



THE POST

College/Service: College of Engineering, Mathematics and Physical Sciences (Based in Living Systems Institute)

Post: Industrial Postdoctoral Research Fellow – TREE

Reference No: P61710

Grade: F

HERA: RFEL

Reporting To: Professor John Terry

Job Description

The above post is one of two available for 36 months to work in the Translational Research Exchange @ Exeter based in the Living Systems Institute.

Our group aligns to three specific challenges as laid out in the Industrial Strategy Challenge Fund: From data to early diagnosis and precision medicine; Healthy ageing; Leading-edge healthcare. We are seeking closer links with industry to help develop solutions to support these challenges.

The Translational Research Exchange @ Exeter (TREE) was established in 2016 using Wellcome Trust Institutional Strategic Support Funding. We are now beginning a new phase of growth focussed around partnership development with industry. To facilitate this, we seek to recruit two Industrial Postdoctoral Research Fellowships (up to 1.0FTE), with a focus on collaborative research with industry around the interface of mathematical modelling, data analytics and (bio)medicine.

Working closely with our Industrial Partnership Development Manager (IPDM) and our wider research team, you will develop collaborative research projects and partnerships through working with enterprises ranging from micro-entities and SMEs to large corporations.

Main duties and accountabilities:

1. To undertake research as appropriate to the field of study. The responsibilities may include all or some of the following:
 - Acting as principal investigator on research projects, in particular those with industry and government partners;
 - Developing research objectives, projects and proposals focused on addressing industry challenges;
 - Conducting individual or collaborative research projects, in particular with industry and government partners;
 - Identifying sources of industry and government 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, including presenting to experts and non-experts at industry conferences;
 - 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, in particular within industry and government;
 - Developing ideas for application of research outcomes, in particular seeking to address industry challenges and to deliver impact;
 - Deciding on /following research programmes and methodologies, often in collaboration with colleagues and partner organisations, and sometimes subject to the approval of the head of the research programme on fundamental issues.
2. Where appropriate and as agreed with line managers, to contribute to teaching and learning programmes in the School and to supervise research students.
 3. To act as research team leader including:
 - Mentoring colleagues with less experience and advising on their professional development;
 - Coaching and supporting colleagues in developing their research techniques;
 - Supervising the work of others, for example in research teams or projects;
 - Developing productive working relationships with other members of staff and staff within partner organisations;
 - Co-ordinating the work of colleagues to ensure equitable access to resources and facilities;
 - Dealing with standard problems and help colleagues to resolve their concerns about progress in research.
 4. 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 partner organisations, sponsors and at conferences.
 5. As determined by the nature of the project and the project deliverables that have been agreed with the industry partner or sponsor, to plan, co-ordinate and implement research programme activity including:
 - Managing the use of research resources and ensuring that effective use is made of them;
 - Monitoring and reporting on the use of research budgets;
 - Helping to plan and implement commercial and consultancy activities;
 - Ensuring delivery of contracted deliverables when working in partnership with external organisations;
 - Where appropriate, to plan and manage own consultancy assignments.

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 qualification/experience in a related field of study.	Be a nationally recognised authority in a relevant subject area
Skills and Understanding	Possess sufficient specialist knowledge in one or more of: <ul style="list-style-type: none"> - mathematical and computational modelling - machine learning, statistics or data analytics - complex networks - multi-scale 'omics to develop and innovate research programmes and methodologies that are specifically focussed on addressing an applied research problem with industrial partners.	Record of research output in high quality publications and/or patents

Prior Experience	Demonstrable and direct experience of joint working between industry and university to deliver high quality research based collaborations.	Experience of managing research projects and research teams. Experience of reporting to industry.
Behavioural Characteristics	Excellent written and verbal communication skills. Able to communicate complex and conceptual ideas to a range of groups including non subject-experts. Evidence of the ability to collaborate actively within the Institution and externally, with a range of stakeholder and partner organisations, to complete research projects and advance thinking. Able to participate in and develop external networks. Able to balance the pressures of research, administrative demands and competing deadlines. Able to identify sources of funding, generate income, obtain consultancy projects, or build relationships for future activities.	
Circumstances		

Informal Enquiries

Before submitting an application you may wish to discuss the post further by contacting Chrissie Walker, Research Project Manager, telephone (01392 725 838) or email c.j.walker@exeter.ac.uk

Terms & Conditions

Our Terms and Conditions of Employment can be viewed [here](#).

Further Information

Please see our [website](#) for further information on working at the University of Exeter.