

PhD Open Days



Whole-cut cultured fish fillet production by cellular agriculture strategies

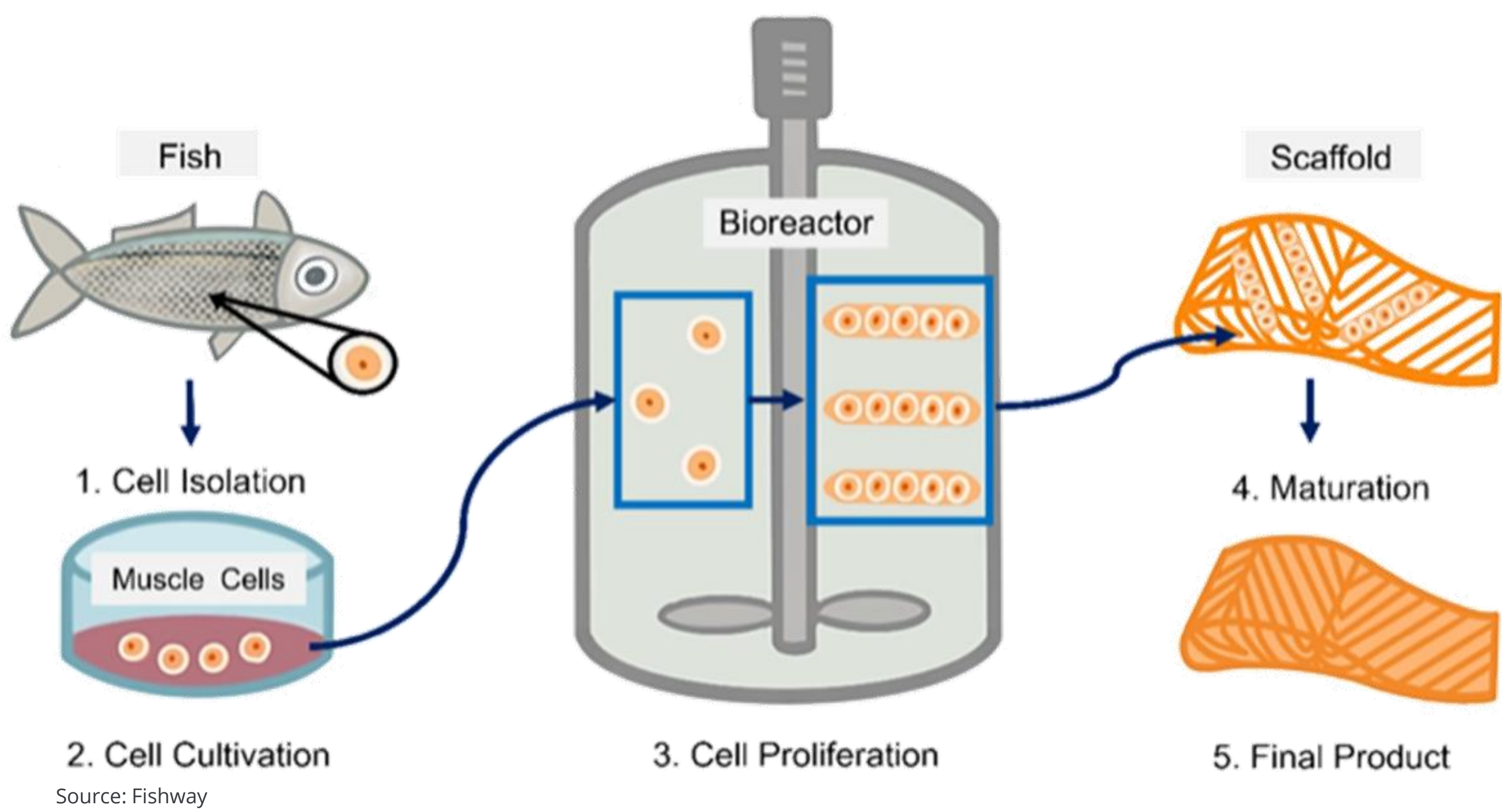
Doctoral program in Bioengineering

