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SCIENCE

Stronauts On Space Station Gear Up For Science While Cosmonauts Relax Before Spacewalk

(May 9, 2023)

Four main components on the Roscosmos segment of the International Space Station are pictured as the orbital outpost soared 260 miles above the Andes mountain range in Bolivia. From top to bottom, are the Nauka multipurpose laboratory module, the European robotic arm attached to Nauka, the Prichal docking module, and the Soyuz MS-23 crew ship. The Expedition 69 astronauts had their day full on Tuesday, May 9, servicing a variety of science hardware and maintaining critical life support gear.

Read more at: <https://scitechdaily.com/astronauts-on-space-station-gear-up-for-science-while-cosmonauts-relax-before-spacewalk/>

Geoscientists Unearth New Insights Into Life's Evolution 800 Million Years Ago

(May 9, 2023)

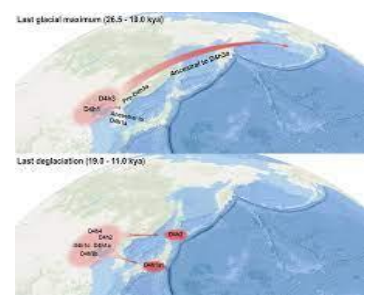
Although the oceans from ancient times have disappeared, the events that occurred in them have been recorded in rocks. By examining these rocks, we can connect Earth's past to its present and future, gaining a deeper understanding of our planet's history. Recently published in *Science Advances*, the team's research findings show a rise in biologically accessible nitrogen during the period when marine eukaryotes – organisms with a defined nucleus – gained dominance.

Read More At: <https://scitechdaily.com/geoscientists-unearth-new-insights-into-lifes-evolution-800-million-years-ago/>

Ice Age Odyssey: Tracing Ancient Human Migrations From China to the Americas and Japan

(May 10, 2023)

Graphical abstract showing ice age migration routes from northern coastal China to the Americas and Japan. A team of scientists discovered that Native Americans share a female lineage with ancient populations from northern coastal China, adding complexity to the ancestry of Native Americans. By analyzing mitochondrial DNA, the researchers found evidence of two migrations from northern coastal China to the Americas during the last ice age and the subsequent melting period.



Credit: Li et al.

Read more at: <https://scitechdaily.com/ice-age-odyssey-tracing-ancient-human-migrations-from-china-to-the-americas-and-japan/>

The Pangenome Breakthrough: A Crystal Clear Image of Human Genomic Diversity

(May 13, 2023)

The Human Pangenome Reference Consortium has made significant progress in creating a more inclusive human reference genome by assembling genomic sequences of 47 individuals from around the world. The original human reference genome was based on data from a single individual of African-European background, limiting its representation of genetic diversity. This new pangenome, which renders over 99% of each sequence with high accuracy, reveals almost 120 million DNA base pairs previously unseen.



Read more at: <https://scitechdaily.com/the-pangenome-breakthrough-a-crystal-clear-image-of-human-genomic-diversity/>

Two NASA Space Legends Ascend to the Astronaut Hall of Fame

(May 13, 2023)

The U.S. Astronaut Hall of Fame inducted former astronauts Roy D. Bridges Jr. and Senator Mark E. Kelly on May 6 at the Kennedy Space Center Visitor Complex in Florida. Both astronauts have made significant contributions to NASA's mission of exploration and discovery, with a combined 60 days in space. Bridges served as the pilot aboard the space shuttle Challenger on the STS-51F mission, while Kelly is a retired NASA astronaut with four space shuttle missions under his belt.

Read more at: <https://scitechdaily.com/two-nasa-space-legends-ascend-to-the-astronaut-hall-of-fame/>



ARTS

The Battle of San Romano: Uccello's Legacy in Renaissance Art and Military History

(May 14, 2023)

Commissioned artwork has long been a part of the art society. From religious [paintings](#) to portraits, each commissioned painting has a story to tell and a message to sell. It is no surprise that historical events such as battles were documented through artworks at the request of authorities wanting to sell a message to the audience – whether of victory or loss. One such prime example of this is The Battle of San Romano which is a set of three paintings by the Florentine artist Paolo Uccello.



