

Position advertisement

The Grigoryan Lab (Stem Cell Niche & Aging Research Group) at the Institute of Molecular Medicine at Ulm University invites highly motivated and qualified applicants to apply for an open PhD position within the project funded by SFB 1506 "Aging at Interfaces".

Type of employment: Temporary position (3 years), TV-L (EG 13) 65% contract
Start of employment: 01.09.2026, or by agreement
Application deadline: 31.07.2026

Project description

Bone fracture healing capacity is significantly impaired in the elderly, which can ultimately lead to morbidity and mortality. Aging of human skeletal stem and progenitor cells (SSPCs) is one of the causes of impaired bone regeneration in the elderly. The changes that occur in aged human SSPCs remain elusive. Our preliminary data suggest that changes in mechanical properties of cells may be one of the underlying causes of human SSPC aging. Using an advanced, aging-focused human bone organ model, we will investigate whether alterations in cell mechanical properties are the cause of SSPC aging and whether modulating cell mechanics leads to the rejuvenation of aged SSPC and thus to improved regeneration of aging bone. The long-term goal of the study is to create opportunities for the development of therapies to prevent or delay age-related bone diseases.

For more information on the advanced human bone model, please read:

A. Grigoryan *et al.*, Engineering human mini-bones for the standardized modeling of healthy hematopoiesis, leukemia, and solid tumor metastasis. *Sci Transl Med* **14**, eabm6391 (2022).

Your Profile

- Master's degree in biological sciences (Biology, Biochemistry, Cell/Molecular Biology, Molecular Medicine) or related study programs, with a CGPA of 2.0 or better according to the German ranking system.
- Experience in mechanobiology and mouse experiments will be an advantage.
- Willingness to perform *in vivo* mouse experiments.
- Good English Language proficiency (written and spoken).
- Good planning and organisational skills and ability to work independently.

How to apply

Interested candidates that meet the above criteria are kindly requested to submit their applications (in English only) per email, complete with the following documents in PDF format.

- Curriculum Vitae
- Master's Degree Certificate with Transcript of Records

Incomplete applications will not be considered for further processing. Send your application to Jun.-Prof. Dr. Ani Grigoryan (Email address: ani-1.grigoryan@uni-ulm.de)