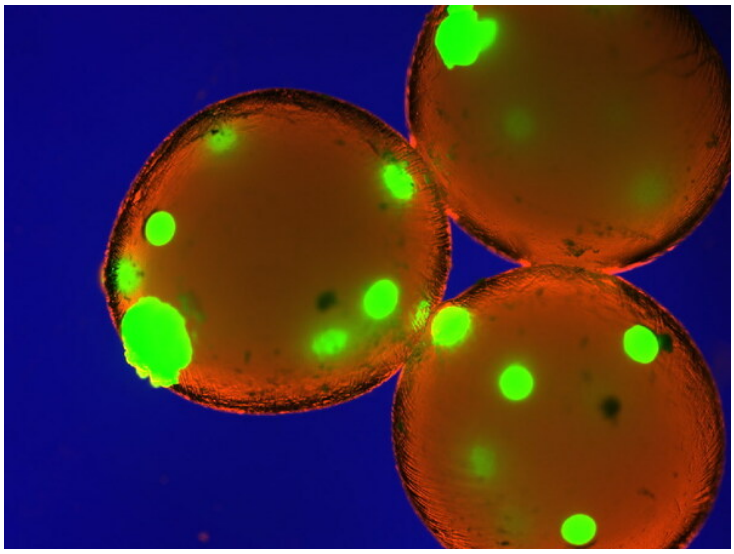
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FGen AG gets funding for sustainable milk protein production project

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FGen AG, a subsidiary of Ginkgo Bioworks, based in Switzerland, has been awarded funding through the European Innovation Council's (EIC) Pathfinder Challenge program. This is part of an international research consortium that aims to develop a new, sustainable approach to milk protein production using only carbon dioxide and electricity. The consortium, led by Finnish food tech innovator, Solar Foods, and also including leading researchers from the University of Groningen and RWTH Aachen University, was selected from more than 440 proposing teams for their four-year, â?¬5.5M "high-risk/high reward" project playfully named HYDROCOW.

The HYDROCOW team will work to genetically engineer hydrogen oxidizing bacteria (HOB) to convert carbon from CO2 gas and nitrogen from N2 into beta-lactoglobulin, a major whey protein found in cow's milk. Beta-lactoglobulin is used in food applications such as infant formula, protein supplements, and baked goods. Microbial systems that can produce valuable food ingredients and other products directly from CO2 will be critical for sustainable bioproduction of foods, medicines, and chemicals.

Engineered microbes capable of producing beta-lactoglobulin will undergo ultra-high throughput testing at FGen, leveraging the cutting-edge platform that makes it possible to rapidly search through up to 1 million HOB variants in a single run. The highest-performing HOB strains identified by FGen will then be validated by Solar Foods under autotrophic growth conditions in an industrially-relevant bioproduction environment.