Master thesis project
New Autoantibodies in Myasthenia gravis

A master position is available starting from Summer semester 2022 in the research group of Romana Höftberger and Inga Koneczny at the Institute of Neurology of the Medical University of Vienna.

The project
*Myasthenia gravis* is an autoimmune disease of the neuromuscular junction (NMJ). Patients have *autoantibodies* against proteins at the muscle membrane, these affect the structure and function of the NMJ. Patients with MG suffer from severe muscle weakness, and may even need to be ventilated artificially. We are searching for new autoantibodies that may cause *Myasthenia gravis* for *better diagnosis and understanding* of this severe, disabling disease.

### Methods
- Fluorescence microscopy
- Muscle stem cell culture
- Isolation of primary muscle cells
- Cell-based assays
- Mass spectrometry
- Immunoprecipitation

### Keywords
- Human translational medicine
- Neuroimmunology
- Autoimmunity
- Antigen discovery
- Biomarker assays
- Neuromuscular junction

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If you are an enthusiastic life sciences master student who wants to work on this human translational medicine project and make a difference for severely affected patients, send an email with your CV and brief cover letter to: inga.koneczny@meduniwien.ac.at