W.A. DE VIGIER STIFTUNG

SUN bioscience from Lausanne (VD) – 3D Cell Cultures For More Effective Treatment Decisions

Industry: Biotech and Life Sciences

Sylke Hoehnel, CEO SUN bioscience

SUN bioscience SA
EPFL Innovation Park
Bâtiment C
1015 Lausanne
sylke@sunbioscience.ch
www.sunbioscience.ch

Healthcare can be expensive, but then it should at least be effective. In order to be effective we need to be able to distinguish treatment responders from non-responders. Since the decoding of the human genome in 2003, genetic profiling seemed like the solution everyone had been waiting for. But as we hardly understand 5% of the entire human DNA we need additional methods and technologies to realize the goal of precision/personalized medicine. That's the only way to ensure that prescribed medications will actually work.

SUN bioscience launches novel technologies that enable faster and more efficient growth of three-dimensional cell structures. This allows for optimized medication decisions prior to the prescription. That novel process can save billions in healthcare costs - money that is currently wasted on inefficient treatments.

Organoids, stem-cell derived patient tissues that can be grown in the lab, are considered a breakthrough for precision medicine. Patient-specific organoids allow to test for the final efficacy of treatments rather than to rely on predictions based on incomplete biomarker sets. However, organoids are still a research tool, produced manually, with high variability and high associated costs. To overcome these limitations, SUN bioscience has developed Gri3D®, a universal organoid culture platform, allowing standardization of organoids for time- and cost-effective use in pharmaceutical screenings and clinical diagnostics.

The Vaud startup is based in Lausanne. The team consists of Sylke Hoehnel (CEO), Nathalie Brandenberg (COO) and Jeroen van den Oever (CFO). Sun bioscience sees itself as a startup at the interface of engineering, materials science and biology.