Nencki Institute of Experimental Biology

ECMED Job Advert

2015-04-22

Job Title: Early Stage Researcher

Department: Laboratory of Neurobiology, Nencki Institute of Experimental Biology PAS

Supervised by: Prof. Leszek Kaczmarek

Salary: This position is funded by a Marie Curie Initial Training Network initiative. Salary includes a living allowance of 2376 EUR and a 600 EUR mobility allowance. An addition of 500 EUR family allowance may be payable depending on circumstances.

How to apply: The application must be received no later than May 15, 2015.

You may choose up to one other project that interests you from the ECMED projects- details are available on http://ecmed15.wix.com/epilepsy"

The application must include:

- Cover letter: a letter motivating the application;
- Curriculum vitae stating education completed to date and a brief description of scientific achievements and a list of publications;
- Copy of higher education diploma or equivalent or a certificate of graduation. Candidates entering the competition prior to the official date of their graduation if admitted must submit the missing documents before the start of the PhD programme;
- List of completed subjects and grades achieved in the course of the MS programme (a personal mean and the maximally possible score/grade should be indicated);
- Recommendation letters from researchers (with at least PhD/MD degree) familiar with the scientific activities of the candidate (e.g. advisor of MS thesis).

Background - The Project:

Over 50 million people worldwide have epilepsy and 30% are resistant to our present therapies. Epilepsy, therefore, comprises a major burden to society and so there is a pressing need for new approaches to treatment. The brain extracellular matrix (ECM) plays a critical role in governing brain excitability and function. Although research into the role of the ECM in neuronal signalling and network function has advanced considerably in recent years, its full translational potential has yet to be realised. There is growing evidence for a major role of the ECM in epilepsy including the association between ECM protein mutations and epilepsy,
changes in the ECM and associated proteins during the development of epilepsy and the strong association between the ECM and brain diseases associated with epilepsy including stroke, traumatic brain injury, neurodegeneration and autism.

This is a 3-year EU-funded position is available in the Nencki Institute, Warsaw, Poland as part of the ECMED European Training Network (ETN), a consortium of 9 leading European research institutions and 2 industrial companies that will involve 12 Early Stage Researchers working collaboratively to determine the role of brain extracellular matrix in the development of epilepsy and to develop novel approaches to treat and to prevent epilepsy. The ETN partner labs cover a broad range of expertise including neurophysiology, behavioural studies, epilepsy models, molecular biology, peptide and protein chemistry, viral vectors, and drug and peptide development.

Given that the positions are funded by the European Commission on a H2020-MSCA-ITN, eligibility restrictions apply:

- **Early-Stage Researchers** (ESRs) 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 not yet have 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.
- **Mobility Rule**: at the time of recruitment by the host organisation, researchers must not have resided or carried out their main activity (work, studies, etc.) in the country of their host organisation (Poland) 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.
- Each ESR will be supported by the project for a maximum of 36 months.
- All ESRs will take part in a **secondment to another project** partner for up to 30% of their appointment period.
- **Mobility and Family Allowances** (dependant on family circumstances) are payable to ESRs.

We are seeking highly motivated candidates with a strong academic record holding a Master degree or equivalent in relevant subjects.

The successful candidates will benefit from a wide-ranging training programme featuring local, network-wide, and external activities with many opportunities for travel to the other European partners in the network. In addition to top-level specific scientific training in the disciplines, techniques and topics investigated at each node, such programme will include (but is not limited to) attendance to international schools, exchanges and secondments to other nodes, specific training on transferable skills, and in particular courses on scientific communication (e.g. scientific writing for publications, and presentation skills) and specific training on intellectual property rights (IPR) protection.

**Duties and Responsibilities – The Sub-project:**
The research project to be carried out at the Nencki Institute is on the brain-penetrating inhibitors of MMP-9 (matrix metalloproteinase-9) as effective as novel class of therapeutic agents against epileptogenesis. Kaczmarek laboratory has shown that MMP-9 is an extracellularly operating protease that contributes to synaptic plasticity, learning and memory as well as epileptogenesis. The present project at testing a hypothesis that MMP-9 inhibitors might be clinically relevant in anti-epileptogenic therapy.

