



LUDWIG  
BOLTZMANN  
INSTITUTE  
Rare and Undiagnosed Diseases

The **Nagy Lab at LBI-RUD**, the Ludwig Boltzmann Institute for Rare and Undiagnosed Diseases in Vienna, seeks to fill the open position of a

## MASTERS STUDENT (#MS2021)

LBI-RUD, a young and innovative institute pursuing basic and translational research on rare genetic diseases, is looking for **a highly motivated individual** to participate in an exciting project within the molecular neurobiology group of Dr. Vanja Nagy.

### The group focus

Our group focuses on identifying and characterizing rare diseases affecting the function of peripheral and central nervous systems in human and mouse primary cells as well as various genetic mouse models (Nagy, V. et al., *NeuroGenet* 2019, Nagy, V. et al., *Cell Cycle* 2015 and Nagy, V. et al., *JNeurosci*, 2006). Our long-term goal is to better define genetic causation and progression of neurodevelopmental disorders by employing the power of genetic and pharmacologic manipulation in various cellular models. Our studies utilize a wide variety of next-generation sequencing technologies, patient-derived stem cells, microscopic imaging tools, biochemical, cellular, and molecular techniques.

### Job Description and responsibilities include:

The overall aim of the project is to model rare neurodevelopmental disorders using advanced human stem cell technologies for the purpose of completing a Master's thesis research requirement.

### Specific tasks:

- Maintenance of human ES and iPS cells
- Differentiation of stem cells into different neuronal cell types
- Biochemistry (FACS, SDS-PAGE Western blotting)
- Molecular biology techniques (PCR, Cloning & CRISPR/Cas9)
- Histology and immunofluorescent microscopy
- Documentation, interpretation and reporting of experiments and results
- Completing a Masters thesis



### Requirements and desired qualifications:

- Bachelor's degree in Life Sciences or a TA/MTA diploma
- Experience in cell culture work and initial experience with human pluripotent stem cells

- Experience in molecular biological and/or cellular techniques, CRISPR/Cas9 gene editing experience a plus
- Precise and detail-oriented working style and the ability to work on multiple projects simultaneously
- Team and goal-orientated personality
- Very good command of the English language both written and verbal

**We offer:**

- A challenging position in a meaningful, inspiring, productive, friendly, and international setting
- Training in various wet-bench techniques, opportunity to attend weekly lab meetings, weekly meetings with the principal investigator, other departmental scientific meetings, seminars, symposia...
- Direct supervision and guidance by an experienced postdoctoral fellow
- Mentorship and guidance by the principal investigator
- Opportunity and guidance in completing the research requirement for a Master's degree
- Opportunity to contribute to exciting and cutting edge research projects
- An excellent work climate and the possibility to join our social (cultural or sports) activities

**The Institute**

Our lab as part of the Ludwig Boltzmann Institute for Rare and Undiagnosed Diseases (LBI-RUD) is strategically situated in the Neurology Department of the Vienna General Hospital (Allgemeines Krankenhaus der Stadt Wien), one of Europe's largest university hospitals in the heart of the city. We have access to state-of-the-art technology platforms, close collaborations with geneticists and clinicians as well as basic researchers, particularly in our renowned partner institutions, namely the CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences, the Medical University of Vienna (MedUni Vienna), and the St. Anna Children's Cancer Research Institute (CCRI). We are committed to creating a diverse environment. All qualified applicants will receive consideration for employment without regard to race, color, religion, gender, gender identity or expression, sexual orientation, national origin, genetics, disability, and age.

For more information visit: [www.vanjanagylab.com](http://www.vanjanagylab.com).

**Applicants should please submit:** A cover letter (describing your career goals and explaining why you are the ideal candidate for this position), a curriculum vitae and name and contact details of a referee, as a single PDF file to: [application@rud.lbg.ac.at](mailto:application@rud.lbg.ac.at) using the reference code **#MS2021**. **Deadline is June 15th!**

