

## Student Assistance (20 h/w) with potentially included MASTER PROJECT within an international project on Bioinks, HU3DINKS

Cell-based Therapies group @ LBI Traumatology, Linz Austria

The Ludwig Boltzmann Institute for Traumatology, the Research Center in Cooperation with AUVA, has the goal of developing and advancing diagnostic, therapeutic and regenerative strategies to enable the full and sustained recovery of trauma patients. Within the group of cell-based therapies we optimize and characterize the therapeutic potential of pro-regenerative cells from human material such as adipose tissue or placenta.

To overcome the limitations associated with the use of conventional bioinks within this IRASME (Austria - Belgium) project Hu3DINK we will develop the next generation human-derived bioink.

### YOUR PROJECT

LBI Traumatology will perform **biological validation** and proof-of-concept application development based on the bioinks. Within a potential master thesis, human bioinks will be evaluated in bioassays relevant in regenerative medicine research, which are usually performed with animal-derived compounds. After testing basic biocompatibility, **primary human cells** will be combined with the developed inks to evaluate their pro-regenerative potential including angiogenesis, immunomodulatory and anti-fibrotic behaviour within the human microenvironment.

### THE METHODS

Basic cell culture, primary human cell isolation, primary human cell culture, 2D co-cultures, 3D cultures including angiogenesis assays, immunofluorescence stainings, gene expression analyses, quantitative assays for cell count viability and proliferation.

### YOUR PROFILE:

- A completed bachelor degree in a cell and molecular biology-related field
- Excellent oral and written communication skills in English
- Experience with eukaryotic cell culture
- Experience in the field of primary cell culture desirable.
- Broad scientific curiosity and good social skills

### Terms of employment

We offer a 2-years contract, including a one-month probation period, starting as soon as possible in 2023. The offered gross annual salary follows the FWF employment guidelines for student assistants 20h/week (<https://www.fwf.ac.at/en/research-funding/personnel-costs>). We encourage applications by women and international candidates.

Please send your CV and application to [susanne.wolbank@trauma.lbg.ac.at](mailto:susanne.wolbank@trauma.lbg.ac.at) before February 12th 2023.