

The Swiss Institute of Allergy and Asthma Research (SIAF) and AO Research Institute (AO) in Davos are seeking a highly motivated post doctoral fellow for a 3 years common project. The lab work will be done in the highly modern and well-equipped facilities of SIAF on the Medicine Campus in Davos Wolfgang.

Due to the lack of sufficient autograft volume, large bone defects commonly require additional material, both as void filler and as a source of osteogenic material. This project is a collaborative project with a consortium that is aiming to further develop a novel bone forming substitute in collaboration with the AO Research Institute.

We are seeking a highly motivated

Post doctoral fellow

Your profile

The candidate for this position will methodologically focus on developing an efficient immune monitoring system to early identify inflammatory response to implanted bone materials; to characterize the effector cells and molecules of the developing immmune response to implanted material; to identify key cytokines/chemokines that are essential markers of immune response to implanted material; to develop early biomarkers of immune response to implanted material to predict in vivo outcomes; to modify the implanted material to overcome immune inflammatory effect and to induce immune tolerance or an immune ignorant status.

We will use sophisticated molecular techniques such as single cell transcriptomics, visium spatial imaging, imaging mass cytometry, and OLINK targeted proteomics. Growth of mesenchimal stem cells and their interaction with immune cells will be performed.

Candidates should have a PhD and master's degree in biology / life sciences with a strong background in Immunology. An excellent written and oral English is essential. Candidates should be highly motivated, open-minded and have very good problem-solving skills.

We offer an interesting and challenging post doctoral position in the modern and scientific institute that is a part of the new campus in Davos. You will work in a new building with the state-of-the-art laboratories and a dynamic, international team of interdisciplinary experts.

Interested applicants should send a cover letter describing their research experience and career goals, along with their CV, and the names and email addresses of at three professional references to **akdisac@siaf.uzh.ch**.

