

Weekly Update

1. Cell-type-specific mRNA transcription and degradation kinetics in zebrafish embryogenesis from metabolically labeled single-cell RNA-seq

Zebrafish are small freshwater fish. As different from humans as a living organism can be. But scientists are using them to make breakthroughs in human health. The zebrafish is a highly effective "model organism" for humans. Diabetes, Parkinson's disease and scoliosis are being tackled through zebrafish research.

Source: Nature Communications

<https://www.nature.com/articles/s41467-024-47290-9>

2. Researchers find that 'superpowers' are real - they're just not what we expect

"If there's something going on at the genetic level, you should have a spleen of a certain size," said lead researcher Melissa Lardo. That's where we saw this very noticeable difference." He explained that the existence of a large spleen in bajos is similar to that of marine mammals, which also have large spleens.

Source: INDEPENDENT

<https://www.independent.co.uk/life-style/superpowers-are-real-research-study-b2525935.html>

3. Where Do Birds Rest When Flying Over The Ocean?

Some species of birds travel long distances each year during the migration season, and sometimes have to fly for weeks over seas and oceans to reach their destination. But where do these birds rest while crossing the ocean?

Source: IFL Science

<https://www.iflscience.com/where-do-birds-rest-when-flying-over-the-ocean-73726>

4. After 20 Years, the Construction of Astronomy's Largest Digital Camera Has Finally Been Completed

Researchers and engineers at the SLAC National Accelerator Laboratory (SLAC) in the United States, who created the camera, say it will provide some of the greatest cognitive mysteries ever solved. Once installed at the Rubin Observatory in Chile, astronomers will use it to observe dark matter, which makes up about 85 percent of the matter in the galaxy.

Source: SciTechDaily

<https://scitechdaily.com/after-20-years-the-construction-of-astronomys-largest-digital-camera-has-finally-been-completed/>

5. Could a telescope see the beginning of time? An astronomer explains

Astrophysicists constantly look back to see what stars, galaxies, and supermassive black holes looked like when their light began its journey toward Earth, and use this information to better understand their evolution and evolution. For space scientists, the James Webb Space Telescope is a window into that unknown world.

Source: University of Maryland, Baltimore County

<https://umbc.edu/stories/could-a-telescope-ever-see-the-beginning-of-time/>

6. Bridging Brain Circuits with Lab-Grown Neural Networks

By connecting neural organoids with axonal bundles, the team created a model that mimics the complex neural networks of the human brain, allowing the organoids to display complex, synchronous patterns of electrical activity that are reminiscent of connections between brain regions.

Source: NeuroScienceNews

<https://neurosciencenews.com/organoid-neural-connectivity-25895/>

7. Acetaminophen Use During Pregnancy and Children's Risk of Autism, ADHD, and Intellectual Disability

The results of a new study suggest that taking acetaminophen during pregnancy does not increase the risk of autism, attention-deficit/hyperactivity disorder (ADHD) or mental retardation in children.

Source: JamaNetwork

https://jamanetwork.com/journals/jama/fullarticle/2817406?guestAccessKey=32d8014d-f026-4985-9e72-d514cb2f81dc&utm_source=For_The_Media&utm_medium=referral&utm_campaign=ftm_links&utm_content=tf1&utm_term=040924

8. The Legacy of Professor Peter Higgs: Unveiling the Mysteries of the Universe

In 1964, Higgs was not alone in working on the idea of what we now know as the Higgs mechanism. At the same time, other scientists were also studying in the same direction. But Higgs was the only person who realized that his mathematical idea was correct, that it really existed in nature and was not just a trick to solve theoretical problems.

Source: NewsDirectory

<https://www.newsdirectory3.com/the-legacy-of-professor-peter-higgs-unveiling-the-mysteries-of-the-universe/>

9. After being insulted, writing down your feelings on paper then getting rid of it reduces anger

Since ancient times, humans have tried to invent anger management techniques. In ancient Rome, the Stoic philosopher Seneca believed, "My anger will probably do me more harm than your mistake." Scientists from Japan's Nagoya University have now come up with a method that will help not only angry people but also common people in reducing their anxiety. Their solution is to write down negative experiences on a piece of paper and then crumple, shred, or throw it away.

Source: ScienceDaily

<https://www.sciencedaily.com/releases/2024/04/240409123905.htm>

10. A Market in Human Kidneys Is a Bad Idea

It is sometimes said that difficult situations require difficult choices. But this difficulty can lead to exploitation of vulnerable groups. If a market for selling human kidneys is established, we will deal with such a problem.

Source: The Epoch Times

<https://www.theepochtimes.com/opinion/a-market-in-human-kidneys-is-a-bad-idea-5626237>