Read more at: <https://indianexpress.com/article/lifestyle/art-and-culture/behind-the-art-the-battle-of-san-romano-uccellos-legacy-in-renaissance-art-and-military-history-8600112/>

Sold-out Vermeer exhibition releases 2,600 extra tickets

(May 12, 2023)

When the large-scale exhibition of works by the Dutch master [Johannes Vermeer](#) (1632-1675) opened on February 10 at Amsterdam's Rijksmuseum, all 450,000 tickets quickly sold out. The museum is showing 28 of the 37 or so existing works by the painter from Delft until June 4, 2023. This is the first time that so many Vermeer paintings are on display together in one exhibition, and it might be the last, given how expensive the works are. This is also likely why the show has attracted so many visitors.

Read more at: <https://indianexpress.com/article/lifestyle/art-and-culture/sold-out-vermeer-exhibition-releases-2600-extra-tickets-8605291/>

A Pakistani artist reimagines her relationship with shame and bodies

(May 10, 2023)

Misha Japanwala looked around her studio in the week leading up to her gallery show and wondered whether there were “too many nipples.” She was talking, of course, about the nipples she plaster cast from the bodies of 70 anonymized Pakistani people. They are part of Japanwala’s new collection, “Beghairati Ki Nishaani: Traces of Shamelessness,” showing at Hannah Traore Gallery in New York through July 30.



Credit: The New York Times

Read more at: <https://indianexpress.com/article/lifestyle/art-and-culture/misha-japanwala-pakistani-artist-bodies-nudity-8599354/>

Mexico City’s mural movement transformed walls into art

(May 8, 2023)

Across the main entrance of a former Jesuit college in the heart of **Mexico** City, a bright-colored mural depicting Our Lady of Guadalupe represents both the Indigenous religiosity and the Christianity that shaped the culture of post-colonial Mexico. The mural was created by Mexican artist Fermín Revueltas between 1922 and 1923, when the walls of Antiguo Colegio de San Ildefonso became the canvases for the country’s emerging muralist movement.

Read more at: <https://indianexpress.com/article/lifestyle/art-and-culture/how-mexico-citys-mural-movement-transformed-walls-into-art-8598100/>

German artist nearing 100,000 cobblestones to mark victims of Nazis

(May 8, 2023)

A German artist who is preparing to lay the 100,000th cobblestone commemorating a person who was deported and killed by the Nazis has no intention of giving up making the brass-capped blocks, saying demand is higher than ever. By placing Stolpersteine (“stumble stones”) outside the victims’ last known address, 75-year-old Gunter Demnig aims to draw attention to the fate of individuals in the Holocaust. The project started about three decades ago when Demnig laid the first stones in Berlin and Cologne.

Read more at: <https://indianexpress.com/article/lifestyle/art-and-culture/german-artist-nearing-100000-cobblestones-to-mark-victims-of-nazis-stolpersteine-talmud-8597759/>



TECHNOLOGY

Brain Meets Origami: Ingenious Deployable Electrodes Transform Craniotomy

(May 10, 2023)

Researchers have developed an innovative, minimally invasive cortical electrode array inspired by soft robotics actuation. The array, which measures 4 cm in diameter when deployed, can be inserted through a 2 cm hole in the skull and placed between the skull and the brain without causing damage. The array features six spiraled arms that maximize surface area and electrode contact with the cortex. It is folded inside a cylindrical loader and deployed using an eversion mechanism that gently unfolds each spiraled arm over the brain tissue.

Read more at: <https://scitechdaily.com/brain-meets-origami-ingenious-deployable-electrodes-transform-craniotomy/>

Sharper Skills: AI Takes Surgical Training to the Cutting Edge

(May 12, 2023)

Caltech researchers and Keck Medicine of USC urologists have developed the Surgical AI System (SAIS) to provide objective performance evaluations to surgeons, aiming to improve their work and patient outcomes. SAIS identifies the type of surgery and evaluates the surgeon's execution quality by analyzing video footage of the procedure.



Read more at: <https://scitechdaily.com/sharper-skills-ai-takes-surgical-training-to-the-cutting-edge/>

The Power of Solar: 35% of US Manufacturing Could Be Powered by Rooftop Solar Panels

(May 13, 2023)

Rooftop solar arrays hold significant potential to fulfill the annual electricity needs of approximately 35% of US manufacturing sectors, yet their current contribution to the electricity grid mix is only 2.2%. Solar panels installed on the roofs of industrial buildings have the potential to satisfy the entire electricity needs of up to 35% of American manufacturers.



