Announcement of post-doc scholarship at the Department of Clinical Sciences, Epilepsy Center

**Project name and description:**
*Combinatorial gene therapy for epilepsy with trophic factors: Glial cell line-derived neurotrophic factor (GDNF).*

Based on our previous studies in naive animals, gain of function approach with viral vector-based overexpression of GDNF in the hippocampus exerts inhibitory effect on acute seizures in electrical kindling (Kanter-Schlifke, 2007) or status epilepticus (SE) models (Kanter-Schlifke, 2009). We have also demonstrated, that in chronic model of epileptic animals, unilateral delivery of GDNF by encapsulated cells significantly decreases frequency of seizures as compared to controls (Nanobashvili et al., 2019). Recently, we have also explored mechanisms of GDNF action in epilepsy by using wide range of experimental approaches including advanced electrophysiological technique and shown that GDNF application enhances inhibitory drive in the network of hippocampus, most likely with GFRa-1 receptor interaction (Mikroulis et al., 2020, manuscript in preparation). Based on these data, we will continue to investigate closely mechanisms of GDNF action, and based on this research outcome develop novel combinatorial gene therapy-based treatment strategies for epilepsy.

**Reference number:** V 2020/1234

**Scholarship period:** The scholarship covers a period of 6 months with possibility of prolongation up to a maximum of 24 months in total.

**Preliminary start date:** to be discussed

**Supervisor/contact person:** Merab Kokaia, +46-46-706620899, merab.kokaia@med.lu.se, Experimentell Epilepsi, LU
Qualifications:

- To be eligible for a post-doc scholarship at Lund University the recipient must hold a PhD degree within a relevant field. The PhD degree must not be from Lund University. The PhD degree must not be older than three years. The applicant must not have been employed at Lund University in the past two years.
- Applicant should have a basic knowledge of in vitro electrophysiology, and animal models of epilepsy, animal surgery as well as preferably other laboratory skills in neuroscience.

Written application, including reference number, is to be sent via e-mail to the supervisor and must include the following:

- CV
- Personal letter stating the reasons why the study suits the applicant (maximum one page)
- List of publications
- References (2)
- PhD diploma

Application deadline: 20-09-25

Information regarding scholarships at Lund University

- The scholarship sum is paid out quarterly
- A scholarship awarded will be reviewed every six months
- Scholarships are tax-exempt
- Scholarships do not give rise to sickness benefits, compensation from the Social Insurance Office or retirement pension.
- A scholarship holder cannot be hired after the scholarship period due to tax reasons.
- The scholarship follows the regulations established by the Vice-Chancellor of Lund University (June 27th 2013; Reg. No PE 2013/356).