

Tuesday, Dec. 3

“Weird Triassic 'dragons' had massive heads”

Millions of years before the dinosaurs, tank-like predators that looked like Komodo dragons with absurdly huge heads roamed the planet. And it turned out that these reptiles, known as erythrosuchids may have evolved their enormous noggins as they became "hypercarnivores," a new study suggests. With their powerful jaws and "steak-knife like teeth," they were likely "at the top of the food chain" in their ecosystems. In fact, erythrosuchids' heads were proportionally larger — relative to body size — than the head-to-body ratio of even the biggest carnivorous dinosaurs. Burly, big-headed erythrosuchids lived between 250 million and 238 million years ago, during the early part of the Triassic period (251 million to 199 million years ago).

Wednesday, Dec. 4

“Shark wounds rarely become infected thanks to germs on skin”

Wounds in the skin of sharks rarely exhibit infections, leading researchers to question why. A team has uncovered a community of germs living on their skin that keeps wounds clean of contamination. These infection-resistant microbes consist of bacteria, fungi and viruses, but the composition varies depending on the shark's location and environment. The study was conducted by collecting mucus samples from the backs and gills of wild-caught blacktip reef sharks around the Seychelles Islands. The islands are located in the Indian Ocean and the team took 88 different samples from 44 sharks in five different locations. Researchers believe these differences may be a result of the shark's ambient environment, such as temperature, population density, nutrient availability or pollution.

Thursday, Dec. 5

“Ice Age ‘puppy’ is found after 18,000 years buried in the permafrost”

Russian scientists recently showed off a prehistoric puppy, believed to be 18,000 years old, found in permafrost in the country's Far East. The creature would have lived during the Earth's Pleistocene period — commonly referred to as the last Ice Age. Discovered last year in a lump of frozen mud near the city of Yakutsk, the puppy is unusually well-preserved, with its hair, teeth, whiskers and eyelashes still intact. But detailed DNA tests have so far failed to establish its species. Researchers are uncertain whether it is an Ice Age dog or a wolf - or perhaps an example of the evolutionary transition from the latter to the former. Presently, it remains unclear when dogs were domesticated — one study from 2017 suggested that domestication happened between 20,000 and 40,000 years ago.

Friday, Dec. 6

“Undersea volcanic eruption creates new island in the Pacific”

NASA has released a photo of a new island created by an undersea volcano. The new island measures around 400 meters long and 100 meters wide and is the tip of the volcano. It is at Lateiki Island (or Metis Shoal) in Tonga, between Kao and Late in the northern Ha'apai group of islands. The same volcano had created an island in 1995, which has since seen considerable erosion. It was ultimately destroyed by this year's eruption, which built a new island in its place last month. Tonga sits on the Ring of Fire, an area in the Pacific Ocean where around 90% of the world's earthquakes occur.