

## Entrepreneurial ID «venture leaders» 2007



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*Project:*

Delta Robotics is a Start Up company of the University of applied sciences in Biel which develops and commercializes specific robotic systems for the manufacturing of biocompatible artificial organs like bone, cartilage and scaffolds.

*Industry:* Life Sciences



### Biography

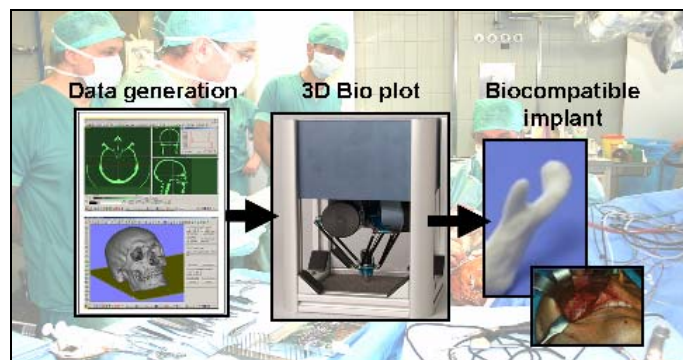
After my studies in micro-technology, I joined the company CSEM (Swiss Center for Electronics and Microtechnics) where I participated in the development of a high precision robotic system for the manipulation of micro-components in controlled biological environments. After an unsuccessful initiative to commercialize this technology within a Start Up company, I joined the company Mikron Assembly Technology that is a leading company in the development of specific assembly lines for high volume production. Acting as a project manager, I had the opportunity to work for different industry sectors like medtech, automotive and telecom. Being motivated by the technology challenge in the medical industry, I returned to the university of applied sciences in Biel where I participated in the challenging development of a robotic system for middle ear surgery. This job opened my mind to the technological and commercial potential in the area of life sciences.

### Company / project

Delta Robotics develops and will commercialize specific *3D Bio plotters* for the manufacturing of biocompatible artificial organs like bone, cartilage and scaffolds.

Tissue engineering (TE) is an emerging field that combines life sciences and engineering to replace and repair damaged human tissues and allows us to look into a potential future for regenerative medicine. Using this technology, it may become possible to regenerate or replace damaged tissues with laboratory-grown parts manufactured by SFF (Solid Freeform Fabrication) technologies.

The need for artificial organs and tissues is widely widespread in many surgery disciplines like skull base surgery, spinal surgery, orthopedics, neurosurgery necessary in interventions caused by accidents, tumors or malformations.



**Fig1.** Functionality principle of the 3D Bio Plotter of Delta Robotics

Delta Robotics will be incorporated in October 2007 as a Start Up of the University of applied Science in Biel and may employ 2-3 well skilled engineers from different disciplines (Biomechanics, robotics and medical imaging) up to the end of 2007. Our objective is to have a functional prototype of the 3D plotter until end 2008.

Delta Robotics is supported by the Insel hospital Berne for the surgical and clinical aspects.

At this time, Delta Robotics is looking for an investor providing the financing for the development of the prototype.