609: Preserving Coral Reef Biodiversity Using Cryopreservation

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Cryopreservation of Sperm

Introduction

Coral reefs are declining globally...

•Multiple stressors are contributing to the decline coral reef health
•Globally, corals are under threat from increased sea surface temperatures and acidified oceans
•Warming oceans lead to coral bleaching and disease – the leading causes of coral loss in the last decade

What our lab is doing for coral conservation

•We use human fertility clinic techniques to preserve the biodiversity of coral reefs globally
•The cryopreservation process keeps material frozen but alive for 100's of years
•We can use this frozen material for restoration, re-seeding and can prevent species extinction

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Cryopreservation of Larvae

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Cryopreservation of Coral Microfragments

Applications of Cryopreservation in Conservation