



The Ideal Foundation for a Start-Up

How EU projects help smooth the way to market



Biotechnologist Dr Jens M. Kelm believes his experience in several EU-funded projects provided a head-start for his new company, PreComb Therapeutics AG. “We were able to test microtissue technology in a European framework, see how it was working in other people’s hands, and create new applications and ideas with other groups,” he explains.

One of the initial developers and pioneers of 3D tissue culture technology, Kelm credits his active participation in several EU consortia (including such milestone projects as “The Body-on-a-Chip”, “Hepatic and Cardiac Toxicity Systems Modelling” and “EU-ToxRisk”) with advancing his career. “The network and experience I gained with the EU Framework Programme 7 (FP7) and Horizon 2020 (H2020) allowed me to get very different perspectives on a specific topic, to hear new opinions and absorb new mindsets,” he says.

“At the same time, it allowed us to benchmark new ideas in the industrial environment and with scientists across Europe before entering into our research. It significantly helped us develop a concept and tailor our projects to market needs, and it changed how we field-use our technology.”

A device for optimal cancer treatment

Recent breakthroughs in the field of genomics have brought personalised medicine, especially targeted cancer treatment, much closer to reality. But, says Kelm,

genomic statistics alone remain insufficient for true personalised therapy. “We need additional information to tailor for the individual patient’s needs, especially in the cancer field.”

‘The network and experience gained helped us tailor our new project to market needs.’

The information must then also be in a form that doctors can use. And that’s where Kelm’s Zurich-based company, PreComb Therapeutics, aims to add value. “Our micro-tumour-based profiling device will give physicians a robust, easy-to-use, cost-effective and predictable method for making informed therapeutic decisions,” he explains. “We want to help doctors tailor drugs to patients, not patients to drugs.”

Horizon 2020: Invaluable contacts and insights

In particular, Kelm says the work in the EU consortia highlighted the need for a higher level of data standardisation to fully exploit the potential of cell-based tests for personalised medicine. “This was the trigger for the creation of PreComb Therapeutics.” He adds that being part of EU projects also advanced PreComb’s R&D, as well as that of his earlier start-up, InSphero AG. “Such a broad, high-level access is super important for a start-up and for Swiss companies in general.”

Sarah Meyer de Stadelhofen for Euresearch

‘Access is super important for a start-up and for Swiss companies in general.’ (Jens M. Kelm)



Dr Jens M. Kelm

Euresearch is an information and advisory service on the European Research and Innovation Framework Programmes. It has offices in all the Swiss regions and a Network Office in Bern. Euresearch is a non-profit organisation funded by the Swiss State Secretariat for Education, Research and Innovation.

CAREER PATH

Dr Jens M. Kelm is one of the initial developers and pioneers of 3D tissue culture technology. He was founder, president and CSO of InSphero AG, commercialising physiological 3D models, assays and screening concepts. He is co-founder of the Swiss Competence Center “Tissue Engineering for Drug Development and Substance Testing” (TEDD) and a member of the steering committee of the 3D cell culture conference series (3DCC) organised by DECHEMA, the German Society for Chemical Engineering and Biotechnology. He has more than 50 publications and 11 patents in the field. Currently, he is CEO and co-founder of PreComb Therapeutics AG, developing novel personalised medicine solutions for cancer patients.

FACTS & FIGURES

Name Jens M. Kelm

Current Position CEO, PreComb Therapeutics AG

Project/Grant

FP7: BoC – The Body-on-a-Chip (Coordinator)
€1919 000

FP7: HeCaToS – Hepatic and Cardiac Toxicity
Systems Modelling
€15990 000

H2020: EU-ToxRisk – An Integrated European
‘Flagship’ Programme Driving Mechanism-based Toxicity
Testing and Risk Assessment for the 21st Century
€30122153
<https://www.eu-toxrisk.eu>

Research Area Tissue engineering, Biotechnology, Personalised medicine, Drug discovery

