

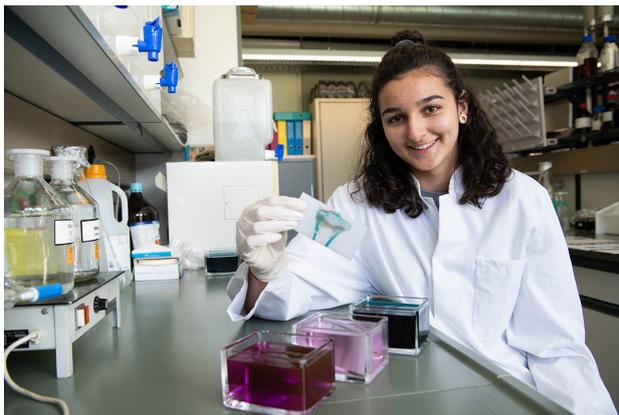
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## Research in Graubünden

### In the laboratory with Cecilia

An apprenticeship in research in Graubünden - international and exciting

Davos - not Basel or Zurich. Cecilia Bärtschi, a young woman from Solothurn, deliberately chose Graubünden for her training as a biology laboratory assistant. "Thanks to the Yousty online apprenticeship platform, I became aware of the apprenticeship at the AO Research Institute. From an early age, I was fascinated with the way the human body works." After a three-day trial apprenticeship, she was convinced that the AO Research Institute in Davos was just right for her. For more than 60 years, scientists there have been developing new methods for the treatment of bone fractures and degenerative diseases of the human musculoskeletal system.



*Cecilia with a colored bone cut. Photo: AO Foundation*

The three-year training as a biology laboratory assistant is demanding. Together with around sixteen other prospective biology laboratory assistants, Cecilia visits the vocational school in Winterthur two days a week. "The timetable is quite packed," she remarks. The focus is on biology and the natural sciences, with bacteriology, virology, anatomy, genetics, and laboratory methodology. During the English lessons, the trainee also learns important technical terms. The internationality of the AO Research Institute is an important advantage for her: "I benefit greatly from the fact that our company

language is English. The researchers come from all over the world, for example from China, Iran and Italy. That way I also get to know other cultures."

For Cecilia, a typical working day at the research institute begins with checking her e-mails in the morning and discussing her daily program with her supervisor. Before entering the lab, she puts on a lab coat, gloves and shoes reserved for the lab. Laboratory work involves a lot of responsibility. "I mostly work with human bone marrow cells. These are made available to us by a hospital with the consent of the patients. It is very important to be careful with the cells, otherwise they can die or be contaminated," explains Cecilia. For example, the researchers are using the cells to investigate how they can stimulate bone growth in order to improve the healing process of complicated bone fractures.

Cecilia first documents all activities in the laboratory in a handwritten journal that will later be digitized: "In order for the cells to grow faster and better, they are cultivated in a sterile plastic container with a nutrient medium. The exact recipe of this nutrient solution depends on what is to be done with the cells. I note down

all substances and quantities in the journal so that the researchers can follow my procedure at any time.” She likes the teamwork with scientists from all over the world: “By now I can even give some tips to the new students in the laboratory.”

## The apprenticeships



*Cecilia Bärtschi*

The AO Research Institute offers the following apprenticeships: BiologielaborantIn EFZ (2020), Kauffrau/Kaufmann EFZ (2022), InformatikerIn EFZ Systemtechnik (2023). Further information on apprenticeships can be found on the AO website ([www.aofoundation.org](http://www.aofoundation.org)) under the menu item "Jobs" -> Lehrlingsausbildung. Apprenticeships are also available at PMOD/WRC in Davos, which has been researching the influence of solar radiation on the Earth's climate since 1907, and at the WSL Institute for Snow and Avalanche Research: [www.pmodwrc.ch](http://www.pmodwrc.ch) -> Offene Stellen -> Lehrstellen and [www.slf.ch](http://www.slf.ch) -> Jobs und Karriere -> Lehrstellen.

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Find out more about research in Graubünden: [www.academiarætica.ch](http://www.academiarætica.ch), [www.graduateschool.ch](http://www.graduateschool.ch).

Apprenticeship: [www.yousty.ch](http://www.yousty.ch)