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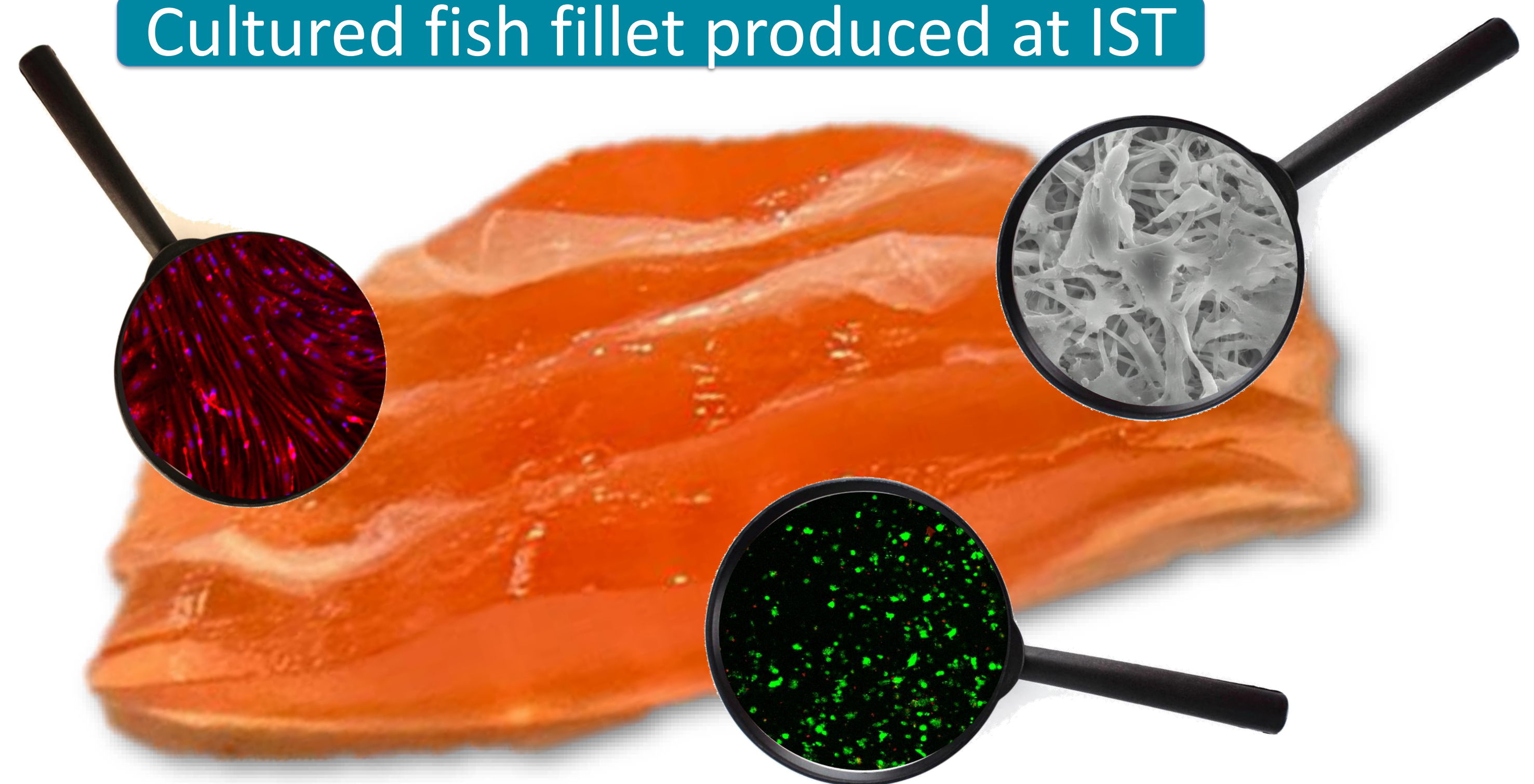
The concept

Is it possible to grow fish fillets just from cells?



