

## World Coral Conservatoire

○Nadia Ounais<sup>1</sup>, Didier Zoccola<sup>2</sup>  
1. INSTITUT OCEANOGRAPHIQUE  
2. CENTRE SCIENTIFIQUE DE MONACO

Coral reefs are in decline due to climate change. Using the network of World Public Aquariums, we propose to build a “Noah's ark” for corals that will serve as a reservoir for conservation purposes, research laboratories, and restoration of coral reefs. The project consists of creating a world reference center for coral that will house, in a network of public and private aquariums, a unique worldwide collection of the majority of species and strains of corals described to date, in the form of living colonies. The World Coral Conservatoire project involved a consortium of scientists, aquariums curators and field.

### The World Coral Conservatoire

- Will provide scientists with tagged referenced biological material. For each species, a transcriptome will be produced using next generation sequencing techniques.
- Will help to protect the biodiversity of coral reefs using solution-based approaches that combine Science, Conservation and Reef management
- Will increase the ability of reef organisms to tolerate stress and facilitate recovery from disruption using the “assisted evolution approach” to enhance coral reef resilience.
- Will provide comprehensive information on coral and coral reefs for the general public and also stakeholders.

This work will be carried out by all aquarium partners who will join the project and will be coordinated by a steering committee composed of scientists and aquariums curators. The project needs to build on a consortium that will include research institutes that can help sample, cultivate, sequence and analyze data. This consortium will also include NGOs involved in reef restoration (50reefs initiative, Coral Guardian and much more). It's a five-year project starting with the sampling of 200 coral species. The final goal is to reach at least 1000 species In the World Coral Conservatoire.