



## PhDs

### Job description

PERICO is a Marie Curie Innovative Training Network (ITN) funded by the European Union. PERICO will employ 15 Early Stage Researchers (ESRs, PhD students) and we currently have 5 Open Positions (see next page for a description, or visit the website: [www.itn-perico.eu](http://www.itn-perico.eu)).

### Short description of the project

In this program we will study peroxisome interactions and communication with other cell organelles. This research will contribute to the development of novel leads for drug discovery and therapies for a growing list of serious human diseases in which peroxisomes have been implicated such as age-related disorders (atherosclerosis, diabetes, neurodegeneration and cancer), metabolic disorders (obesity and malnutrition) and pathogenic trypanosomal infections (e.g. sleeping sickness).





PERICO overcomes current barriers by establishing a strong, multidisciplinary and inter-sectoral training network, developing technologies tailored to solve key questions in organelle biology. The PERICO programme 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 ESRs at world-leading academic institutions, including university hospitals and companies, thus forming strong interdisciplinary links between industry, life/medical sciences, and end-users. The Network consists of 10 full partners, representing 4 Member states and Israel, and includes 2 commercial enterprises.

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. The scientific training programme will be complemented with training in managerial soft skills.



PERICO PhD Positions, open positions are green: 2 in Groningen (NL), 2 in Freiburg (DE), 1 in Berlin (DE); locations of further PERICO partner organizations are marked in yellow.



## Workpackages

### **Workpackage 1: To understand the role of physical contacts between peroxisomes and other organelles in controlling cellular metabolism**

WP 1 aims to identify and characterize novel peroxisomal contact site resident proteins and to understand the molecular mechanisms and physiological importance of peroxisomal contact site formation and function.

### **Workpackage 2: To characterize the role of peroxisomal transporter proteins in controlling cellular metabolism**

WP 2 aims to identify novel peroxisomal/glycosomal transporter proteins in yeast, human and trypanosomes using a combination of genetic screens, proteomics approaches and bioinformatics searches. In addition, the most promising candidates will be functionally analyzed.

### **Workpackage 3: To understand the significance of peroxisome interactions in health and disease**

WP 3 aims to establish the specific roles of peroxisomal contact site and transport proteins in human peroxisome metabolism and functioning as well as in interaction and communication with other cell organelles and how defects therein may cause disease or affect aging; (2) Identification and characterisation of human disorders due to defects in peroxisomal contact sites and metabolite transport proteins; (3) Understand how and why malnutrition causes the loss of liver peroxisomes and how this compromises mitochondrial function; (4) To develop novel inhibitors of the glycosomal function of Trypanosomatid parasites.

## Open positions

### [ESR 3: Translational models for peroxisomal dysfunction in genetic disease and malnutrition \(Workpackage 3\)](#)

Host organization: University Medical Centre Groningen, Department Paediatrics, Centre for Liver, Digestive and Metabolic Diseases, Groningen, NL; contact: b.m.bakker01@umcg.nl

### [ESR 5: Autonomous High-Throughput accurate FLIM with subcellular resolution \(Workpackages 1 & 2\)](#)

Host organization: Lambert Instruments, Groningen, NL; contact: jeroen@lambertinstruments.com

### [ESR 8: Dynamics and regulation of ER-peroxisome contact sites \(Workpackage 1\)](#)

Host organization: University of Freiburg, Department of Biochemistry & Functional Proteomics, Freiburg, Germany; contact: bettina.warscheid@biologie.uni-freiburg.de

### [ESR 9: High-resolution proteomics of peroxisome-centred membrane contact sites and transporters \(Workpackages 1 & 2\)](#)

Host organization: University of Freiburg, Department of Biochemistry & Functional Proteomics, Freiburg, Germany; contact: bettina.warscheid@biologie.uni-freiburg.de

### [ESR 10: Model-driven discovery and network modelling of peroxisomal interactions \(Workpackages 1,2 & 3\)](#)

Host Organization: Lifeglimmer GmbH, Berlin, Germany; contact: vds@lifeglimmer.com



## What do we need

- You have a Masters degree or equivalent in life sciences, biophysics, biochemistry, biology, computer science, artificial intelligence or a related discipline.
- Your educational background matches the requirements (subject-specific skills and expertise) of the ESR positions you are interested in.
- You are an Early Stage Researcher, meaning that at the time of recruitment by the host organization your research experience shall be less than 4 years (counted from the diploma that gives the rights to embark in a doctoral degree, full-time equivalent research experience).
- You must fulfil the mobility criteria defined by the European Commission, which means you must not have resided or carried out your main activity (work, studies, etc) in the country of your host organization for more than 12 months in the 3 years immediately prior to recruitment (short stays, such as holidays, are not taken into account).
- You have exceptional academic performance, including qualifications, prizes (see project descriptions).
- You have communication and presentation skills and team working abilities
- You are competent in written and spoken English.

## What do we offer

The PhD student will be appointed at and conform to the condition of the host organization indicated for each position. We offer:

- A 3-year advanced multidisciplinary and inter-sectoral research training.
- A stimulating and creative learning environment and an interdisciplinary and international research training programme.
- You will be engaged in transdisciplinary experiences with targeted secondments in academic and non-academic environments.
- You will have the opportunity to acquire outstanding complementary training in transferable skills (e.g. presentation techniques, networking, publishing and outreach) as well as leadership, innovation, and entrepreneurial skills.
- You will receive an attractive salary, including living and mobility allowance and if you are married or have a registered partnership, you will also receive family allowance according to MSCA regulations for ESRs.

## Additional information

For more information about a specific position, please contact the person indicated for that position.

For general questions, please do not hesitate to contact us via [info@itn-perico.eu](mailto:info@itn-perico.eu).

## Apply for a job

Please visit [www.itn-perico.eu](http://www.itn-perico.eu) and carefully read the vacancy text for all specific information.

**You can apply until February 17<sup>th</sup> 2019**