

PRESS RELEASE

July 21, 2022

Ziccum AB and Zurich University of Applied Sciences apply for joint funding on 3D modelling project of unique drying technology for thermostable vaccines

Ziccum AB, in partnership with the prestigious Zurich University of Applied Sciences, is applying for funding to Eurostars for a joint project developing the 3D modelling of LaminarPace, its unique room-temperature drying system that formulates vaccines as thermostable powders requiring no cold chain. The project is expected to support and accelerate development, scale-out and ultimately sales, tech transfer and partnering.

Thermostable vaccines that can withstand heat in any climate, anywhere in the supply chain, are in high demand - as growing numbers of national and international bodies seek to improve pandemic preparedness and establish tougher, more robust vaccines in a rapidly warming world.

Now, Ziccum AB and the Zurich University of Applied Sciences (ZHAW) are applying for funding from the Eurostars funding body for a joint project that will develop the 3D modelling stage of LaminarPace (LAPA) – Ziccum's unique room-temperature drying system that formulates thermostable vaccines that require no refrigeration or freezing. The new application is part of Ziccum's sharpened strategic focus on continuously evaluating soft funding opportunities that strongly match Ziccum's offering and its current state of development.

Eurostars funds a wide range of highly innovative collaborative R&D projects across its 37 member countries. All Eurostars projects partner SMEs with larger companies, universities and research organizations. Eurostars is co-funded by the EU Horizon 2020 Framework Programme and EUREKA, the world's largest public network for international cooperation in R&D and innovation.

The project will be carried out by the ICP Institute of Computational Physics at the School of Engineering (SoE) at ZHAW, and the Ziccum team at its labs in Lund, Sweden. An initial workshop between the two teams took place in Lund, Sweden on June 15 and intense authoring of the grant application is now underway.

The project aims to strengthen, support and accelerate the development of LAPA – offering high-value insights into its unique particle properties, and accelerating and optimizing industrialization. The first phase will focus on modelling flow, particle formulation and scale-out. A projected final phase will further develop the 3D modeling to accelerate sales, partnering and tech transfer to pharmaceutical and CDMO (Contract Development and Manufacturing Organizations) partners.

Strengthened focus on soft funding

As stated, Ziccum now has a sharpened strategic focus on identifying and prioritizing soft funding, opportunities that best match the company's offering and current phase of technology development. As a consequence, the company has decided not to apply for the previously-mentioned CEPI funding as this is targeting well-established manufacturing organizations that can implement thermostable vaccine facilities globally. Instead Ziccum is identifying other funding projects for earlier-stage companies, enabled by strong current interest in and demand for thermostable vaccines and novel drying methods that can achieve them.

Ziccum CEO Ann Gidner: "3D modeling is an integral part of our technology development - so the opportunity to partner with such an expert team and receive funding for this stage is a win-win for us – and, ultimately, our prospects and partners. 3D modelling and its potential resulting tools will offer partners the chance to explore the benefits to be gained from ambient drying from every angle. Our partners at ZHAW are fully committed to the project and our unique ambient drying methodology, and morale and momentum are high."

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About Ziccum

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Ziccum is developing new thermostable versions of vaccines and biologic materials for licensing to vaccine providers, developers, manufactures and CDMOs in the global pharmaceutical industry. Ziccum's patented drying technology, LaminarPace, is unique. It can dry-formulate temperature-sensitive vaccine materials at room temperature with high yields and low waste. These robust, thermostable dry powders could be stored and transported worldwide with no need for cold chain refrigeration or freezing. Ziccum is listed on the Nasdaq First North Growth Market

| Attachments | | | | | | |
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| Ziccum AB and Zu | rich University o | f Applied Scie | ences apply f | or joint fundi | ing on 3D mo | odelling |
| project of unique | drying technolog | gy for thermo | stable vaccir | nes | | |
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