Read more at: <https://scitechdaily.com/the-power-of-solar-35-of-us-manufacturing-could-be-powered-by-rooftop-solar-panels/>

FLASH Capsules: First-Ever Ingestible Electroceutical to Control Appetite by Hormone Modulation

(May 12, 2023)

Researchers at NYU Abu Dhabi have developed an ingestible electroceutical device, called the FLASH system, that modulates the gut-brain axis, affecting hunger levels and potentially treating a range of disorders. Inspired by the Australian thorny devil lizard's skin, the device uses a fluid-wicking capsule to deliver electrical stimulation to stomach tissue, influencing the hunger-stimulating hormone ghrelin.



Credit: NYU

Read more at: <https://scitechdaily.com/flash-capsules-first-ever-ingestible-electroceutical-to-control-appetite-by-hormone-modulation/>

“Talking” Concrete – New Invention Could Significantly Reduce Traffic Jams

(May 11, 2023)

A new Purdue invention, a sensor that lets concrete “talk,” is set to be trialled on a growing number of U.S. interstates, promising to reduce construction time, frequency of repairs, and the carbon footprint of roads. **Purdue’s invention for reducing road repairs is being considered by interstates across the United States.**

Read more at: <https://scitechdaily.com/talking-concrete-new-invention-could-significantly-reduce-traffic-jams/>



SPORTS

Ilkay Gundogan brace takes Manchester City four points clear at top of Premier League

(May 6, 2023)

Hard-charging Manchester City went four points clear of Arsenal at the top the Premier League on Saturday, beating Leeds United 2-1 with a pair of near-identical goals from Ilkay Gundogan, stretching their winning league run to 10 games. City's prolific striker Erling Haaland graciously handed the ball to Gundogan to take a penalty kick in the 84th minute for what would have been a hat-trick, but Leeds keeper Joel Robles had no trouble turning aside his shot.

Read more at: <https://indianexpress.com/article/sports/football/ilkay-gundogan-brace-takes-manchester-city-four-points-clear-at-top-of-premier-league-8595604/>

Nadal missing French Open would be 'brutal' for the sport- Federer

(May 8, 2023)

Roger Federer said he hopes Rafa Nadal will recover in time for the French Open and that it would be a "brutal" blow for tennis if the 14-time Roland Garros champion is absent this year. Nadal has been dealing with a hip injury he suffered at the Australian Open in January, and fears that the Spaniard may miss the Paris Grand Slam grew after he pulled out of this week's Italian Open.

Read more at:

<https://indianexpress.com/article/sports/tennis/nadal-missing-french-open-would-be-brutal-for-the-sport-federer-8597326/>



Credit: New York Times

TNCA launches talent scout program for women

(May 8, 2023)

The Tamil Nadu Cricket Association has launched a Talent Scout Program for women to unearth new talents. The Talent Scout Wing (TSW) which will comprise of former men and women first-class cricketers and coaches will help in identifying the talent across the state in the trials scheduled to begin from May 13. For the program, the TNCA has formed four groups of four members each who will cover all the 37 districts in Tamil Nadu.

Read more at: <https://indianexpress.com/article/sports/cricket/tnca-launches-talent-scout-program-for-women-8598452/>

From European Cup to Champions League, the two Milan clubs 'are used to these moments'

(May 11, 2023)

The Milan clubs were Succession done differently than HBO. Inter had been born out of AC. A split in ranks at the original club owing to the Italian Football Association introducing a law in 1907 that didn't allow teams to sign foreign players. Milan, the champions at the time, wouldn't feature in the upcoming season. Few among the hierarchy at the eight-year old club looked at the injustice as reason enough to form a faction of their own.

Read more at:

<https://indianexpress.com/article/sports/football/european-cup-champions-league-inter-ac-milan-semifinal-ucl-derby-de-madonnina-8602572/>



Credit :Reuters

Australia captain Pat Cummins reveals struggle due to burn out, wants to play until 35

(May 12, 2023)

Australia captain Pat Cummins admitted that he felt "burnt out" a few years ago because of playing non stop cricket but he's now looking at competing at the top level for at least another five years. Cummins returned home from Australia's tour of India earlier this year to be at the side of his mother, who passed away in March after a prolonged illness.

Read more at: <https://indianexpress.com/article/sports/cricket/australia-captain-pat-cummins-reveals-struggle-due-to-burn-out-wants-to-play-until-35-8602323/>

