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SCIENCE

The best from the science journals: Laser-powered nanomotors to black hole partners

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Here is some of the most interesting research to have appeared in top science journals last week

Shell sponge

Published in *Matter*

Love mussels? Next time, don't throw the shell - just convert it into a soft sponge. Researchers from Canada have created an absorbent and soft calcium carbonate material from waste blue mussel shells. "We've got lots of ideas. The fact that we could absorb oil was pretty

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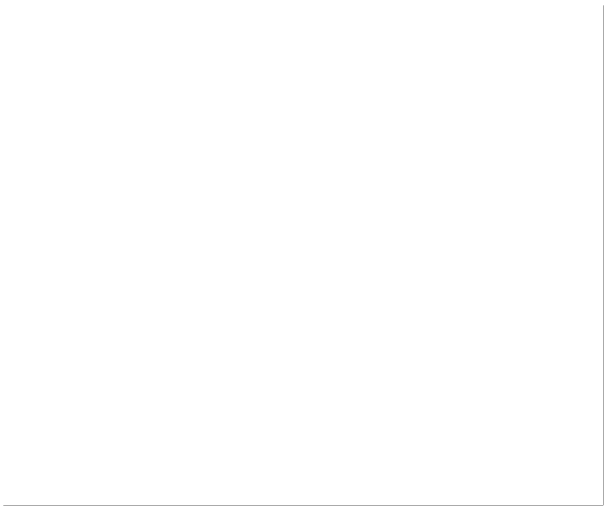
ingredients of help control acid in the body," senior author Francesca Kerton in a release.

Slingshot tongue

Published in Science



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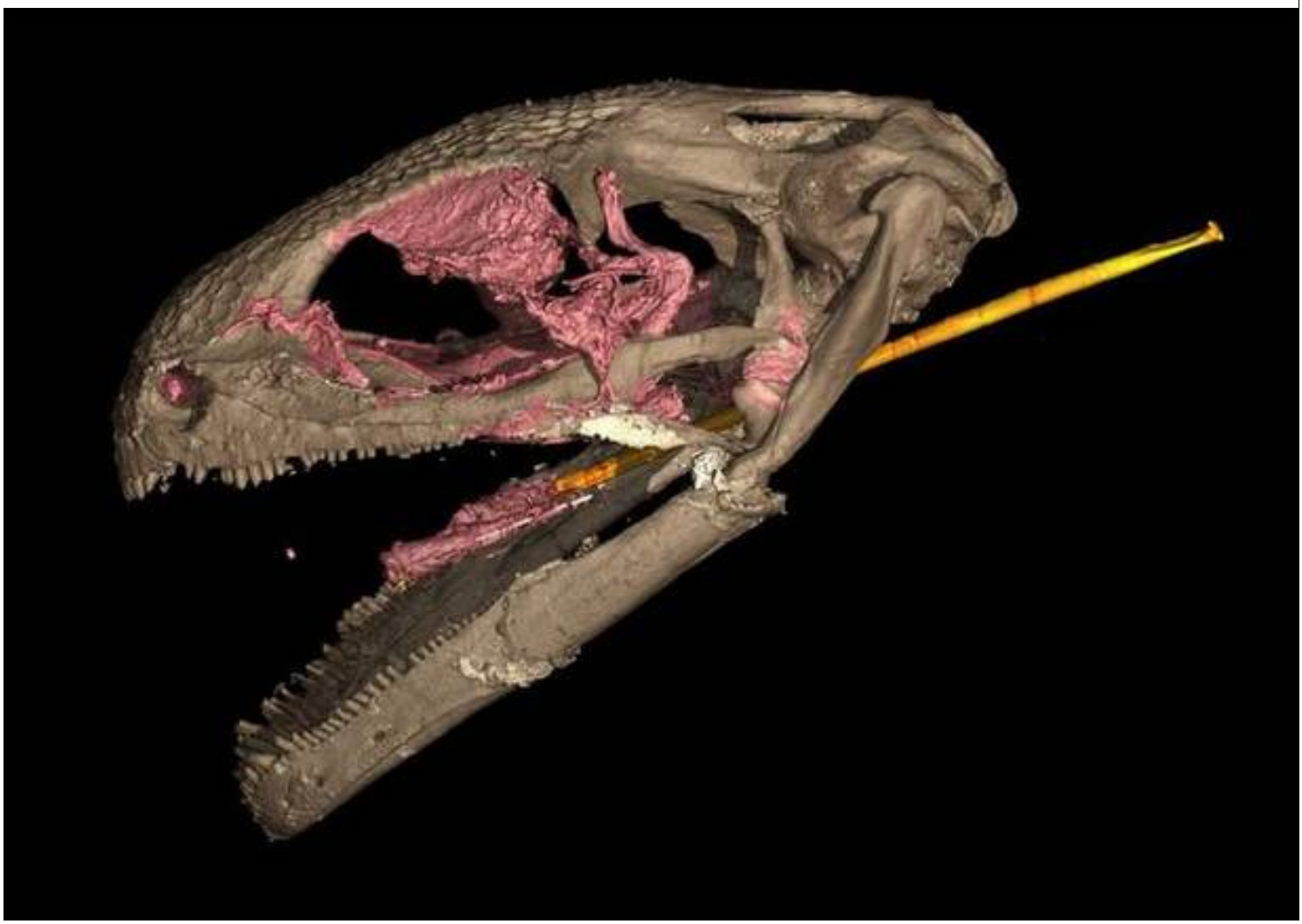

