

THE POST

Colleges: Interdisciplinary: Engineering, Mathematics and Physical Sciences (CEMPS); Medical School (UEMS) and Life and Environmental Sciences (CLES)

Post: Research Fellow

Reference No: P48003

Grade: F

HERA: RFEL

Reporting To: Professor John Terry

The above full-time fixed term post is available from 1st April 2015 to 31st March 2018.

Job Description

Main purpose of the job:

We have 5 Wellcome Trust funded Research Fellow positions, available to work within the Centre for Biomedical Modelling and Analysis; an exciting new multidisciplinary research environment spanning three of the University's Colleges. There are 5 Research Fellow posts, available for 36 months from 1st April 2015. Individuals who successfully secure external Fellowship funding during their appointment will be further **offered a proleptic appointment** within a College closely aligned to their core research interests. These positions will be suitable for exceptional early-career researchers whose expertise spans one or more of the following areas: spatio-temporal modelling, complex networks, algorithm design and parallel architectures, data analytics and visualisation, optical microscopy and image analysis, high throughput -omics, causal modelling of observational data and uncertainty quantification. Candidates are required to have a high level of analytical ability, as well as be able to communicate complex and conceptual ideas to a range of groups, including scientists from outside the immediate research area and to participate as part of an interdisciplinary team to develop new research ideas.

The roles have two main components with the Fellows expected to divide their time equally between the two: First they will pursue their **own programme of research** (which should be in an area closely aligned to existing strengths within the University). Second they will develop new areas of cross-disciplinary research within the Centre for Biomedical Modelling and Analysis. This will include pump priming, co-creating and consolidating both new and existing research partnerships; training and advising biomedical researchers in areas aligned to their core expertise; and mentoring of students, thus enhancing the interdisciplinary research ethos within the University. This will include the opportunity to co-supervise a cohort of PhD students who will be recruited during 2016.

The Centre for Biomedical Modelling and Analysis is led by a core group of leading interdisciplinary biomedical academics from across three colleges: Tim Fraying (Professor of Human Genetics), Christian Soeller (Professor of Physical Cell Biology), Ed Watkins (Professor of Experimental and Applied Clinical Psychology) and James Wakefield (Associate Professor in Cell Biology), under the co-directorship of Nicholas Talbot FRS (Professor of Molecular Genetics and Deputy Vice Chancellor for Research and Knowledge Transfer) and John Terry (Professor of Biomedical Modelling and Director of Research for Mathematics and Computer Science). These Professors will play an important role in mentoring the Fellow as well as utilising the Centre to establish new collaborations within the institute. The Centre environment will allow the appointed Fellows to gain key data generating methodologies, ensuring their awareness of data control and assessment. This balance of research and training provides a unique environment for the appointed Fellows to establish their own independent research careers within the biomedical domain.

Main duties and accountabilities:

1. To undertake research as appropriate to the field of study including:
 - Leading individual or collaborative research projects;
 - Developing research objectives, projects and proposals;
 - Identifying sources of funding and contributing to the process of securing funds;
 - Extending, transforming and applying knowledge acquired from scholarship to research and appropriate external activities;
 - Writing or contributing to publications or disseminating research findings using media appropriate to the discipline;
 - Making presentations at conferences or exhibiting work in other appropriate events;
 - Assessing, interpreting and evaluating outcomes of research;
 - Developing new concepts and ideas to extend intellectual understanding;
 - Resolving problems of meeting research objectives and deadlines;
 - Developing ideas for generating income and promoting research area;
 - Contributing to the growth of the Centre through enabling new interdisciplinary research as well as building upon areas of existing strength
 - Developing ideas for application of research outcomes;
 - Deciding on research programmes and methodologies, often in collaboration with colleagues and sometimes subject to the approval of the head of the research programme on fundamental issues.
2. To routinely communicate complex and conceptual ideas to those with limited knowledge as well as to peers using high level skills and a range of media and to present the results of scientific research to sponsors and at conferences.

This job description summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility. Please visit the Human Resources website to view the Research Fellow role profiles.

Person Specification

Competency	Essential	Desirable
Attainments/Qualifications	PhD or equivalent in a quantitative discipline such as mathematics, physics, computer science, chemistry, informatics; systems biology or a related interdisciplinary field;	
Skills and Understanding	Possess sufficient specialist knowledge in one or more of the following areas: spatio-temporal modelling, complex networks, algorithm design and parallel architectures, data analytics and visualisation, optical microscopy and image analysis, high throughput –omics, causal modelling of observational data and uncertainty quantification, enabling development of research programmes and methodologies across disciplines. Record of research output in internationally recognised peer-reviewed publications.	
Prior Experience	Experience of research in a quantitative discipline	Experience of post-doctoral level research. Experience of working in an interdisciplinary research

		environment. Experience of undergraduate or postgraduate teaching and supervision. Success in obtaining grant funding (either internal or external).
Behavioural Characteristics	Excellent written and verbal communication skills. Able to communicate complex and conceptual ideas to a range of groups, including scientists from outside the immediate research area and participate as part of an interdisciplinary team to develop new research ideas. Evidence of the ability to collaborate actively within the Institution and externally to complete research projects and advance thinking. Able to participate in and develop internal and external research networks.	Able to identify sources of funding, generate income and build relationships for future activities.

