



Press release

ETH Zurich and KSB deepen their partnership

A new space for clinical research

Zurich and Baden, 5. July 2023

Kantonsspital Baden (KSB) and ETH Zurich have been working together since 2017, mainly in teaching initially, but increasingly in clinical research. Now three ETH professors are moving into new premises on the hospital's healthcare campus. Together, they want to make findings from basic research available for the benefit of patients.

Breast tumours have tiny channels running through them. They are remnants of former blood vessels and are tightly packed with protein fibres in the tumour. Immune cells remain attached to the fibres. Instead of targeting the tumour cells, the immune cells in this environment secrete growth-promoting molecules and thus help the cancer cells multiply. This finding emerged from experiments on mice conducted a few months ago by a research group led by ETH Professor Viola Vogel. Their research provides a better understanding of tumour growth and potentially aids the development of new diagnostic and therapeutic methods.

But an important question still needs to be answered: To what extent can the results of experiments on mice be transposed to human patients with breast cancer? In a joint research project with Kantonsspital Baden (KSB), scientists are now investigating whether it is also possible to find traces of modified blood vessels in tissue samples taken from breast cancer patients. The findings of Viola Vogel's experiments show how important clinical research is in making basic research available for the benefit of society.

Collaboration in research and teaching

"Our collaboration with Kantonsspital Baden has been a great opportunity for ETH", says a delighted Christian Wolfrum, Vice President for Research at ETH Zurich. "In recent years we have been able to build a solid and innovative collaboration, creating a platform for joint projects in many clinical areas. Our shared vision is to combine healthcare and research in a way that produces optimal outcomes for patients." Building on this success, the partnership is now being expanded. As part of this collaboration, three ETH professors will move into the newly built Partnerhaus II on the KSB healthcare campus.

"We are proud that an institution such as ETH Zurich has chosen to work with one of Aargau's main hospitals," says KSB's CEO Adrian Schmitter. This collaboration is unique in Switzerland. "Our hospital provides researchers with a practice-based environment to work in. For its part, KSB benefits from ETH Zurich's know-how and innovation capacity. Our partnership also makes Baden even more attractive as a location for healthcare companies and start-ups."

The collaboration started back in 2017, when the first 100 students enrolled for the new Bachelor's program in Human Medicine at ETH Zurich. During their induction week they visited KSB, where they were able to get a taste of hospital life for the first time. This was followed by the first joint research projects and in 2018 ETH moved into several offices in KSB's Partner House on the hospital's healthcare campus. Since then, the teaching offering has been supplemented by more extracurricular events and additional training opportunities.

KSB's expertise and data, ETH's computing power

However, the current collaboration extends well beyond purely clinical research and continuing education and training. KSB and ETH also want to push ahead with the digitalisation of healthcare data and its use in research. To this end, ETH Zurich has appointed a dedicated data architect to analyse the data and interfaces and develop a suitable architecture. This will make it easier in future to assess the data and to search for specific patterns, such as those giving indications of complications or disease progressions.

ETH's technology and service platform dTIP will also be represented in Baden. The dTIP team comprises specialists in clinical studies, data management and regulatory aspects, as well as offering scientists an "all-round carefree package" for clinical research – from planning through to organising and conducting clinical studies. "We want our basic research and engineering developments to benefit people even more than previously, in the form of medicines, therapies, diagnostic procedures or medical devices," says Christian Wolfrum. Collaboration with Kantonsspital Baden, Switzerland's university hospitals and other partners, along with interdisciplinary research in the <u>new GLC building</u> and in the new <u>medical research laboratory in Schlieren</u>, will all help to accelerate this process.

Further information

ETH Zurich Markus Gross Media Relations Telephone: +41 44 632 41 41 mediarelations@hk.ethz.ch Kantonsspital Baden AG Omar Gisler Head Marketing & Communication Telephone: +41 76 341 31 56 omar.gisler@ksb.ch