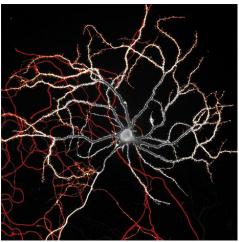
PhD Student Position

Innsbruck Medical University

Neuroscience / Molecular Cell Biology / Physiology

Project: Auxiliary calcium channel subunits in excitable cells and neurological disease In nerve and muscle cells voltage-



activated calcium channels activate mature cell functions and activity-dependent gene regulation. Altered calcium channel functions have been implicated in neurological diseases such as epilepsy, ataxia and myotonia. A major goal of ongoing research in the Lab is to understand how specific variants of auxiliary calcium channel subunits regulate different nerve and muscle functions and how mutations in these channels contribute to disease.

- **Methods:** Electrophysiology, whole-cell and single-channel patch-clamp recordings, fluorescent calcium recording, FRAP, live cell imaging, cell culture, immunofluorescence, molecular biology
- **References:** Tuluc et al., 2007, *PNAS*, 104:11091-6; Subramanyam et al., 2009, *Channels* 5:343-55; Obermair et al., 2010, *J Biol Chem* 285:5776-91; Di Biase et al., 2011, *J Neurosci* 31:13682–13694; Tuluc and Flucher, 2011, *JMRCM*, 32:249-256.
- Salary:According to FWF rates for PhD students plus travel funds for international
scientific meetings (www.fwf.ac.at/de/projects/personalkostensaetze.html).

The successful candidate will be part of a joint research group (Flucher/Obermair) consisting of approximately 10 researchers with diverse backgrounds (e.g. zoology, biochemistry, pharmacology, physics). The group is well integrated in the lively calcium channel research environment in Innsbruck, and participates in the Doctoral Program in *Molecular Cell Biology and Oncology* (*www.mcbo.at*), as well as in the a special research focus on *Cell signaling in chronic CNS disorders* (*http://www.uibk.ac.at/pharmazie/pharmakologie/sfb-f44/*) both funded by the Austrian Science Fund.

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Application deadline: January 6th, 2013