

UNIQUE LONGEVITY

'Immortal jellyfish' secret unveiled

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CHICAGO: Scientists in Spain have unlocked the genetic code of the immortal jellyfish, a creature capable of repeatedly reverting into a juvenile state, in hopes of unearthing the secret to their unique longevity, and find new clues to human ageing.

In their study, published on Monday in the *Proceedings of the National Academy of Sciences*, Maria Pascual-Torner, Victor Quesada and colleagues at the University of Oviedo mapped the genetic sequence of *Turritopsis dohrnii*, the only known species of jellyfish able to repeatedly revert back into a larval stage after sexual reproduction.

Although many types of jelly-



Jellyfish in an aquarium dedicated to 45 delicate species at the Paris Aquarium, France. REUTERS PIC

fish have some capacity to reverse ageing and revert to a larval stage, most lose this ability once they reach sexual maturity, the authors wrote.

Not so for *T. dohrnii*. "We've known about this species being able to do a little evolutionary trickery for maybe

one to 20 years," said Monty Graham, a jellyfish expert and director of the Florida Institute of Oceanography.

This trick earned the species its nickname, "the immortal jellyfish".

Scientists found that *T. dohrnii* has variations in its genome that

may make it better at copying and repairing DNA. They also appear to be better at maintaining the ends of chromosomes called telomeres.

Graham said: "It's one of those papers that I do think will open up a door to a new line of study that's worth pursuing." **Reuters**