

Postdoc position

Neuroscience – Ion Channels

Team: **Ion Channels & Diseases** (<http://theweisslab.com>)

Location: **Institute of Biology and Medical Genetics - Charles University in Prague**

Start date: **January 2022**

Position

Physiopathology of T-type calcium channels in motor neuron function

Amyotrophic lateral sclerosis (ALS) is a neurodegenerative disorder characterized by the progressive loss of cortical, brain stem, and spinal motor neurons that leads to muscle weakness and death. ALS is regarded as a complex genetic disorder with a Mendelian pattern of inheritance in 5-10% of cases (familial ALS), but most patients have no discernable family history of the disease (sporadic ALS). However, several genes in apparent sporadic ALS are believed to increase the risk and/or modify the onset/progression of the disease. Recent studies from our laboratory suggest that CACNA1H encoding for Cav3.2 T-type Ca²⁺ channels may represent a risk factor for the disease. The candidate will address clinically relevant, fundamental questions regarding the role of T-type Ca²⁺ channels in motor neuron function, with a key translational aim of elucidating their pathogenic role in the development of motor neuron disorders such as ALS.

The candidate will benefit from modern instrumentation including patch clamp electrophysiology, confocal imaging microscopy, efficient animal and cell culture facilities, as well as all necessary equipment for regular molecular biology and biochemistry assays.

Requirements

The candidate must have a Ph.D or equivalent degree in Neuroscience. Prior experience with patch clamp electrophysiology, primary neuronal cell culture, or basic molecular biology and biochemistry assays will be an added advantage.

To Apply

Please send a short cover letter describing your scientific interests and a CV to Norbert Weiss (nalweiss@gmail.com) **no later than June 30.**

POSTDOC POSITION