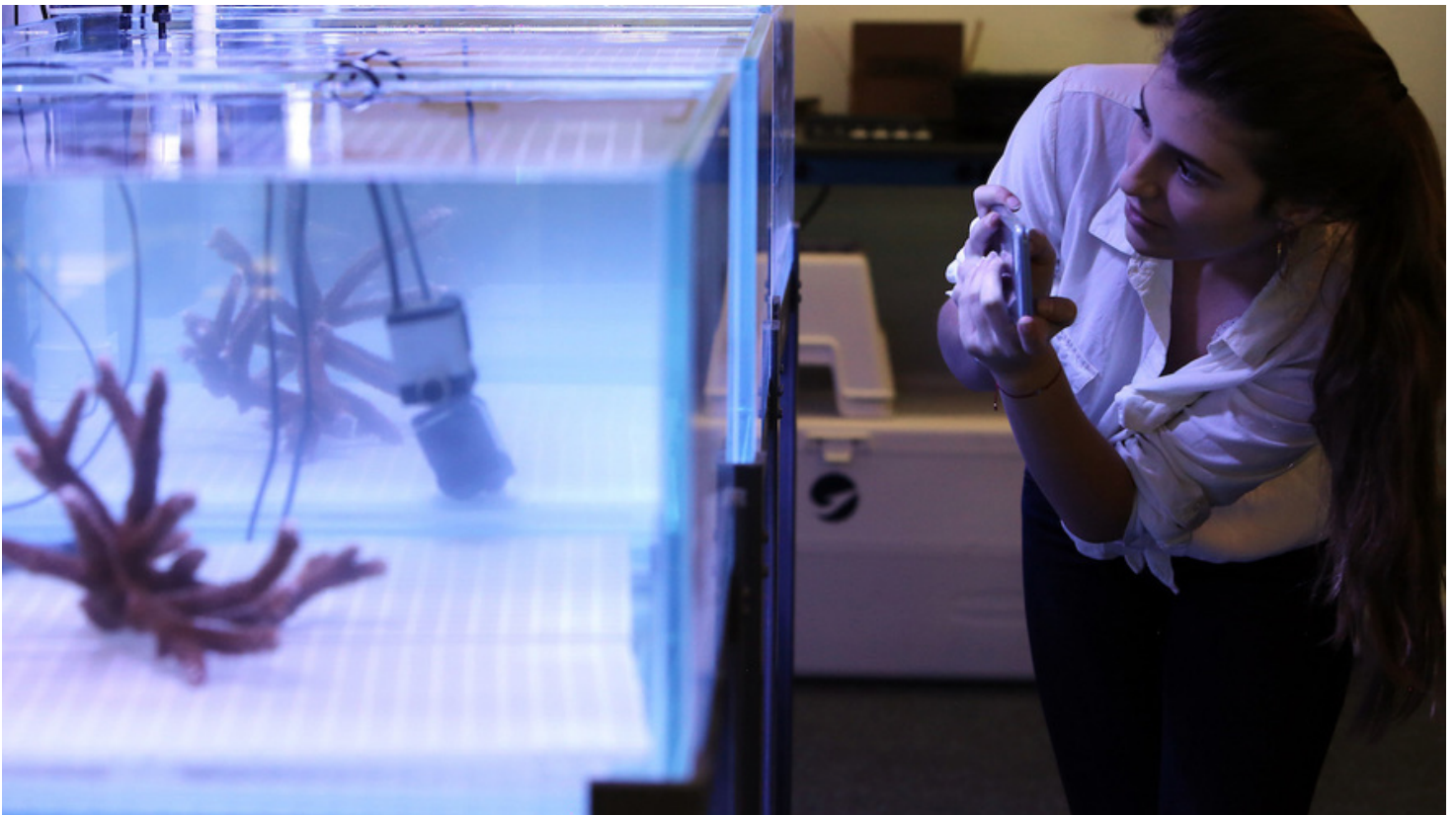


Scientists work to make coral that can survive weather changes

By Miami Herald, adapted by Newsela staff on 04.25.16

Word Count **434**

Level **MAX**



Melissa Fernandez, a freshman at FIU's biomedical engineering dept. is an intern on the coral restoration team at the Frost Museum of Science. The team is stress-testing coral in the Inventors Lab to make reefs more climate-change resilient. Photo by: Emily Michot/Miami Herald/TNS

MIAMI, Florida — A laboratory sits at the top of the new Frost Museum of Science in Miami, Florida. A group of scientists is hard at work. They are studying a creature called staghorn corals.

