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Triplebar and Umami Meats initiate technology collaboration for sustainable seafood

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Biotechnology company Triplebar and cultivated seafood platform company Umami Meats are partnering to co-develop optimised cell lines suitable for large-scale production of cultivated seafood â?? starting with one of the most popular and critically endangered fish species.

Emeryville, California-based Triplebar and Singapore-headquartered Umami Meats signed a letter of intent this month to collaborate on shared technical milestones, with the unified mission of producing commercially viable, scalable, and affordable cultivated seafood. Their first project will be Japanese eel.

Together, Triplebar and Umami teams will work to improve the fitness and performance of cell lines to enable lower-cost, more efficient production of cultivated foods. The shared goal is to reduce the cost of high-quality foods, reduce supply-chain risks in the global fishing and aquaculture industry, and relieve pressure on depleted fish stocks in the worldâ??s oceans.

â??The solution to the global seafood problem is to leverage science and technology to make high-quality food affordably and sustainably,â?• said Maria Cho, CEO of Emeryville and California-based Triplebar. â??Biotechnology can make our global food system more robust, and relieve pressure on the ecosystem, which is facing a catastrophic collapse in biodiversity.â?

The first product to be commercialised under the new letter of intent is the Japanese eel, or unagi, native to the waters off Japan, Korea, China, Vietnam and the Philippines. Itâ??s considered an essential part of Japanese cuisine, common in sushi, poke and grilled main courses.

Umami Meats will leverage Triplebarâ??s Hyper-Throughput screening system for solution discovery, testing millions of potential phenotypic solutions in the time it normally takes to search mere hundreds. The partners will work together to develop a licensing agreement that will accelerate cell line development and optimisation without the need for genetic modification.

Triplebar uses its proprietary integration of hardware, software, biology and biochemistry as the microprocessor for biology, bringing the powerful algorithm of evolution to develop products and biological production systems used to produce them in the lab. Triplebarâ??s technology can be easily applied to food, pharmaceuticals and other verticals.