

TigerSharkScience

Our complex skin models helps cosmetic and pharmaceutical companies to test their products to enable non-animal and profitable next generation research.

The Project

Due to our progress in time and our biological Secret know-how, we were able to generate a complex human skin model, which represents the architecture of the skin. This skin model, developed from reprogrammed human stem cells (hiPSC), generates complex structures such as hair, sebaceous glands and nerves. For this reason, it represents a platform technology that can be used for different applications. With the help of discussions with leading pharmaceutical and cosmetics companies, we were able to filter out the needs of the industry (e.g. skin cancer models) and adapt the requirements to our test system. Personalized testing will be of great interest to for our customers in the coming years and we are focus on iPSC of patients. In addition, genetic skin diseases can be reproduced with the help of genetic modification (CRISPR/Cas). Furthermore, due to the high sale up techniques, our test model is less expensive than existing models.

The Team

Location: Fraunhofer ISC Würzburg

Members: Dieter Groneberg (Team Leader), Amelie Reigl (Team Member)

AHEAD Infos Batch: 2022

Phase: 1

Track: Spin-Off

The Business Model

Unique Selling Proposition:

Our skin models represent the human skin in its its complexity and possess complex structures such as hair, nervous system and other skin cells. This can no test system that is currently on the market. We can upscale and have the expertise for analysis for our customers as a contract research organization.

Unfair Advantage: Patent from ISC FhG (F63720)
+ Secret know how (patent in preparation)

Revenue Model: Sales, service

Venture Readiness Level



Technology Readiness Level



The Side Facts

Customer Focus: B2B

Searching For: investors, mentors

Industry Tags: health care

Technology Tags: bioengineering