

THE POST

College: College of Medicine & Health

Post: Postdoctoral Research Associate

Reference No: P68528

Grade: E (sp26)

HERA: ARF

Reporting To: Prof Noel Morgan

Responsible For: Postdoctoral Research Project

The above full-time post is available from 1st October 2019 to 30th September 2020 in the College of Medicine & Health.

Job Description

The post is designed to pursue independent research which will investigate the role of PPP1R1A, a protein involved in the regulation of phosphatase activity, in pancreatic beta cells. The project will utilise cell lines (both rodent and human) expressing either wild type or mutant forms of PPP1R1A to understand the role of this protein in controlling secretory responses, cell cycle progression and antiviral activity in beta cells. The work will also employ immunocytochemical approaches to study the expression and subcellular localisation of PPP1R1A in cultured beta cells and in a collection of pancreas samples obtained from people with diabetes and from non-diabetic individuals.

Main purpose of the job:

To perform laboratory investigations that will lead to an improved understanding of the cellular and molecular events that result in diabetes in susceptible individuals.

Main duties and accountabilities:

- 1. To undertake research as appropriate to the field of study including:
 - Writing up research work for publication;
 - Developing research objectives and proposals for own or joint research;
 - Making presentations at national and international conferences and similar events;
 - Dealing with problems which may affect the achievement of research objectives and deadlines;
 - Analysing and interpreting the results of own research and generating original ideas based on outcomes;
 - Using new research techniques and methods;
 - Using initiative and creativity to identify areas for research, developing new research methods and extending the research portfolio;
 - Using creativity to analyse and interpret research data and draw conclusions on the outcomes.
- 2. To contribute to teaching and to be involved in the assessment of student knowledge including assisting in the supervision of student projects and in the development of student research skills.
- 3. To work in collaboration with colleagues as appropriate to the field of study including:
 - Contributing to collaborative decision making within the research group;
 - Contributing to the production of collaborative research reports and publications.

- Preparing papers and presenting information on research progress and outcomes to bodies supervising research, e.g. steering groups.
- 4. To communicate complex information, orally, in writing and electronically.
- 5. To prepare proposals and applications to external bodies, e.g. for funding and contractual purposes
- 6. To contribute to the planning of research projects.
- 7. To use research resources, laboratories and workshops as appropriate and to take responsibility for reducing hazards and for the health and safety of others. Where appropriate, will also be responsible for conducting risk assessments.
- 8. To monitor research budgets as appropriate.
- 9. To engage in continuous professional development and to be responsible for continually updating knowledge and understanding in field of study or specialism and for developing skills.

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 nearing completion) or equivalent qualification/experience in a related field of study.	
Skills and Understanding	Sufficient knowledge in the discipline and of research methods and techniques to work within established research programmes. This must include experience of handling proteins which regulate phosphatase activity, establishment of clonal cell lines & generation of protein variants by site-directed mutagenesis. Evidence of published research in human beta cell biology. Experience of immunocytochemical staining of FFPE tissue sections and optimisation of antibodies/ staining conditions. Experience of light and confocal microscopy and image analysis.	Experience of human cell culture, cellular and molecular biology techniques including RT-PCR, western blotting, flow cytometry. Managing sample tracking databases Experience of handling HTA relevant material
Prior Experience	Experience of conducting risk assessments and understanding of health and safety legislation	Experience of undergraduate teaching
Behavioural Characteristics	Excellent written and verbal communication skills. Able to communicate material of a specialist or highly technical nature. Able to manage research and administrative activities and to balance the competing pressures of research and administrative demands and deadlines. Able to liaise with colleagues and students.	

	Able to build contacts and participate in internal and external networks for the exchange of information and collaboration.	
	Able to identify potential sources of funding.	
	Actively participate as a member of a research team.	
	Engage in continuous professional development.	
	Understand equal opportunity issues as they may impact on areas of research content.	
	Where appropriate to the role, willingness to undergo training in order to conduct risk assessments.	
Circumstances	Willing to work flexibly to achieve project demands.	

Informal Enquiries

Before submitting an application you may wish to discuss the post further by contacting Prof Noel Morgan (email n.g.morgan@exeter.ac.uk) or Prof Sarah Richardson (email s.richardson@exeter.ac.uk).

 $\frac{\text{Terms \& Conditions}}{\text{Our Terms and Conditions of Employment can be viewed } \underline{\text{here}}.$

Further Information

Please see our website for further information on working at the University of Exeter.