

Press release

Medtech hub in Bern on the way to great success

- Thanks to the Grand Council of Bern ruling on June 13, 2023, ten projects were launched for 2023
- For 2024, 29 projects have been submitted from almost all medical disciplines. In November, the decision will be made as to which projects will be implemented next.
- Twenty employees have already settled at the Insel Campus in Bern. By 2026, CSEM's "Medtech" department will have around 65 specialists, and 43 of them will be based in Bern.

Bern | Neuchâtel, November 6, 2023 – The Canton of Bern wants to establish itself as a leading international medical location by 2030. To achieve this, the Insel Group, the University of Bern, and the technology innovation center, CSEM, will combine their exceptional medical expertise and work together on research and development projects. Their goal is to strengthen the competitiveness of local industrial businesses and start-ups.

Since the decision by the Grand Council of Bern on June 13, 2023, regarding the establishment of a department of the technology innovation center, CSEM, medical and clinical research has been actively promoted on the Insel Campus. Ten new collaboration projects between various university clinics and the University of Bern have been started. In addition to previous work on gynecology, neurology and diabetology, endocrinology, nutrition medicine, and metabolism domains, these new collaborative projects will cover different fields such as, pneumology, cardiology, and surgery. The goal of these projects is to use new measurement technologies and artificial intelligence to make patient care and monitoring easier, and to support medical professionals with diagnostics and therapy optimization.

At today's media orientation, all four partners – CSEM, the Canton of Bern, Inselspital (University Hospital Bern), and the University of Bern – showcased concrete examples of their past and future collaborations. They confirmed that nearly all medical departments of the Insel Group, along with numerous academic researchers and various start-ups, have expressed strong interest in this collaboration.

The potential benefits to patients

Together with the University Clinic for Pneumology from the Inselspital, University Hospital Bern, CSEM is currently carrying out two studies to make the evaluation and treatment of lung diseases easier and to monitor patients continuously. They are testing a chest strap that can measure pulmonary blood pressure in patients with chronic lung diseases. For patients, this could reduce the need for frequent visits to pulmonary function laboratories. Two more examples from this year's projects: The University Clinic for Cardiology and CSEM are looking for alternatives to the adhesive electrodes commonly used for monitoring cardiac arrhythmia. The University Clinic for Diabetology, Endocrinology, and Metabolism is exploring together with CSEM if changes in the voice can indicate hypoglycemia (low blood sugar).

2024 overview

Researchers from the University of Bern and Inselspital, University Hospital Bern, submitted new project ideas and research projects for 2024 by mid-October 2023. A panel of 22 medical-technology specialists and experts will decide by the end of November how to allocate the annual research fund of 2 million Swiss Francs. In total, 29 projects have been submitted from almost every medical field. The diversity of the applications shows the high interest in digital solutions in the hospital sector and the success potential at the crossroads of medicine and engineering.

CSEM moved into new premises on the Insel Campus

To better facilitate teamwork, CSEM has procured offices and meeting rooms on the Insel Campus, including some within the [Sitem Start-up Club \(SSC\)](#). Twenty employees have already settled in the new premises and by 2026, CSEM's "Medtech" department will have about 65 specialists, 43 of whom will be based in Bern.

The Medtech ecosystem in Bern is already bearing fruit

The collaboration between renowned institutions from Bern and CSEM has existed for several years and has led to several successful projects, including the 2019 [machineMD](#) start-up in Bern. This spin-off from the Inselspital (University Hospital Bern), and the University of Bern uses virtual-reality glasses for a complete, standardized neuro-ophthalmological exam to improve the diagnosis and monitoring of neurological diseases. In addition to CSEM, specialists and experts from the Swiss Federal Institute of Technology in Bern and the Helbling Group also contributed to the project. This example shows the potential of the Swiss innovation landscape when different stakeholders work together.

Existing collaboration working as a catalyst

Cooperating with several university clinics (gynecology, neurology, diabetology, endocrinology, nutrition medicine, and metabolism) has led to concrete success in recent years: a lightweight, wearable electrode belt around the abdomen for better [monitoring of pregnant women and their babies](#) before and during birth; two wearable systems for [continuous day and night monitoring](#) of people with epilepsy through a pair of electrodes discreetly attached to glasses frames for the daytime and integrated into a headband for nighttime; and smartphone voice recordings that could play a significant role in the treatment of diabetes patients. All examples have come from the intersection of "microelectronics and prototyping" and "medical and clinical research".

Further information

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About the Canton of Bern

The Canton of Bern is an attractive innovation and investment location that promotes networking between research and business sectors. The council is focusing on this networking effort as part of its Engagement 2030 program. The canton wants to become a leading international medical location and is using the unique potential of the Bern Insel campus.

About Insel Gruppe

Insel Gruppe is Switzerland's leading hospital group for university and integrated medicine. It offers comprehensive healthcare to people based on groundbreaking quality and pioneering research, innovation, and education at every stage of life, around the clock, and in the right location. Insel Gruppe conducts over 900,000 outpatient consultations each year across its hospital network and treats approximately 60,000 inpatients in accordance with the latest therapy methods. Insel Gruppe is a training organization for a multitude of professions, as well as an important institution for furthering the education of young doctors. Over 11,000 employees work at Insel Gruppe, including students.

About the University of Bern

The University of Bern was founded in 1834 and comprises eight faculties, around 150 institutes and ten inter- and transdisciplinary competence centers. Globally networked and regionally anchored, the University of Bern focuses on excellence in research and teaching. It has over 18,000 enrolled students in around 40 bachelor's and 70 master's degree programs, making it the third largest university in Switzerland.

The five thematic priorities of the University of Bern are: Sustainability, Health and Medicine, Matter and Universe, Intercultural Knowledge, and Politics and Administration. In selected research areas such as space research, dentistry, and veterinary medicine, it occupies a leading international position.

About CSEM—Facing the challenges of our time

CSEM is a Swiss technology innovation center developing advanced technologies with a high societal impact, which it then transfers to industry to strengthen the economy. The non-profit orientated, public-private organization is internationally recognized, and works to support the disruptive activities of companies in Switzerland and abroad. CSEM operates in the domains of precision manufacturing, digitalization, and sustainable energy. To accomplish its mission as gateway between research and economy, CSEM's more than 550 employees from 46 countries collaborate with leading universities, scientific institutions, research institutes, and industrial partners. With its six sites in Allschwil, Alpnach, Bern, Landquart, Neuchâtel and Zurich, CSEM is active all over Switzerland.