



Lab Technicians at the LCSB

## More than just support – an essential part of the lab



Laboratory technicians organise processes to keep things running smoothly in the lab and support the scientists in their practical work. Thanks to their expertise, the LCSB is able to have many complex experiments running at the same time. The two lab technicians Annegrät Daujeumont and Thea Van Wüllen are part of a large team that makes things happen in the various labs of the centre. They look after cell cultures, for example, or assist the scientists in the use of highly sensitive instruments. They also help familiarise new team members with protocols and play a key role in documentation and quality control.

Annegrät Daujeumont works in the Eco-Systems Biology group of Prof. Paul Wilmes. Among other things, this team studies the microbial communities present in the gut of Parkinson's patients and compares them with those of healthy volunteers. This involves analysing stool samples from both groups. Daujeumont ensures that molecules such as DNA are extracted from the samples and well-preserved so that the composition of the microbiome of the participants can be reliably determined. From quality control, to managing the stocks of all the required substances and defining the best processes with her colleagues, there is a lot to take care of. Every lab technician ensures that each experiment is carried out safely and according to the highest standards. "Guaranteeing the safety of scientists in the laboratory is especially important," Daujeumont says, "which is why lab technicians are also trained to be able to provide

critical assistance and solve problems in potentially dangerous situations." Every working week is different and involves different procedures. "We are never bored. I really like the variety of my job," she says.

The tasks of the lab technicians are as diverse as the topics of the research groups they are part of. Daujeumont's colleague Thea Van Wüllen works in the laboratory of Prof. Jens Schwamborn, who heads the Developmental & Cellular Biology group. This team also studies Parkinson's disease, but is investigating genetic modifications that could have an influence on the disease. For this purpose, researchers and technicians are growing three-dimensional brain organoids in the laboratory. With these organoids, they are trying to recreate complex processes in the brain and to find potential therapeutic approaches. From cultivating skin cell derived stem cells to differentiating them

into nerve cells and making sure they grow well in 3D, it takes several steps to generate an organoid.

"In order to keep up with so many experiments, the scientists need support in their practical work," Thea Van Wüllen reports: "Planning the extraction of a protein is somewhat different from actually isolating it in the lab. There is a gap between theory and practice." This is where the hands-on skills of Van Wüllen and the LCSB technicians prove invaluable. They give advice on what would be the best protocol to address a specific scientific question and help young researchers navigate the lab. The director of the LCSB, Prof. Rudi Balling, fondly refers to the lab technicians as "secret helpers" – by assisting in the daily laboratory routine, they make an essential contribution to the high-quality research at the centre.

◀ Seven of the laboratory technicians at the LCSB. The full team comprises over 20 people. From left to right: Annegrät Daujeumont, Dean Cheung, Jenny Ghelfi, François Massart, Léa Grandmougin, Jean-François Conrotte, and Audrey Frachet Bour.