



Joint Media Release – For Immediate Distribution

InSphero and ETH Zurich Bio Engineering Laboratory Achieve Milestone to Commercialize Akura™ Flow Organ-on-a-Chip Solutions

Long-term collaborative research partnership continues to serve as successful biotechnology incubator for disruptive drug discovery and safety testing platforms and applications

Schlieren and Basel, Switzerland – August 25, 2020 [InSphero AG](#), a pioneer in 3D cell-based assay technology, and the ETH Zurich [Bio Engineering Laboratory](#), today announced that they have completed the licence agreement for InSphero's Akura™ Flow organ-on-a-chip platform. [Akura™ Flow](#) is a commercially available "plug and play" microphysiological system (MPS), engineered to enable pharmaceutical and academic researchers to integrate 3D spheroid models in single- and multi-tissue organ networks for preclinical drug efficacy and toxicity testing applications.

InSphero has been testing and perfecting organ-on-a-chip solutions since 2011, when the company teamed up with the Bio Engineering Laboratory, AstraZeneca, and other leading academic groups as part of the [European Commission-funded "Body on a Chip \(BoC\)" Project](#), which aimed to mimic the response of the human body as a whole to drugs for safety and efficacy testing. Working in collaboration, microfluidic experts at InSphero and the Bio Engineering Laboratory in Basel were able to refine early prototypes of BOC system and create higher-order solutions, suitable for industry applications, such as [low-clearance assays](#), [prodrug activation](#), and [metabolic disease modeling](#). With the financial support of the Swiss Innovation Agency [InnoSuisse](#), InSphero has since been working on commercialization of the Akura™ Flow platform to ensure operational robustness and trustworthy results demanded by the pharmaceutical industry. Akura™ Flow represents the first MPS technology to address important industry needs, such as simple and quick setup and the capability to automatically extract 3D microtissues from microfluidic device for downstream next-generation sequencing, histology, or other rich endpoints. It is compatible with all commonly used laboratory automation tools.

"This license agreement between ETH Zurich and InSphero marks the culmination of close to a decade of innovative bio engineering and integrative biomedical research efforts," says InSphero Head of Technology and Platforms Olivier Frey, PhD, the principle architect of the Akura™ Flow platform, who also headed research projects conducted at ETH Zurich and served on the BOC project team. "Through our ongoing research collaborations with the ETH Zurich Bio Engineering Laboratory, led by Professor Andreas Hierlemann, we are able to break through 3D *in vitro* technology barriers to deliver better, safer 3D *in vitro* solutions that will help further our understanding of complex diseases and find cures faster."

For more information about the InSphero Akura™ Flow technology platform, visit: <https://insphero.com/science/enabling-technology/microphysiological-systems/>

To learn about biomicrofluidic systems under development in the ETH Zurich Bio Engineering Laboratory, visit <https://bsse.ethz.ch/bel>.

About InSphero

InSphero is the pioneer of industrial-grade, 3D-cell-based assay solutions and scaffold-free 3D organ-on-a-chip technology. Through partnerships, InSphero supports pharmaceutical and biotechnology researchers in successful decision-making by accurately rebuilding the human physiology *in vitro*. Its robust and precisely engineered suite of 3D InSight™ human tissue platforms are used by major pharmaceutical companies worldwide to increase efficiency in drug discovery and safety testing. The company specializes in liver toxicology, metabolic diseases (e.g., T1 & T2 diabetes and NAFLD & NASH liver disease), and oncology (with a focus on immunoncology and PDX models). The scalable Akura™ technology underlying the company's 3D InSight™ Discovery and Safety Platforms includes 96 and 384-well plate formats and the Akura™ Flow organ-on-a-chip system to drive efficient innovation throughout all phases of drug development.

Learn more about InSphero at www.insphero.com and follow them on [Twitter](#) and [LinkedIn](#).

About the ETH Zürich Bio Engineering Laboratory

Research at the ETH Zurich Bio Engineering Laboratory (BEL) is rooted in engineering and physics. BEL is performing interdisciplinary engineering research and education relevant to biology and medicine. It has longstanding experience in the development of Complementary Metal Oxide Semiconductor (CMOS)-technology-based integrated chemical and biomicrosystems, as well as bioelectronics and microelectrode arrays. Moreover, BEL is engaged in the development of microfluidics for investigating the characteristics of single cells and microtissues. BEL is one of several innovative research groups within the ETH Zurich Department of Biosystems Science and Engineering (D-BSSE), where engineers, biologists and computational scientists work together on the understanding, rational design, and reprogramming of complex biological systems from the nanoscale up to whole organisms.

Visit the ETH Zurich BEL at bsse.ethz.ch/bel/. Follow BEL on [Twitter](#) and ETH Zurich on [LinkedIn](#).

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