

## Open Position: PhD-student (m/f/d) in Molecular Biology and Biotechnology at the Josef Ressel Centre (JRC) for Materials Engineering in Soft Tissue Regeneration (MESTR).

**Location:** JRC-MESTR (Linz/Vienna), Austria

**Employment Type:** PhD position according to FWF scheme (30 hours per week, 2.890,31 € Brutto)

**Supervisor:** Wolfgang Holthoner LBI Trauma / Jaroslaw Jacak FHOOE

**University enrollment:** flexible, e.g. BOKU University (University of Natural Resources and Life Sciences, Vienna)

### Job Description:

We are seeking a highly motivated student to join our team in the fields of molecular biology, biotechnology, or related disciplines. This position provides a unique opportunity for career development in a dynamic academic and industrial setting, in collaboration with our corporate partner, Innovacell GmbH.

### Key Responsibilities:

- Develop and characterize muscle tissue models by differentiating SMDCs into myotubes and iSMC, using 2D cell culture for expansion and (trans)differentiation with specific growth factors.
- Utilize various imaging techniques (e.g., confocal imaging) to monitor SMDC differentiation into myotubes and iSMC, ensuring accurate characterization.
- Establish and optimize electrical and mechanical stimulation protocols to enhance SMDC differentiation, focusing on the effects of stretch and pulsed electrical currents. and iSMC differentiation, including axial cyclic stretch and pulsed electrical currents.
- Participation in various *in vivo* experiments.
- Planning, completion, interpretation and presentation/reporting of experiments and results

### Required Qualifications:

- Master's degree in molecular biology, biotechnology, chemistry, cell biology, or a related field
- Basic knowledge of cell culture techniques, biochemistry, proteomics/genomics is advantageous

### Additional Information:

We offer a 3-year contract. Since the JRC-MESTR is located at University of Applied Sciences (Upper Austria, Linz) and Ludwig Boltzmann Institute for Traumatology (Linz and Vienna), experiments will be conducted at both sites. In line with our commitment to gender equality, preference will be given to candidates of the under-represented gender, wherever possible. The successful candidate will be eligible for career development support from the LBG's inhouse career service (Career Center; <https://cc.lbg.ac.at/>).

If you are passionate about advancing research in the molecular biology and biotechnology fields and eager to contribute to cutting-edge scientific projects, we encourage you to apply.

**Application Deadline:** 31.03.2025

**To Apply:** Please send your motivation letter and CV including publication list to:

**Jaroslaw Jacak, Department of Medical Engineering**

University of Applied Sciences Upper Austria, Garnisonstraße 21, 4020 Linz/Austria, [jaroslaw.jacak@fh-linz.at](mailto:jaroslaw.jacak@fh-linz.at)

We look forward to receiving your application!