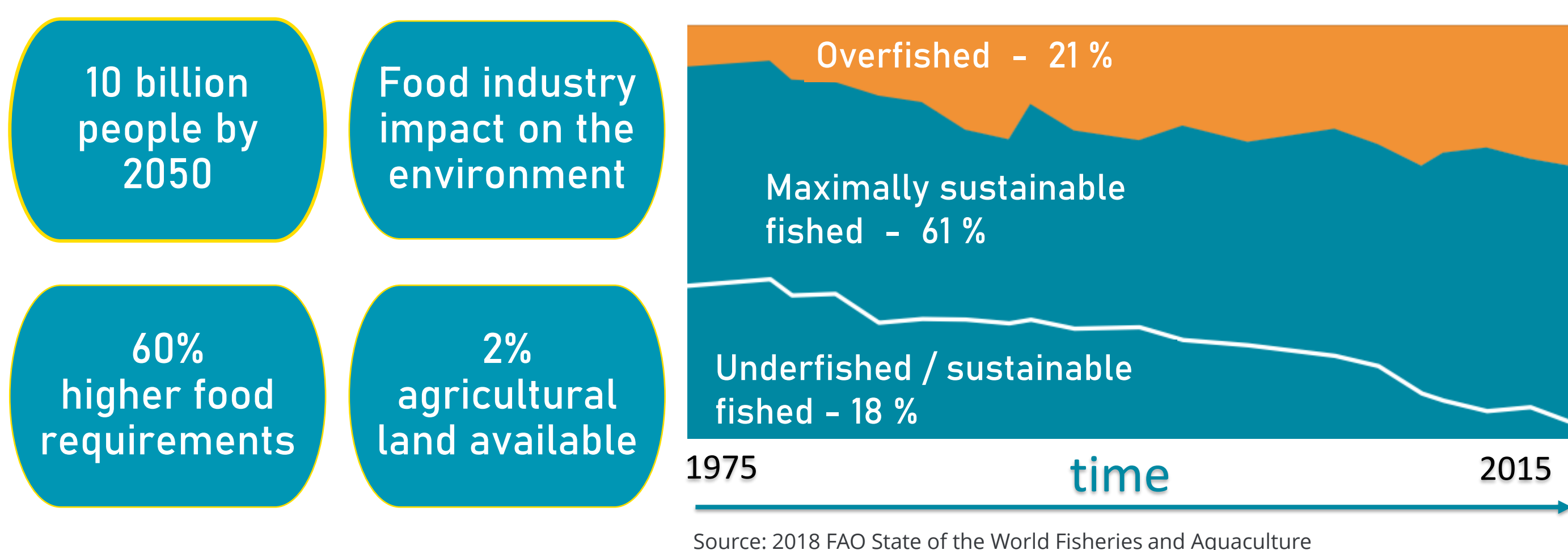
Our prototype

Cultured fish fillet produced at IST



Motivation

Why do we need cultured fish production?



