

Press release
Geneva, 17th May 2022

Fact-sheet (1)

Wyss Centers and Academy in Switzerland



WYSS CENTER for Bio and Neuroengineering (Geneva) – www.wysscenter.ch

- Founded in 2014, based at Campus Biotech
- 56 employees



Wyss Zurich Translational Center – wysszurich.ch

Translating
Science into Life

- Founded in 2014 by ETH Zurich and the University of Zurich
- 169 employees



Wyss Academy for Nature, Bern – www.wyssacademy.org

- Founded in 2020 at the University of Bern
- Initial donation: CHF 100M plus CHF 100M of co-funding by the University of Bern and the Canton of Bern
- 45 employees

Fact-sheet (2.1)

Examples of research projects in Geneva

Active Brain Implant Live Information Transfer System (ABILITY)

The ABILITY project aims to create an advanced fully implantable brain computer interface (BCI) system to enable communication and movement in people with severe impairment. It develops an active, battery-less, long term, fully implantable medical device.

- Started 2017
- 22 active team members
- Partners: HUG, EPFL + industrial partners in CH, D, US

Brain mapping

The brain mapping team is pioneering 3D maps of human brain circuits to identify early biomarkers of neurodegenerative disease. Using advanced microscopy and machine learning, the team is comparing cellular-level changes in healthy and diseased brains with the goal of enabling early interventions in disorders like Alzheimer's disease.

- Started 2020
- Partners: UNIGE, HUG, EPFL
- 10 active team members

Epios: Unlocking brainwaves with 24/7 sub-scalp neuro-sensing device

The Epios project aims to develop a minimally invasive device to enable long term brain monitoring in daily life. Indicated first for epilepsy, the device could be used for other neural disorders such as severe sleep disorders, stroke and mental health applications. The early feasibility clinical trial is proceeding in parallel with a functional full prototype aimed for delivery in 2022.

- Started 2017
- 14 active team members
- Partners: CHUV, Inselspital Bern
- Spin-off company: Epios SA

Fact-sheet (2.2)

Examples of translational projects in Zurich

ANYmotion

ANYmotion developed the autonomous four-legged robot ANYmal for industrial inspection to solve customer problems in challenging environments.

- From 2016 to 2019
- 78 team members
- Spin-off company: ANYbotics AG

denovoSkin

denovoSkin aims to provide patients who suffer from large and deep skin defects with the first personalized and automated skin tissue therapy that is safe, effective and accessible for children and adults.

- From 2016 to 2022
- 37 active team members
- Ongoing clinical trials
- Spin-off company: CUTISS AG

Voliro

Voliro is engineering a highly advanced flying robot for safe and efficient work at height. Voliro's technology enables its aerial robots to hover at any orientation and exert precise forces in contact with structures, thereby allowing for safe and reliable measurements even in difficult-to-access locations.

- Started 2019
- 24 active team members
- Spin-off company: Voliro AG

hemotune

hemotune is developing a disruptive blood purification platform allowing for the targeted removal of disease-causing factors. This complex medical device comprises non-toxic magnetic beads and the HemoDevice to enable extracorporeal blood purification and magnetic separation to restore immune balance in septic shock.

- started 2017
- 19 active team members
- Spin-off company: hemotune AG

Fact-sheet (2.3)

Examples of research projects in Bern

Dual corridors for wildlife and livestock migration (Kenya)

Many semi-arid lands in Africa are multi-functional and maximize co-benefits between nature and people. However, they are threatened by fragmentation and sectoral claims on land. This incubator will test the implementation of dual wildlife and livestock migration corridors that provide resilience to climate change and to growing pressure on land through mobility. The approach combines customary and formal land tenure arrangements in order to simultaneously secure human and animal (wildlife and livestock) mobility in an integrated manner.

- started 2020
- first “dual-use corridor” now being demarcated for testing

Innovative governance of buffer zones (Peru)

The increased accessibility of the Madre die Dios Region opened up vast areas, so far undisturbed, to large-scale forms of resource exploitation, leading to deforestation and the expansion of agriculture, illegal logging, forest degradation and the loss of habitats and increasing inequality. We develop participatory management plans for buffer zones which are formally endorsed by the government. This will set the stage for an array of nature-based solutions such as value chain development for local products, agroforestry schemes, etc.

- started 2021
- several governmental and non-governmental partners in Peru

Rewarding Agrobio-diversity (ABD) through value chains (Laos)

Rapid economic globalization leads to a homogenization of landscapes in Laos. Maintaining diverse and multi-functional landscapes is key to maximizing co-benefits between nature and people and securing resilience against climate change and biodiversity loss. Different approaches are developed and will be tested to materialize the values of these landscapes, especially for smallholder farmers.

- started 2021
- Initial set of promising agrobiodiversity products has been identified to develop value chains.