



# Xavier's Daily

## ➔ Challenge yourself!

A man who was outside in the rain without an umbrella or hat didn't get a single strand of his hair wet. Why?

Answer - He was bald.



## ➔ Spectrum's Corner

### Thought of the Day

"The universe doesn't give you what you want you ask for with your thoughts; it gives you what you demand with your actions"

- Dr Steve Maraboi

### Word of the Day

tenable \ 'te-nə-bəl \ adjective  
: based on sound reasoning or evidence

eg. "The concept of things going back to some historical fixed condition is really just no longer tenable," said Patty Glick, a senior scientist for climate adaptation at the National Wildlife Federation and one of the lead authors of the document.

## HOW A LARGER SPLEEN HELPS PEOPLE OF THE SAMA BAJAU STAY UNDERWATER FOR A SIGNIFICANTLY LONGER PERIOD THAN AN AVERAGE HUMAN?

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[Interact Club]

- Most humans can hold their breath underwater for a few minutes. However, the legendary people of the tribe called Sama Bajau have shown the remarkable ability of staying underwater for as long as 13 minutes at depths of around 200 feet. These nomadic people live in waters winding through the Philippines, Malaysia, and Indonesia, where they dive to hunt for fish or search for natural elements that can be used in crafts. Studies show that a DNA mutation for larger spleens gives the Bajau a genetic advantage for life in the deep.

As a human being dives deeper into the water, the increase in pressure causes the lung's blood vessels to fill with more blood. In extreme cases, the vessels can rupture, causing death. In addition to genetically inherited adaptations, regular training could help prevent that effect.

The dive response is similar to a medical condition called acute hypoxia, in which humans experience a rapid loss of oxygen. The condition is often a cause of death in emergency rooms. Studying the Bajau could effectively act as a new laboratory for understanding hypoxia. However, the sea nomad lifestyle is increasingly under threat. Tribes like Sama Bajau are considered marginalized groups that don't enjoy the same citizenship rights as their mainland counterparts. Increased industrial fishing is also making it harder for them to subsist on local stocks. As a result, many choose to leave the sea.

Without support for their way of life, scientists worry that the Bajau and the lessons they can impart about human health may not be around for much longer.



### DID YOU KNOW?

Bajau people live in the middle of the sea, rarely go on land, have no nationality, no fixed abode, no money and they go spearfishing without scuba gear.