

## Job Advertisement

### Position

PhD student

### Institution

Medical University of Graz

### Location

Graz (Austria)

### General Information

A position is open for a 3-year PhD student in the group of Assist Prof Dr Nerea Alonso, at the Medical University of Graz (Austria), to work in the project "BAMBiO: bile acids as metabolic regulators in osteoporosis".

### Job Description & Responsibility

The project aims to investigate the mechanisms underlying bile acid-induced metabolic rewiring in bone. We also aim to uncover novel metabolic biomarkers that could better predict fracture risk and provide stratified clinical care. Besides, we are interested in identifying targets for personalised treatments in osteoporosis, including obesity-related bone loss. To do so, we will use rodent models for obesity-induced osteoporosis and for bile acid metabolism.

Molecular, metabolic, and microbiome-related biomarkers identified in these models will be validated in osteoporotic patients via comprehensive quantitative panels and untargeted -omics methods.

This project is funded by the Austrian Research Fund (FWF) in collaboration with the French National Research Agency (ANR).

The student will join a multidisciplinary, international, and ambitious team, based at the Centre for Medical Research (ZMF), Medical University of Graz, which provides first class biomedical research infrastructure for cutting-edge basic and applied biomedical research. Besides, the student will collaborate with our partners in France (research groups led by Prof Roland Chapurlat, University of Lyon, and Assoc Prof Maura Strigini, University Jean Monet, St Etienne).

### Qualifications

- Master degree in Molecular Biology, Biomedicine or similar
- Expertise in animal models, cell and molecular biology (bone biology is desirable)
- Expertise in mass spectrometry is an advantage
- Good communication and collaborative skills
- Proficiency in English (written and spoken)

The ideal candidate is highly motivated, focused, and ambitious, interested in working in an international collaborative environment where English is the main language. The student should be reliable and with high scientific standards.

#### **Salary**

Competitive salary in agreement with the FWF guidelines

#### **Preferred application deadline**

03/21/2025

#### **Contact for inquiries**

Assist Prof Dr Nerea Alonso ([n.alonso@medunigraz.at](mailto:n.alonso@medunigraz.at))

#### **Other information**

The Medical University of Graz is one of the Europe's leading Universities in the field of medical research. The student will join the cutting-edge Molecular Medicine PhD program and receive a 3-year contract (1 initial year + 2 years extension) including a competitive salary and social benefits. The possibility of a contract extension for 1 year (4th year) may be possible upon successful completion of a research stay abroad. Applications are open until 21st March 2025 through the online platform: <https://phd-recruiting.medunigraz.at/> (project "BAMBinO: bile acids as metabolic regulators in osteoporosis").