ETH Zurich’s Pioneer Fellowship Program helps turn new research findings and a brilliant business idea into an innovative product, and develop this for market launch. Having passed through a rigorous selection process, the ambitious young researchers start an 18-month funding programme; during this time the majority of Pioneer Fellows found a spin-off company. One such promising Pioneer Fellow is Dr Sergio Sanabria, an ETH scientist who, together with his ETH Professor Orçun Göksel, has developed a novel ultrasound method for detecting breast cancer in its early stages. It diagnoses tumours more precisely and in a non-invasive way. The goal now is to bring the specially designed, hand-held device to market and make it available for medicine at large. Sergio Sanabria has been awarded many coveted prizes, such as the ETH Zurich Spark Award 2016 for commercially promising inventions, and Venture 2017, one of the top Swiss prizes for young entrepreneurs. We are very grateful to our sponsors who have made this success story possible, and who offer the Pioneer Fellows crucial support.
Thanks to the targeted coaching and a network of experts, the Pioneer Fellowship brings us much closer to becoming an ETH spinoff.

**PATRIZIA MARSCHALKOVA**

*Dicrons*, Microneedle-based patches for the earliest possible detection of lymphedema (swelling of the limbs due to retention of lymph fluid).

*The Pioneer Fellowship means I can continue optimising the technology and bring it to market as rapidly as possible. The programme helps ETH technologies to become known and available to the public.*

**ZHENZHONG SU UND TONIO GSELL**

*Fixposition*, a real-time kinematic positioning and navigation system for centimetre-accurate localisation. The lightweight hardware can be used in drones and autonomous cars, for example.

*Thanks to the targeted coaching and a network of experts, the Pioneer Fellowship brings us much closer to becoming an ETH spinoff.*

**PATRIC EBERLE**

*Automated Single Cell Dispense and Pick Unit*, a smart pipette system for picking and dispensing single cells with precision.

*The Fellowship gives me the opportunity to determine market requirements for the smart pipette system, and, using novel ETH technology, develop a product that sustainably improves process reliability.*

**CHRISTINA WOUTERS**

*HallcuBe*, High precision Hall sensors

A multi-dimensional sensor based on the Hall effect for high-accuracy magnetic field measurement.

*The Pioneer Fellowship enables me to tailor my doctoral research into a unique first-class product solution for the market.*

**LORENZ MEIER**

*SkyAware*, Obstacle Detection and Avoidance on Drones

Hardware and software for the early detection and avoidance of obstacles, for unmanned aerial vehicles. The product allows drones to navigate safely without a pilot.

*ETH Zurich is a world leader in the development of drones. Having completed my doctorate and research project with Amazon, I now want to prepare my research for market launch.*
The Fellowship motivates our team and supporters to drive this project to the next stage. The resources and the professional coaching are a great help in developing our technology and drawing up a solid business plan. We will soon be able to start up Reflectus as a medtech company!

VINCENT MARTINEZ UND LUCA HIRT

Nanoleq, Unbreakable cables
Highly flexible und durable cable from new composite materials, for robots and medical equipment.

The Pioneer Fellowship gives us the opportunity to put our technical concepts into practice, to find the best applications for our cable, and to prepare our technology for roll-out. We much appreciate the input from experienced coaches, and the chance to exchange ideas with other ETH Zurich startups.

SERGIO SANABRIA

Reflectus, a new ultrasound technology for the reliable diagnosis of breast cancer – without radiation or discomfort.

The Fellowship motivates our team and supporters to drive this project to the next stage. The resources and the professional coaching are a great help in developing our technology and drawing up a solid business plan. We will soon be able to start up Reflectus as a medtech company!

PHILIPP FURLER

Sunredox, Fuels from Air and Sunlight
Reactor technology for producing CO2-neutral and renewable fuels (diesel, kerosene, methanol) from air and sunlight.

The Pioneer Fellowship has allowed me to demonstrate the technology in a normal operating environment, and so move it much closer to market launch.

MAX AHNEN UND JANNIS FISCHER

BPET, a positron emission tomography device dedicated to detecting diseases of the brain, allowing an early diagnosis of dementia.

The extensive network and intensive coaching offered by the ETH Zurich Pioneer Fellowship helps us implement our business idea, week by week.

THANKS TO OUR PARTNERS

We are thankful for the support of more than 70 individuals, ETH alumni, companies and foundations. Without them this program would not be possible. Among them are: AdNovum Informatik, Adrian Weiss Stiftung, AO Foundation, BASF Schweiz Forschungsstiftung, Blooming Juniper Foundation, Gemeinnützige Stiftung Accentus, Hauser-Stiftung, Huawei Technologies, IMG Stiftung, KPMG, Palmary Foundation, SCS Swiss Child Support Foundation, Robert Bleibler, Albert Eberhard, Christoph Fischer, Walter Fust, Gregory Mirko Xavier Guglielmetti, Prof. Dr. Anton Gunzinger, Hansruedi Kaiser, Dr. Markus Rauh, Gerhard E. Schmid, Prof. Dr. Roland Yves Siegwart.
Track record (2010 – 2017)

72
Fellowships granted since 2010

18
Current Fellowships

43
Companies founded by Pioneer Fellows

Young researchers from ETH Zurich are often true experts in their field, and extremely motivated to put their research to commercial use. It is inspiring to discover new technologies together and to support them on the challenging route to market success. We believe in the impact of the Pioneer Fellowship and we look forward to working with many interesting people on many innovative projects: this is why AdNovum is proud to support the programme.

- Kornel Wassmer, Chief Development Officer AdNovum Informatik

NEWS PIONEER FELLOWS ON THE ROAD TO SUCCESS

The Pioneer Fellowship Program has had a most successful year. Two Pioneer Fellows won this year’s final of Venture, the longest-standing startup competition in Switzerland. In addition to Sergio Sanabria (Reflectus) who took the prize for the best business idea out of 95 submitted projects, Mark Bispinchnoff (Lumigbo) successfully competed against 108 others to gain first place in the business plan category. In addition, BASF and Volkswagen awarded Martin Ebner (Battrion) a special prize for applied research in electrochemistry. The winners of last year’s Venture Kick final were Fellows Michela Puddu (Haelixa), and Matthias Krebs and Daniel Meier (Aerotain).

NEWS TOP 100 START-UPS

In 2016, 10 Pioneer Fellows were elected for the 100 best Swiss startups – a larger number than in previous years: Glycemicon, Pregnolia, Versantis, rqmicro, Inositec, PharmaBiome, Aerotain, ZuriMed Technologies, Noonee and Fashwell. This positive development shows that companies established within the Pioneer Fellowship Program belong to the best start-up ideas in Switzerland with hopefully many more success stories to come.

Contact:
Alex Hochuli
Relationship Manager
+41 44 632 49 08
alex.hochuli@ethz-foundation.ch