Informal Enquiries

Before submitting an application you may wish to discuss the post further by contacting Dr Charlotte Moger: 01392 726493 or c.j.moger@exeter.ac.uk

Additional Information Relating to the Post

Salary

The starting salary for this post will be from £33,242 to £37,394 on Grade F, depending on qualifications and experience.

An increment will be payable on 1 August each year until the top of the scale is reached (subject to being in post for 6 months and satisfactory performance). The scale will be subject to a cost of living review each year.

Hours of work

There are no specific hours of work but staff are required to work such hours as are necessary to carry out the duties associated with the appointment

Annual Leave

The annual leave entitlement for full-time appointments is 41 days per calendar year (pro rata for part-time appointments). For further information see our website <http://www.admin.ex.ac.uk/personnel/leave.shtml>.

Probationary Period

The appointment will normally be subject to a probationary period of one year.

References & Medical Clearance

All appointments are subject to satisfactory reference and medical checks and individuals will be required to complete a medical assessment form before appointment is confirmed. Applicants should note that the University normally contacts referees for short-listed applicants without further advice to applicants. When advising of referees, if they are resident overseas, please ensure you supply fax numbers and/or email addresses enabling us to contact them (if necessary) without delay.

Right to Work in the United Kingdom

If you do not have the right to work in the UK, this appointment will be subject to the University successfully obtaining a Certificate of Sponsorship under the UK's Points Based System for migrant workers and to you obtaining Entry Clearance/Leave to Remain.

For further information, see the Home Office website at <http://www.ukba.homeoffice.gov.uk/>. In particular you are encouraged to undertake a self assessment of your eligibility to work in the UK using the link to www.ukba.homeoffice.gov.uk/pointscalculator.

Terms & Conditions

The Terms and Conditions of Employment can be viewed on line by visiting <http://www.exeter.ac.uk/staff/employment/conditions/terms/>

Pensions

Membership of the Universities' Superannuation Scheme (USS) is automatic provided that you meet the qualifying criteria for membership. The USS is a contracted-out scheme. USS scheme has two sections: Final Salary and Career Revalued Benefits; which section you will be eligible for will depend on any previous membership of USS. An information leaflet concerning the qualification rules for both the sections is enclosed; more detailed information about the USS scheme structure can be found at www.uss.co.uk. **IF you have been in USS before, you are strongly requested to contact the Pay and Benefits Office as soon as you can so that possible membership of the Final Salary benefits section can be investigated.** The University, as your employer, contributes such sums as will be required to maintain the full benefits of the scheme. You may opt out of the scheme; if you wish to do so, you should contact the Pay and Benefits Manager, Mrs Alison Rose (01392 263088/email a.j.rose@exeter.ac.uk) for further information. Further information about Pension Salary Exchange is available from the Human Resources website www.admin.exeter.ac.uk/personnel or from the Pensions Office.

Relocation

You may be able to claim relocation expenses in accordance with the University's Relocation Assistance Scheme. The maximum allowance that you can reclaim under the Relocation Assistance Scheme, if eligible, is 10% of salary.

Short-listing Information

We will acknowledge your application by email. The University of Exeter recognises the time and effort taken to apply for a position and will contact you by email to inform you of results of shortlisting.

Assessment of Candidates

Shortlisted candidates will be invited to attend an assessment centre and interview, where there will be opportunities for fellows to present current and future research, as well as work with other candidates in a series of cohort based exercises. You will also have the opportunity to visit our new state-of-the-art RILD building and biomedical research facilities, as well as the opportunity to meet our research teams and get an idea of the support available to you to establish your independent research career. Candidates will be invited to attend a group evening meal, with interviews scheduled for the following day. Candidates will be informed before Christmas with details of the assessment centre and interviews.

Application Procedure and Interview Information

The closing date for completed applications is **15th December 2014**. We expect to hold interviews in Exeter the week commencing **5th January 2015**.

Data Protection Act (1998)

The information contained within your application is being requested to enable the University to make employment decisions and meet statutory obligations. Any information provided to the University in this context will be treated confidentially and used only by manager(s), member of the University, Human Resources, Superannuation and Payroll during the course of your employment. Where the application relates to a post which is externally funded this information may be passed onto the relevant funding body.