Selected publications:


The post-holder will carry out any other duties as are within the scope, spirit, and purpose of the job as requested by Prof. Kaczmarek or his/her designees.

- The post-holder will actively participate at group meetings, meetings with academic and non-academic collaborators, and in particular attend progress meetings.
- He/she will be seconded to other network nodes as necessary to fulfill the grant obligations.
- He/she will contribute to the drafting and submitting of papers to peer reviewed journals.
- He/she will prepare progress reports on research for funding bodies as required.
- He/she will contribute to the preparation and drafting of research bids and proposals.
- He/she will contribute to the overall activities of the research team and department as required.
- He/she will undertake a limited amount of teaching in relation to subject area.
- He/she will contribute to the induction and direction of other research staff and students as requested.
- He/she will be responsible for ensuring that equipment is safe and maintained in working order.

As duties and responsibilities change, the job description will be reviewed and amended in consultation with the post-holder.

The post-holder will carry out any other duties as are within the scope, spirit and purpose of the job as requested by their supervisor or the Head of Department.

The post-holder will actively follow appropriate policies including Equal Opportunities and Race Equality policies.

The post-holder will maintain an awareness and observation of Fire and Health & Safety Regulations.

As job descriptions cannot be exhaustive, the post-holder may be required to undertake other duties which are broadly in line with the above duties responsibilities.

**Person Specification/key competencies:**

- Essential: MSc or equivalent in relevant subject
- Significant background in molecular biology or neurobiology or cell biology or pharmacology
- Fluency and clarity in spoken English
- Good written English
- Effective written and verbal communication skills
- Experience of managing a research project and setting research targets
- Excellent IT skills. Word, Excel and Power Point
- Well-organised, attention to detail and ability to meet deadlines.
- Ability to think logically, create solutions and make informed decisions.
- Ability to analyse and write up data and to present complex information effectively to a range of audiences
- Experience of working collaboratively in a research environment
- Commitment to high quality research
- Commitment to the Nencki Institute policy of equal opportunity and the ability to work harmoniously with colleagues and students of all cultures and backgrounds

**Working conditions and entitlements:**

This is a full-time position.
About the Nencki Institute of Experimental Biology:

The Nencki Institute of Experimental Biology (www.nencki.gov.pl) of the Polish Academy of Sciences (PAS), founded in 1918, is the first and largest non-academic biological research centre in Poland, currently employing over 110 researchers and training 150 PhD students. High quality of externally funded research and excellent publication record (with well over 100 peer-reviewed publications on the ISI list and over 2,000 citations annually, and with 10 of the 35 most-cited Polish biologists) place the Institute among the leading biological institutions in Central Europe.

Neurobiology and biochemistry represent two main research areas of the Institute. Nencki Institute is the only research centre in Poland, in which neurobiology is thoroughly studied from the molecular to the organismal level. Research projects in this field are carried out by teams belonging to the Department of Neurophysiology (12 laboratories), Department of Molecular and Cellular Neurobiology (8 laboratories), as well as Department of Biochemistry (10 laboratories) and the EU-funded Neurobiology Center (5 laboratories).

The Institute places high emphasis on education and training. We actively recruit the best PhD candidates with the highest academic achievements, keen intellectual curiosity, and the desire to excel professionally and personally. Our staff provides them with a rigorous background in scientific concepts, tools, and a hands-on learning environment characterized by highly interactive laboratories. The best of the students, after completing the PhD curriculum with honours and a successful external postdoctoral stage, have an opportunity to return to one of our scientific teams as assistant professors, or to form a new team. New laboratories are created at the Institute to facilitate recruitment of the best specialists in research areas that are new and complementary to our current research profile. The Nencki Institute is an equal opportunity employer with full awareness of gender issues in scientific research (women account for approximately 65% of the Institute’s research and administrative staff, including senior level positions).