This CT scan of a 99-million-year-old skull shows albies' large eye sockets, tiny teeth and the long bone that enabled them to launch their tongue at lightning speed. The stippling on the skull acted as a form of reinforcement. Preserved soft tissues are shown in pink. | Photo Credit: **FLORIDA MUSEUM IMAGE BY EDWARD STANLEY, VGSTUDIOMAX3.4**

A 99-million-year-old fossil of a tiny animal, which was believed to be a chameleon has now been identified as a new species of Albanerpetontid - an ancient amphibian. It was named *Yaksha perettii*. The most surprising find was that these animals snatched prey by flicking their tongue at high speeds and to a distance of at least a body length, making them one of the oldest ballistic tongue feeding in history.

Height gap across nations

Published in *Lancet*

A study of 65 million children (five to 19 years old) across 193 countries has shown that there is a huge variation in the height and weight of school-aged children around the world. A 20cm height difference was seen between 19-year-olds in the tallest and shortest nations. Though in many nations, children at age five had an ideal height and weight, the team found that after

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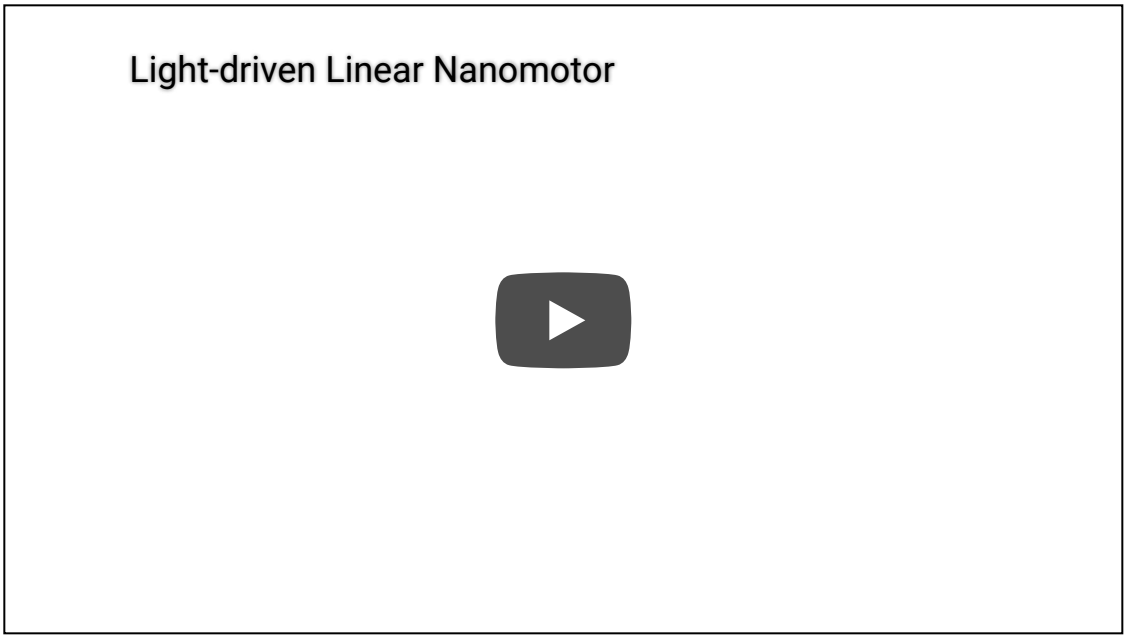
may lead to stunted growth and a rise in childhood obesity.

Laser-powered nanomotors

Published in *Science Advances*



Researchers from Japan have designed new nanomotors using gold nanorods that can be moved in the desired directions using laser light. The team notes that this can help in nano-sized machinery, microfluidics, lab-on-a-chip, while also reducing the cost and improving the precision of nanodevices.

Black hole partners

Published in *Physical Review Letters*

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Still from an animation of the inspiral of a binary black hole with a 128:1 mass ratio showing the beginning of the final burst of gravitational waves. | Photo Credit: **Carlos Lousto, James Healy, RIT**

Researchers have simulated the merging of two unequal black holes - the ratio of the mass of the larger black hole to the smaller one is 128 to 1. They used the Frontera supercomputer, the eighth most powerful supercomputer in the world for the study. "These merged black holes can have speeds much larger than previously known...They can travel at 5,000 kilometers per second. They kick out from a galaxy and wander around the universe," writes lead author Carlos O. Lousto in a release.

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