

No brainers! What Jellyfish and Cliff Richard have in common!

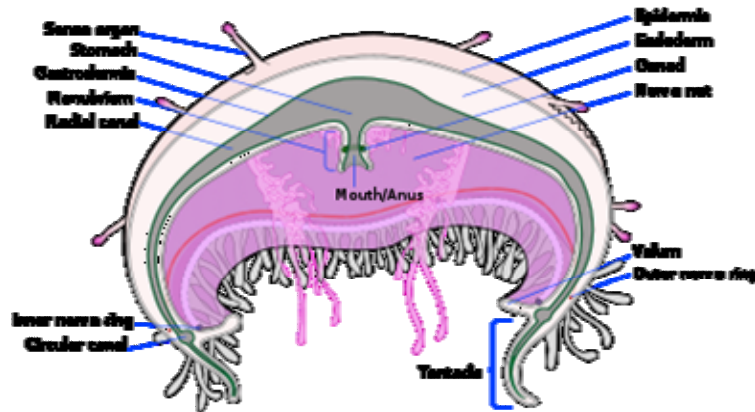
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I was watching 'Life' on BBC1 last Monday, narrated by Sir David Attenborough, and was fascinated to learn that jellyfish have no brains!

Jellyfish are captivating creatures, and a reminder that we do not need to look into outer space to find exciting beings that are wildly different to humans. Want to see an alien? We have them right here on Earth.



Jellyfish have a loose network of nerve endings known as a nerve net. They react directly on food and danger stimuli via nerve impulses, without a brain to process them. It remains a mystery how they can process this information without a brain.



Scientists have recently been jumping over themselves in frantic 'jellyfish research scramble', with funding justified on the basis of their increasing populations and resultant contact with humans.

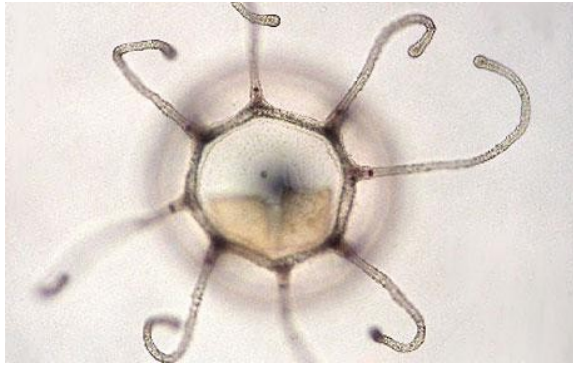
And now they have found something truly astonishing.

An immortal jellyfish has evolved, and is swarming through the world's oceans. It's numbers are rocketing because it can reproduce, but need not die. Eventually something might eat it, but that's not the point.

Turritopsis nutricula may be the world's only immortal creature.

It's the only known animal that is capable of reverting completely to its younger self. Instead of dying after reproducing, like other jellyfish, it reverts to a juvenile polyp of sexual immaturity and rejuvenates itself. A far better deal.

It does this through a cell process of transdifferentiation, where cells transform from one type to another. The switching of cell roles is usually seen only when parts of an organ regenerate. However, it appears to occur normally in the *Turritopsis* life cycle. Scientists believe the cycle can repeat indefinitely, rendering it potentially immortal.



This tiny creature is just 5mm long, and is the focus of many marine biologists and geneticists, to see exactly how it manages to reverse its aging process and achieve eternal youth.

Or they could just ask Cliff Richard.

Sources and thanks to:

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