



European Training Network

PhD Student Position

Applications are invited for a pan-European academic/private sector research training network in the fields of diagnostic and therapy development for brain disorders.

PurinesDX brings together **global leaders in translational research** in purinergic signalling, Europe's **leading clinical specialists** in a broad range of brain diseases, and **industrial partners** specializing in drug and biomarker development. The synergism facilitated within **PurinesDX** will extend to the training of an urgently needed new generation of highly skilled, innovative, creative and entrepreneurial scientists. Alongside the provision of this **interdisciplinary, international and intersectoral environment**, an **original and high level training in state-of-the-art neuroscience** will be provided, nurturing a cohort of **highly competitive researchers** with potential to drive a new era of neuroscience research.

Brain disorders affect ~179 million people and their families in Europe alone, with an annual cost to the taxpayer estimated at €800 billion- a greater economic burden than cardiovascular disease and cancer combined. Despite diverse aetiology, overlap in clinical symptoms and comorbidities between brain disorders suggests shared patho-mechanisms. In particular, hyperexcitable states driven by glial activation and neuroinflammation appear near ubiquitous. Targeting these mechanisms offers the potential to ameliorate symptoms and reverse disease progression across a broad span of brain disorders. Functioning as a gatekeeper to neuroinflammation and mechanistic link between neuronal hyperexcitability and glial activation, the ATP-gated, ionotropic purinergic P2X7 receptor (P2X7R) offers the most promising target for pharmacological intervention in the neuroinflammation-hyperexcitability pathway, to date.

The overall research goal of **PurinesDX** is *to provide a novel therapeutic target and establish the diagnostic potential of newly developed devices to better diagnose and treat patients suffering from brain diseases and their underlying co-morbidities.*



The programme is funded through the Horizon 2020 Marie S. Curie Actions Programme. Selected candidates will be offered a competitive salary and, during their training, will spend time in academic, clinical and private sector research institutions.

Eligibility:

At the time of recruitment, the candidate must not have resided or carried out their main activity (work, studies, etc.) in Germany for more than 12 months in the 3 years immediately prior to start of the project. Short stays such as holidays and/or compulsory national service are not taken into account.

Candidate requirements:

Candidates can be of any nationality, but are required to undertake transnational mobility. Candidates should ideally possess a Master's degree in a relevant academic field, and be within his/her first four years research career. Application from candidates who already possess a doctoral degree will not be considered for this competition.

Ideal candidates should be motivated, eager to learn, and should possess excellent communication skills, as well as strong organizational skills with high level of attention to detail. In addition, applicants should have the ability to work independently and as part of a team. Previous related research experience with a strong background and/or interest in biochemistry will be a distinct advantage.

Application process:

- **Required documents:** a full CV, a motivation letter including a description of previous research experiences and contact details or recommendation letters of two 2 referees. **Only documents in English will be accepted.**
- **Submission:** applicants should submit the documentation to purinesdx@rcsi.ie by **Friday, March 16th, 2018 at 5 pm (GMT)**.

Applications failing to include the requested documentation, where the candidates do not meet the eligibility criteria or which do not indicate the preferred projects WILL NOT be considered in this competition.

Selection process:

Shortlisted candidates will be invited for interviews (telephone and/or Skype) and positions will be offered to candidates following approval by the PurinesDX training committee and coordinator.

We will endeavour to provide feedback to unsuccessful applicants where possible.



Project

Project 3: Identification of novel disease-specific P2X7R down-stream targets in schizophrenia and epilepsy

Location: University of Ludwig Maximilians, Germany

Principal Investigator: Prof Annette Nicke (annette.nicke@lrz.uni-muenchen.de)

Collaborators: Prof Antonio Garcia (Foundation Teofilo Hernando, Spain); Dr Tobias Engel (Royal College of Surgeons in Ireland); Prof Beata Sperlagh (Institute of Experimental Medicine, Hungarian Academy of Sciences, Hungary)

Informal inquires:

For informal inquiries regarding the application and eligibility questions, contact purinesdx@rcsi.ie.

For informal queries regarding specific projects contact the Principal Investigator directly.

More information can be found on www.purinesdx.eu.

Best of luck!

PurinesDX Recruitment Team