UNIVERSITÀ DI TRENTO

Dipartimento di Biologia Cellulare, Computazionale e Integrata

Postdoc position in Stem Cell Biology at the University of Trento

The project

We offer a fully funded renewable 12-months position focusing on the characterization of the heterogeneity of muscle stem cells and their cellular interactions during physiological regeneration and in disease. By using cutting-edge technologies, such as single cell/nuclei RNA sequencing, the selected candidate will aim at the comprehension of the cellular and molecular dynamics occurring in skeletal muscle with the ultimate goal of identifying novel therapeutic targets to counteract tissue degeneration occurring in muscular dystrophies, in aging and cancer.

The Biressi laboratory

The Laboratory of Stem Cells and Regenerative Medicine, led by Prof. Stefano Biressi, is dedicated to the study of the cellular and molecular mechanisms that control the behavior of stem cells. We are mainly using regenerating skeletal muscle models as well as developing (embryonic) ones. We focus on the basic biology of muscle development, the pathogenesis of muscular dystrophies and muscle aging dysfunction, and the application of stem cell therapeutics to muscular diseases. Rodents are our elective animal model, but we recently started to access human specimens. Team members should expect to interact with international laboratories and clinical researchers. The lab is funded national and international research foundations, including Telethon and the French Muscular Dystrophy Association.

The University of Trento and the CIBIO department

The University of Trento, in Northern Italy, is top-ranked among medium-sized Italian Universities (1st on 2023/2024 Censis ranking, 1st for scientific output in 2016 and 2022 ANVUR/VQR). The Department of Computational and Integrative Biology (CIBIO: https://www.cibio.unitn.it/) is a cutting-edge and top-ranked academic department in the biomedicine and biotechnology field with 46 national and international PIs, about 80 postdocs/research collaborators and 100 PhD students. The CIBIO's infrastructure provides core facilities for next-generation sequencing, flow cytometry, advanced imaging, high throughput screening, proteomics, animal modeling, cell technology, and bioinformatics services. In 2023, the CIBIO was recognized as "Department of Excellence" by the Italian Ministry of University and Research.

Qualifications/Requirements

We are seeking enthusiastic, self-motivated candidates who have a keen interest in stem cells and muscle biology. Applicants should hold a PhD degree in life science, and previous experience with cell culture and molecular biology/microscopy is highly desirable. Knowledge of qPCR, Western blotting, and flow cytometry is preferred.

Applications

Interested candidates should send their inquiries (including a CV, a motivation letter, and contact information for two references) to Stefano Biressi (stefano.biressi@unitn.it) by the 1st of October 2024.