

Passive eDNA and Sediment Collection Apparatus (PESCA)



BACKGROUND

The collection of environmental DNA aims to develop a thorough view of all the species in a biome without the need for direct observation. Current methods for collecting these samples in marine environments entail active or passive sampling, oftentimes with a costly collection apparatus prone to issues such as sediment buildup and contamination.

DESCRIPTION

The PESCA revolutionizes the way we monitor marine and freshwater biodiversity. It enables rapid and cost-effective detection of invasive species, tracking of animals' range shifts, and assessment of ecosystem health. Traditionally, eDNA studies required manual collection and filtration of large volumes of water, leading to time-consuming processes and potential sample contamination. But with PESCA this innovative device is designed to align with ocean and river currents, maximizing eDNA retention. It features modular components for sediment collection and can accommodate various filter types and sizes while minimizing contamination risks.

ADVANTAGES

- Maximizes eDNA collection and retention
- Lightweight, cost-effective, 3D-printed

APPLICATIONS

- eDNA Monitoring Kits
- Community Science Kits
- Mariculture
- Research Institutions

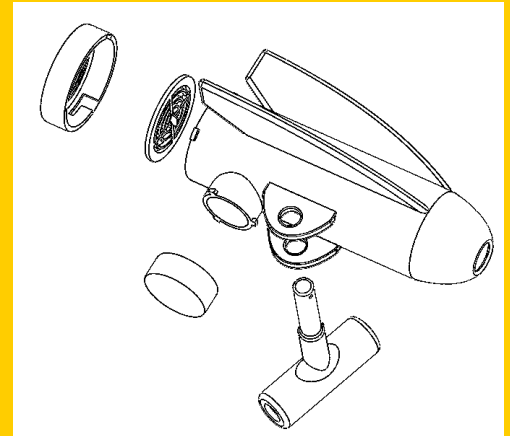
INTELLECTUAL PROPERTY

- US Patent Application No. 63/688,621

OPPORTUNITY

- Available to license

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PESCA



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