Corals grow in oceans. They often grow in groups. Together, they create reefs. Reefs look like huge colorful rocks. They sit on the ocean floor. Many fish live in and around them.

The scientists are trying to make their coral stronger. So, they are purposely causing it stress.

Why would they want it to be uncomfortable?

The goal is to create "super corals." These are corals that are better at surviving weather changes. Lately, lots of corals have been dying as oceans get warmer. This is because of global warming.

Global Warming Affects Corals

Global warming is a change happening all over the world. Factories, cars and other activities are giving off greenhouse gases. These gases trap the planet's heat. As they have built up, the Earth has gotten warmer. This is causing problems for people, plants and animals. Corals have been badly affected.

The reason why has to do with a plant called algae. Algae live inside coral reefs. It makes food for the corals to eat.

When the water gets too warm, though, algae stop making food. Instead, it releases a kind of poison. The corals then spit the algae out. This makes the corals turn white. Without food, they then slowly die.

So, when the water gets too warm for algae, corals die. To save corals, scientists have been closely studying algae.

Stronger Algae Could Help Coral

It turns out that some kinds of algae can stand warmer water better than others. This led scientists to another challenge. How could they get these special algae to grow in coral reefs?

That is what led scientists to create "stress" for corals. Andrew Baker is a scientist who studies corals. He helped come up with the new system.

The idea is to make the corals uncomfortable. The corals then spit out their algae. Next, scientists send in a stronger kind of algae. They try to make it join with the coral. The coral can then come back to life, stronger than before.

Saving Reef In Miami

The results so far have been hopeful.

Scientists hope to bring this "super coral" back in the wild. If it does well, it could help save the coral reef off the coast of Miami. The reef there has been quickly disappearing.

The study is the first of its kind. If it works, it would be a major step forward.

Quiz

1 Read the paragraph from the introduction [paragraphs 1-5].

Corals grow in oceans. They often grow in groups. Together, they create reefs. Reefs look like huge colorful rocks. They sit on the ocean floor. Many fish live in and around them.

Which sentence from the paragraph explains that corals are important to life in the ocean?

- (A) Corals grow in oceans.
- (B) Reefs look like huge colorful rocks.
- (C) They sit on the ocean floor.
- (D) Many fish live in and around them.

2 Read the section "Global Warming Affects Corals."

Which sentence from the section BEST explains why algae are important to corals?

- (A) The reason why has to do with a plant called algae.
- (B) Algae live inside coral reefs.
- (C) It makes food for the corals to eat.
- (D) This makes the corals turn white.

3 Finish the sentence below.

One MAIN idea of the article is that _____.

- (A) scientists are trying to create coral that can survive global warming
- (B) global warming is a change happening because of greenhouse gases
- (C) Andrew Baker helped come up with a new system for studying corals
- (D) corals often spit out their food when they are feeling uncomfortable

4 What is the MAIN idea of the section "Saving Reef In Miami"?

- (A) Strong kinds of algae can join together with coral to bring it back to life.
- (B) Scientists are hopeful that planting the super coral will help save the Miami reef.
- (C) The reef in Miami is disappearing faster than other coral reefs around the world.
- (D) Replacing regular coral with super coral will make Miami's reef more fun for tourists to visit.

5 How is coral affected by global warming?

- (A) Coral get too hot and need to find deeper water.
- (B) Coral spits out an algae that is harmful to the fish nearby.
- (C) Coral becomes stronger because there is more food in warm water.
- (D) Coral dies because it can no longer eat the algae for food.

- 6 Why are scientists trying to make coral uncomfortable?
- (A) to give it food to eat that won't be affected by global warming
 - (B) to help it practice for the stress of global warming
 - (C) to make it eat more algae for food and clean up the coral reefs
 - (D) to test to see how warm water can be before coral dies

- 7 Read the paragraph from the introduction [paragraphs 1-5].

A laboratory sits at the top of the new Frost Museum of Science in Miami, Florida. A group of scientists is hard at work. They are studying a creature called staghorn corals.

Fill in the blank. A "laboratory" is a _____.

- (A) scientist who works in a museum
 - (B) place where scientists study things
 - (C) creature called a staghorn coral
 - (D) job that involves working with corals
- 8 Read the paragraph from the introduction [paragraphs 1-5].

The goal is to create "super corals." These are corals that are better at surviving weather changes. Lately, lots of corals have been dying as oceans get warmer. This is because of global warming.

What is the BEST definition of "super corals" based on the context clues?

- (A) corals that can live through weather changes
- (B) corals that have been dying in warm water
- (C) corals that are hurt by global warming
- (D) corals that are larger than other kinds of coral

Answer Key

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