



THE POST

College:	Life and Environmental Sciences
Post:	Marie-Sklodowska Curie ITN: Early Stage Researcher
Reference No:	R65370
Grade:	E
HERA:	tbc
Reporting To:	Prof. Michael Schrader
Responsible For:	N/A

The above full time post is available from September 1, 2019 (or as soon as possible thereafter) to May 31, 2022 in the College of Life and Environmental Sciences.

Job Description

The Initial Training Network “PERoxisome Interactions and COmmunication” (PERICO) fosters education of ESRs in a project to uncover how a central metabolic organelle, the peroxisome, participates in controlling cellular metabolism.

Metabolism and metabolic control are emerging as important frontiers in physiology. This is because, in our rapidly changing world, we face the effects of both metabolic extremes – from obesity on the one hand to malnutrition on the other. Learning how to control energy metabolism is therefore one of the most pressing challenges of the 21st century.

Peroxisomes are key metabolic organelles, which must communicate and interact extensively with their environment to exchange metabolites and coordinate cellular responses. Membrane contact sites, where membranes of two organelles are physically tethered to enable rapid transfer of small molecules, enable organelle communication and are crucial for coordination of cellular functions and hence human health. Research on contact sites and transport proteins is a challenging, upcoming field in current cell biology.

PERICO will exploit recent developments in high-throughput and genome-wide screening technologies, combine these with modern molecular cell biology and systems biology and ultimately translate the data into new leads for drug discovery and therapy.

PERICO will train 15 Early Stage Researchers (ESRs) at world-leading academic institutions, including university hospitals and companies. The training schemes include specific research projects, a wide range of dedicated courses, and workshops organized by the academic and industrial partners of the Network, complemented with training in managerial soft skills.

Further information can be found at: www.itn-perico.eu

Main purpose of the job:

The post holder will support the work of Prof. Michael Schrader (CLES, Biosciences, UoE) as part of an EU H2020 Marie-Sklodowska Curie Innovative Training Network entitled PERICO (PERoxisome Interactions and COmmunication). The project will investigate the newly discovered peroxisome – ER membrane contact sites in mammalian cells. The funded post includes enrolment on a 3-year doctoral programme in the College of Life and Environmental Sciences and part of the research will be performed in collaboration with the Amsterdam Medical Centre, MS-OmicsAps, and The Hospital for Sick Children, Canada.

Main duties and accountabilities:

1. To support research activity under the direction of the principal investigator as appropriate to the research project. Responsibilities may include:
 - Undertaking a broad range of basic research activity according to the nature of the research project. For example preparing, setting up, conducting and recording the outcome of experiments and field work, developing questionnaires and conducting surveys, using straightforward mathematical modelling, statistical techniques or scientific computation;
 - Maintaining databases, keeping accurate written and computerised records and ensuring data is stored securely and managed in accordance with the Data Protection Act;
 - Conducting literature and database searches as required;
 - Writing up the results of own research;
 - Contributing to the production of research reports and publications;
 - Presenting information on research progress and outcomes to bodies supervising research, e.g. steering groups, sponsors or members of research groups;
 - Assisting in the preparation of papers or reports for steering groups and other bodies;
 - Providing administrative support to the principal investigator and other project researchers as required;
 - Making use of standard research techniques and methods;
 - Analysing and interpreting the results of own research and generating original ideas based on outcomes;
 - Contributing to the planning of future research projects.
2. To support teaching activity by assisting in the supervision of student projects and providing limited supervision or instruction to classes, if required.
3. To liaise with members of the research team and other colleagues as appropriate to the research project.
4. To establish internal and external contacts to develop knowledge and understanding and form networks for future collaboration.
5. To plan own day-to-day research activity within the framework of the agreed programme of research and co-ordinate own work with that of others in the group to avoid conflict or duplication of effort.
6. To use research resources, laboratories and workshops as appropriate and to adhere to safety procedures as appropriate. This may include wearing personal protective equipment, conducting risk assessments, reducing hazards and being responsible for the health and safety of others.
7. To engage in continuous professional development and to be responsible for continually updating own knowledge and understanding in field of study or specialism and for developing own 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.

Person Specification

Competency	Essential	Desirable
Attainments/Qualifications	Educated to first degree level in a related field of study or equivalent experience.	Master's degree (or very close to completion) in the field of Life Sciences or Biology (molecular cell biology, biochemistry, biomedicine).
Skills and Understanding	Possess sufficient breadth or depth of knowledge in the discipline and of research methods and techniques to work within own area.	Experience in mammalian cell culture, fluorescence microscopy and protein biochemistry.
Prior Experience	Understanding of health and safety legislation.	

Behavioural Characteristics	<p>Ability to maintain accurate records.</p> <p>Ability to organise and prioritise own research work within the project framework.</p> <p>Good written and verbal communication skills.</p> <p>Computer literate.</p> <p>Good analytical skills.</p> <p>Able to liaise with colleagues and students.</p> <p>Able to build contacts and participate in internal and external networks for the exchange of information and collaboration.</p> <p>Actively participate as a member of a research team</p> <p>Engage in continuous professional development.</p> <p>Understand equal opportunity issues as they may impact on areas of research content</p>	
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 Professor Michael Schrader, telephone (01392 72 5850) or email m.schrader@exeter.ac.uk.

Additional Information Relating to the Post

Eligibility

Applicants will possess a master's degree (or be very close to completion) in life sciences/biology (e.g. molecular cell biology, biochemistry) or equivalent in a relevant scientific field and excellent communication skills. They must be eligible to be appointed as an Early Stage Researcher in the UK under the EC Horizon 2020 Marie-Skłodowska Curie Action, Innovative Training Networks (ITN) Scheme. This is currently defined as:

‘shall at the time of recruitment by the host organisation, be in the first four years (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree.’

‘**Full-time equivalent research experience** is measured from the date when a researcher obtained the degree which would formally entitle him or her to embark on a doctorate, either in the country in which the degree was obtained or in the country in which the researcher is recruited or seconded, irrespective of whether or not a doctorate is or was ever envisaged.’

Under the rules of the scheme European and International applications are welcomed, subject to the UKVI regulations on the Right to Work in the UK. At the time of recruitment by the host organisation, researchers shall not have resided or carried out their main activity (work, studies, etc.) in the country of their host organisation for more than 12 months in the 3 years immediately prior to the reference date. Compulsory national service and/or short stays such as holidays are not taken into account.

Salary

Salary will be on a spot salary in the range £27,025 to £30,395 per annum on Grade E subject to knowledge, skills and experience. In addition, allowances are payable in line with the Marie Curie Horizon 2020 requirements for Early Stage Researchers as follows: a Marie Curie allowance of £7,077 per annum and a mobility allowance of £5,221 per annum.

The University pay scale will be subject to a cost of living review each year, but you will not receive annual increments.