Engineer Position in College de France (Paris, France) on translational research in epilepsy

Laboratory Neuroglial Interactions in Cerebral Physiology and Pathologies - N. Rouach

The "Neuroglial Interactions in Cerebral Physiology and Pathologies" laboratory invites applications for an engineer position at Collège de France, a top international institution with a long tradition of excellence in research. The strong scientific environment and equipment resources at Collège de France make this a unique opportunity for a motivated scientist.

The position is funded by an ERC Proof of Concept grant for 18 months to explore the translational potential of our fundamental work on epilepsy. The candidate will join a multidisciplinary group using electrophysiology, imaging, molecular biology, biochemistry and cellular biology to study *in vivo* the antiepileptic effect of a compound on rodent models of epilepsy and the expression of relevant targets in brain tissues. The host laboratory, located in the center of Paris, is expert in the fields of neuroglial interactions and epilepsy and is involved in collaborations with several academic institutions, hospitals and start-up companies.

Candidate skills

The position is open to a master or Ph.D. in neuroscience, neuropharmacology or other applicable disciplines, and involves recordings of hippocampal and cortical EEG, analysis of EEG data to quantify epileptic activity and immunohistochemistry. The successful candidate is expected to have a strong interest in neurological disorders and experience in *in vivo* mice EEG recording and analysis. The position can start between may and September 2022.

Letter of interest, CV and names of two referees should be addressed to Dr Nathalie Rouach: nathalie.rouach@college-de-france.fr

Selected relevant publications of the laboratory

- E. Dossi and N. Rouach. **2021**. Pannexin 1 channels and ATP release in epilepsy: two sides of the same coin. ***Purinergic Signalling***. 7(4):533-548.
- E. Dossi, T. Blauwblomme T, J. Moulard, O. Chever, F. Vasile, E. Guinard, M. Le Bert, I. Couillin, J. Pallud, L. Capelle, G. Huberfeld, N. Rouach. **2018**. Pannexin1 channels contribute to seizure generation in human epileptic brain tissue and in a mouse model of epilepsy. ***Science Translational Medicine***. 10(443). pii: eaar3796.
- Dossi E, Vasile F, Rouach N. **2018**. Human astrocytes in the diseased brain. ***Brain Research Bulletin***. pii: S0361-9230(17)30082-5.
- G. Dallérac, J. Moulard, J.F. Benoist, S. Rouach, S. Auvin, A. Guilbot, L. Lenoir, N. Rouach. **2017**. Non-ketogenic combination of nutritional strategies provides robust protection against seizures. ***Scientific Reports***. 7:5496.
- E. Dossi, T. Blauwblomme, R. Nabbout, G. Huberfeld, N. Rouach. **2014**. Multi-electrode array recordings of human epileptic postoperative cortical tissue. ***Journal of Visualized Experiments.*** 92:e51870.