. The modern city is a major centre of banking, commerce and manufacturing. It has a highly cosmopolitan atmosphere and its cultural life is internationally renowned.

There are three outstanding professional theatre companies, the halls of the Hallé and BBC Philharmonic orchestras, the Cornerhouse as well as other cinemas, and Europe's fastest-growing Chinatown. On the way into the city, there is perhaps the best stretch of road in the entire country for Indian and Pakistani food, known as the curry mile in Rusholme.

Amongst developments enriching the area's cultural life have been: the opening of the Lowry Centre and Media City at Salford Quays; the opening of the Bridgewater Concert Hall; the refurbishment of the City Art Gallery; the opening of Urbis in the centre of Manchester and of the Imperial War Museum North, designed by Daniel Libeskind, in Trafford.

Trafford, specifically Old Trafford, is known internationally for sport: it is a venue for Test cricket and the home of Manchester United FC. The Commonwealth Games were held in Manchester in 2002 and were highly acclaimed. The Commonwealth Stadium became the home of Manchester City FC in 2003.

Housing is varied, plentiful and the price ranges can start moderately priced and are as varied as the requirements.

Schooling ranges from world-famous private schools to excellent sixth-form colleges and comprehensives.

Manchester is well served by a major international airport, with direct scheduled flights to many destinations in Europe as well as North America and Asia.

Manchester Piccadilly railway station has been refurbished and is served by inter-city and other train services – with a direct link to Manchester Airport. The expanding network of Metrolink tram services offers an alternative mode of public transport from certain parts of the conurbation and is currently being expanded to include connections near to the Institute. Some of the most beautiful countryside in Europe is just short of an hour's drive from the Institute in the Peak District National Park, while the Lake District and Snowdonia are also within easy reach.

Manchester offers extensive provision for research. Library facilities include the John Rylands University Library (the major library in the North West and the third largest in the country) and the Manchester Central Reference Library. Facilities for quantitative analysis are provided by Manchester Computing and the Computer Support Unit



ADDITIONAL RECRUITMENT AND SELECTION PARTICULARS:

Shortlisted Candidates:

1. We will reimburse reasonable travel expenses. You need to retain all your receipts as you will need to submit these with your expense claim form. This form will be given to you when you attend your interview.
2. If candidates require accommodation the Institute can arrange this for you. Please notify the Human Resources Department as soon as possible so that this can be arranged on 0161 306 6098 / 0161 306 6091 or email: jobs@cruk.manchester.ac.uk. Please note that reimbursement for accommodation may **not** apply.
3. If candidates have any additional support needs to enable them to attend an interview they will be able to request/discuss this with the HR department when arranging the interview.
4. Shortlisted candidates may be expected to complete a presentation as part of the selection process. Information regarding the duration and title of the presentation will be provided in the invitation to interview correspondence. We supply both laptop and projector for presentations.
5. All dates and times stated in correspondence from the Institute refer to UK GMT (Greenwich Mean Time).
6. Candidates need to bring along their passport to interview, (a copy of which will be taken for our records) and where applicable, your visa, when you visit the Institute. If candidates have difficulty in producing their passport, please contact the Human Resources Department prior to the interview on 0161 306 6098 who will be able to advise you.
7. **Skype interview with presentation:**
Instances may arise when it may not be possible for candidates to travel to the Institute to attend the interview on the given date. In this circumstance, a Skype interview may be used as the first stage of the selection process. The criteria will be consistent with all other candidates. If successful following the Skype interview, candidates will be invited to visit the Institute at a later date. Further information will be provided at that time. 24 hour prior to the interview we will require:
 - ◆ A copy of the presentation emailed to jobs@cruk.manchester.ac.uk Skype name
 - ◆ A contact telephone number
8. **Telephone conference with presentation:**
As above, instances may arise when it may not be possible for candidates to travel to the Institute to attend the interview on the given date. In this circumstance, and if a Skype interview is not possible, then a telephone conference interview will be arranged as the first stage of the selection process. The criteria will be consistent with all other candidates. 24 hour prior to the interview we will require:



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- ◆ A copy of the presentation emailed to jobs@cruk.manchester.ac.uk
- ◆ A contact telephone number



POSTDOCTORAL SCIENTIST TERMS AND CONDITIONS

The following is a basic summary of the standard terms and conditions applicable to the post you have applied for:

- The Postdoctoral Scientist grade is on a Cancer Research UK salary. Starting salary is £31,604 – £41,929 per annum dependent upon experience and qualifications.

Individuals' pending their formal PhD qualification will be placed on a salary of £30,000. Once their PhD has been awarded, the individual will revert to the appropriate Postdoctoral Scientist salary (once evidence has been provided to the Human Resources Department).

- Your employment will be with The University of Manchester appointed under The Cancer Research UK Manchester Institute terms and conditions.
- Salary is paid monthly.
- There are 32 days holiday per year plus Bank Holidays for England.
- The duration of the contract is three years.
- 37 hour week.
- There is a probationary period attached to this post of 8 months. It's standard for many organisations now and consists of two 4-monthly reviews with your line manager.
- You are eligible to join the USS pension scheme.
- Any offer made by the Cancer Research UK Manchester Institute would require the successful candidate to undergo a medical clearance. This is arranged with Occupational Health department at the University of Manchester prior to starting employment and consists of a basic medical. This is to address and gain clearance for any potential hazards identified for the role on offer.
- Offer is subject to receipt of 3 satisfactory references and proof of your highest qualification.
- The successful candidate is required to have submitted their thesis prior to their start date. Confirmation from their educational institution will be required by the Institute's Human Resources Department prior to commencing employment.
- Offer is subject to documented evidence of your right to work in the UK under the Home Office UK Border Agency Regulations.
- The appointment will be subject to a satisfactory pre-employment security check.



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- The successful candidate is required to complete a Rehabilitation of Offenders/ Criminal Records declaration form at the offer stage of the process. Please note: a criminal record will not necessarily be a bar to obtaining a position.
- The Institute is promoting a green travel plan and there are staff benefits promoting this including a cycle to work scheme and the use of public transport. There are strong links to bus routes and trains to all CRUK Manchester Institute locations.

At The Oglesby Cancer Research Building and The Christie site there are also strong links to tram lines, however, please note: that there are car parking restrictions imposed around these sites.

- There are a range of staff benefits. If you require further information at this stage please contact HR department directly.