(RE)DISCOVER ART

Problem – Challenge: Lack of perception in digitized art
How can we improve the perception of Art and at the same time better preserve our cultural heritage, using modern digital technology?

When looking at a 2D image of an artwork, the vital element of materiality, which is essential to its comprehension and appreciation, is missing.

Although for the past decade the online Art market has been booming, the lack of interaction and security standards (“what is the real condition of an artwork?”) due to the use of traditional technology such as 2D images, is capping its growth.

Solution: Unique digital fingerprints
With its new generation of scanners and algorithms developed at the EPFL, ARTMYN is radically changing the visualization and preservation of art online, by recreating digital twins. Pigments, surface topography and materiality of a work are all translated, allowing the digital twin to be manipulated and inspected, from any mobile device, just like an expert would.

This technology not only allows for a better comprehension and experience of the artwork, but also makes an artwork scanned by ARTMYN unfalsifiable: a first scan will generate a unique digital fingerprint, allowing to automatically detect any potential damages or forgeries after a second scan.

PERSONALIZED BIOENGINEERED SKIN GRAFTS

Problem – Challenge
Every year in the world, more than 50 millions of people suffer from skin defects and need surgical intervention to restore skin function. Skin defects can be either acute (burns & trauma) or elective (reconstructive and ulcers). In many cases, standard of care leaves patients with debilitating scars.

Solution
CUTISS is a Swiss biotech company, spin-off of the University of Zurich (UZH), developing personalized skin graft technologies for the treatment of a large spectrum of skin defects. Its first in line product denovoSkin™ has been tested in a phase I clinical trial on pediatric patients at the University Children’s Hospital in Zurich. EU phase II studies are about to start funded by Wyss Zurich, a joint accelerator of UZH and ETHZ. denovoSkin™ has received Orphan Drug Designation for the treatment of burns by Swissmedic, EMA and FDA. In addition, denovoSkin™ promises to improve life quality of elective (reconstructive) patients as well and it can further be developed in terms of complexity by adding pigmentation.

In EU and US about 12 million patients could benefit from CUTISS’ technology every year. denovoSkin™ could significantly improve the life quality of patients worldwide by drastically reducing scarring after transplantation. CUTISS closed a seed financing round of CHF 1 million with the UZH Life Sciences Fund (UZH LSF). UZH LSF has been established by UZH and Novartis Venture Fund with the goal to create financing possibilities for UZH spin-off companies. These ventures are often in a very early stage of development. UZH LSF aims to promote innovation in the life sciences in the Zurich area.

Skin graft (copyright Wyss Zurich)