The benefits

↑ Food safety

↓ 80% GHG

↓ 99% land

↓ 96% water

↑ Animal welfare

↑ Accessibility to food

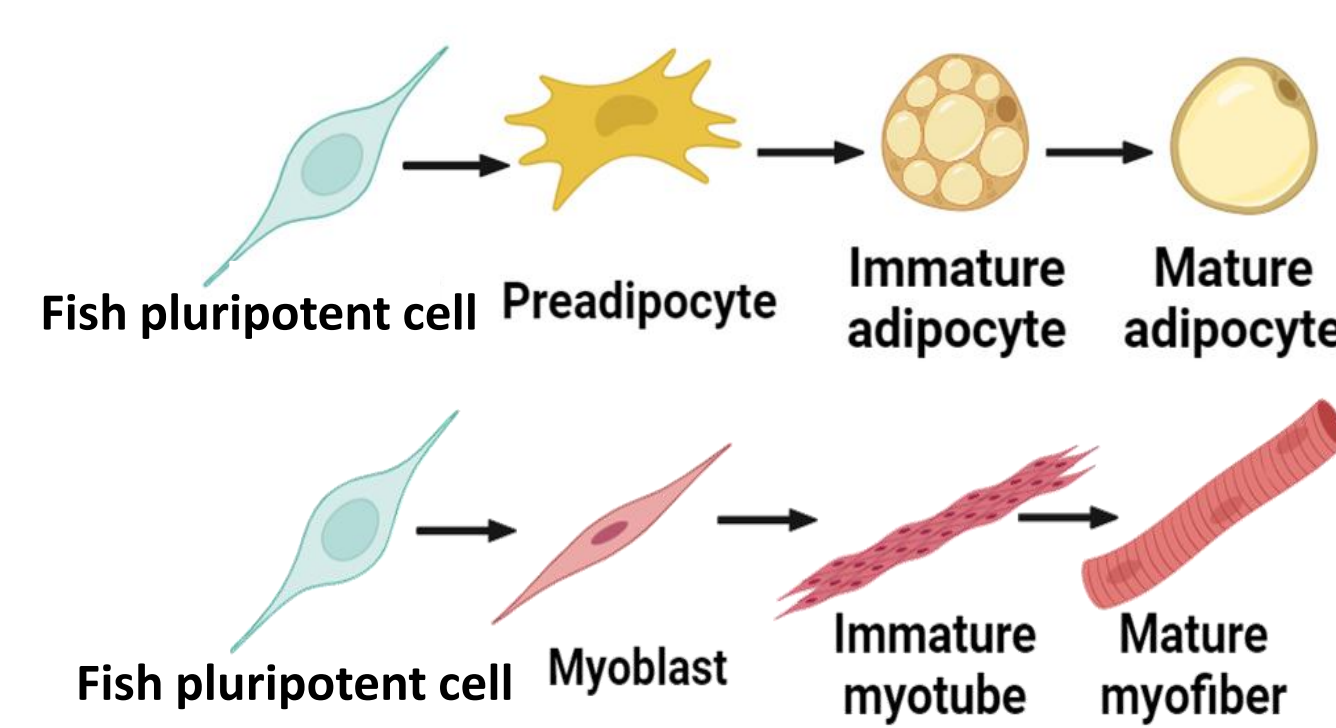
2 ZERO HUNGER

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

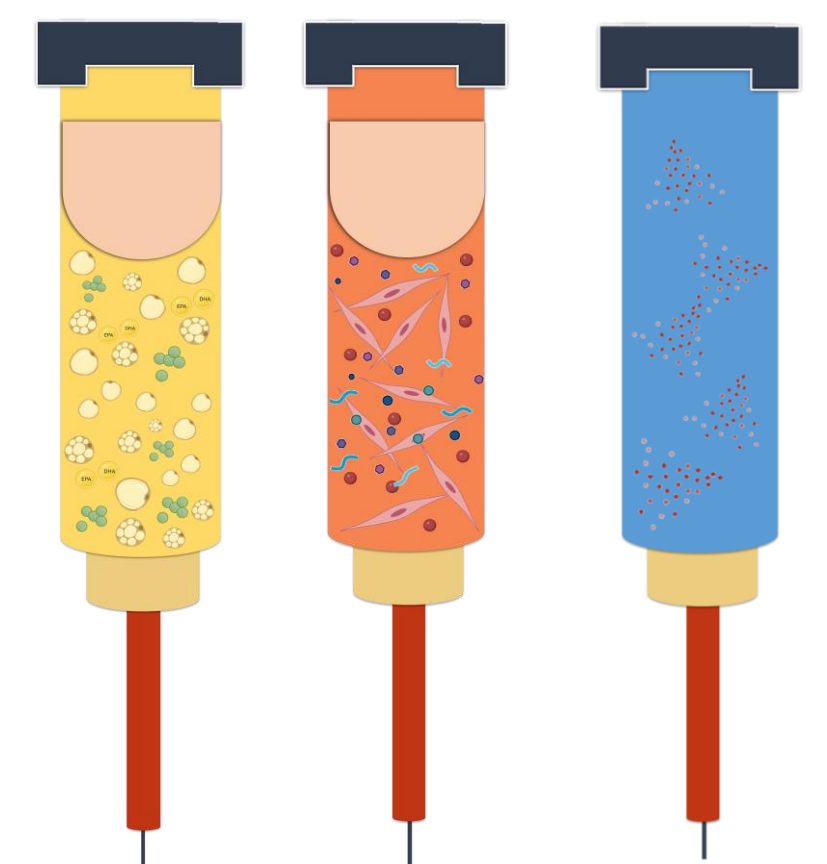
14 LIFE BELOW WATER

Methodology

Fish cell culture



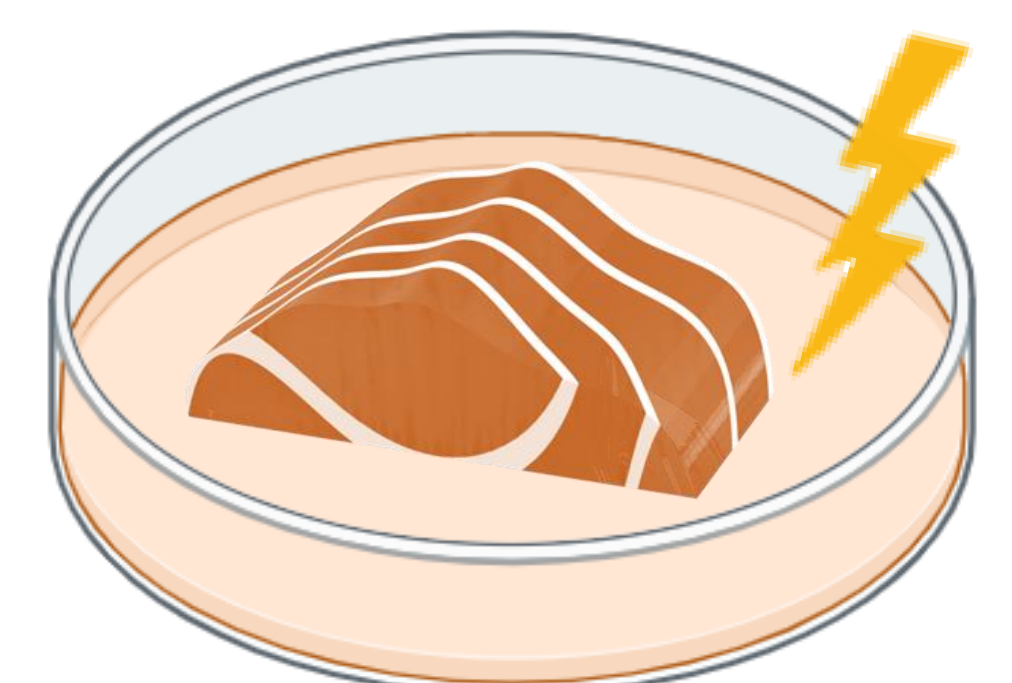
