

Jellyfish Reborn

Like people, all animals are mortal. No one lives forever, and every living thing will eventually die. Right? Well, maybe not if you're an immortal jellyfish!

The immortal jellyfish starts life as a larva, just like any other jellyfish. It swims around for a while and then lands on the ocean floor and grows into a colony of polyps. Eventually, these polyps turn into the creatures that we know as jellyfish, called medusas. They become adults in just a few weeks.

Immortal jellyfish are tiny. Even in their fully grown form, they are no bigger than a fingernail. They have a clear body with a red stomach floating in the middle. They have around 90 tentacles on their edges.

So far, their story is similar to any other type of jellyfish. But here's where things change. They have an amazing survival skill that no other jellyfish, or any other animal, possesses. They can age backward.

It's true! When they are in physical danger, immortal jellyfish can transform back into their polyp stage. Then they start life all over again, growing into medusas like they did before. They are genetically identical to the adult that was injured, making them seem immortal.

The process that makes this rebirth possible is called transdifferentiation. Scientists are studying the process and hope to apply it to human medicine. Researchers refer to it as cell recycling. They think it could hold the key to breakthroughs in treatment for cells that have been damaged by trauma or disease.

Immortal jellyfish are also survivors in other ways. They have started to invade all areas of the world as they hitch rides on ships passing through their waters. With their immortal properties and their traveling ways, immortal jellyfish are likely to be around for a very long time.

What is the order of the typical jellyfish lifecycle?

- A. larva-medusa-polyp
- B. medusa-polyp-larva
- C. larva-polyp-medusa
- D. polyp-larva-medusa

What do immortal jellyfish do when they are in danger?

- A. Hitch a ride on a ship
- B. Turn back into a polyp
- C. Hide
- D. Become a larva

What part of the jellyfish lifecycle are people most familiar with?

- A. Larva
- B. Polyp
- C. Medusa
- D. Transdifferentiation

Why are scientists interested in immortal jellyfish?

- A. Because they are survivors
- B. Because of transdifferentiation
- C. Because they might hold clues to human medical treatment
- D. All of the above

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