(Bio)ink development



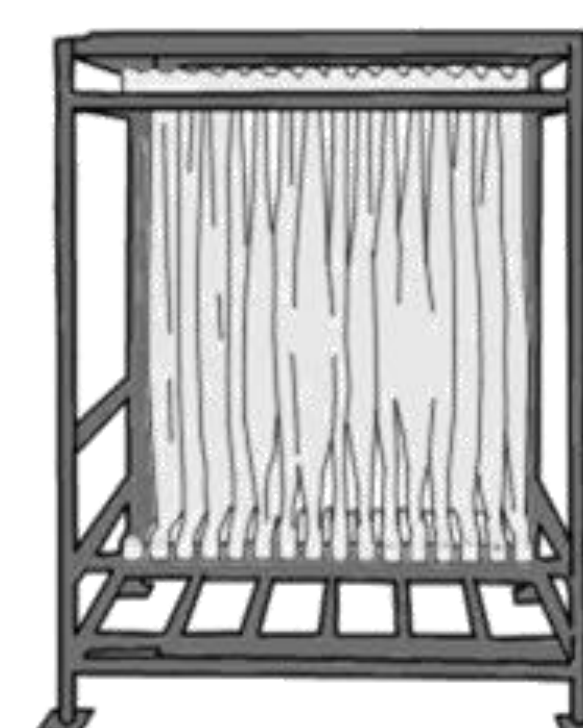
3D bioprinting & electrospinning



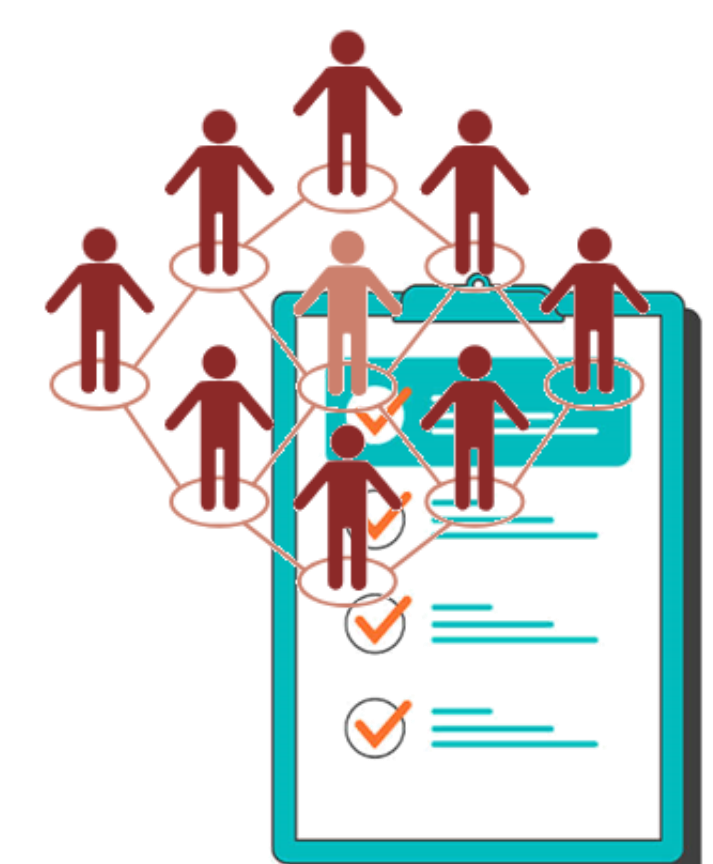
Fish fillet maturation



Novel bioreactor



Consumer evaluation



Supervisor : Prof. Frederico C. Ferreira;
Co-supervisors: Prof. Luisa Torri, Dr. Paola Sanjuan-Alberte

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