

IN BRIEF



Greece's Acropolis shut down due to heat

ATHENS
Greece's most famous archaeological site, the Acropolis, was shut to visitors for four hours on Thursday because of hot weather. The monument would remain closed in the afternoons if temperatures in Athens rose above 36°C, as the temperature on the Acropolis hill would be even higher, authorities said. AP



YouTube's new policy bans hacking videos

SAN FRANCISCO
Video-sharing giant YouTube has banned "instructional hacking and phishing" videos citing them as harmful or dangerous content under its recent policy update. The move has puzzled content creators who say that there is a lack of clarity on how the policy will be applied. IANS



Volcano erupts in Sicily, one tourist killed

MILAN
A volcanic eruption on the Sicilian island of Stromboli sent about 30 tourists jumping into the sea for safety on Wednesday as molten material ignited a series of fires. Authorities said that a hiker was killed during the eruptions. Italy's two other active volcanoes are Etna in Sicily and Vesuvius near Naples. AP

Scientists find new gene linked to schizophrenia

Collaborative effort between Indian and Australian team aims to shed more light on the mental illness

**PRESS TRUST OF INDIA
MELBOURNE**

After 18 years of research, Indian and Australian scientists have identified a new gene directly linked to schizophrenia.

Scientists from the University of Queensland (QBI) in Australia and a team of Indian researchers analysed the genomes of over 3,000 individuals and found those with schizophrenia were more likely to have a particular genetic variation.

The team of Indian re-



R. Thara

searchers was led by R. Thara, co-founder and director of the Chennai-based Schizophrenia Research Foundation.

Bryan Mowry from QBI said such studies had predo-

minantly been done in populations with European ancestry, with more than 100 schizophrenia-associated variants identified previously.

"Looking at other populations can highlight different parts of the genome with a more robust association with the disease," Dr. Mowry said.

"This study identified a gene called NAPRT1 that encodes an enzyme involved in vitamin B3 metabolism – we were also able to find this gene in a large genomic data-

set of schizophrenia patients with European ancestry," he said.

Function in the brain

"When we knocked out the NAPRT1 gene in zebrafish, brain development of the fish was impaired – we are now working to understand more deeply how this gene functions in the brain," Dr. Mowry said.

"Our studies aim to shed more light on what makes people susceptible to schizophrenia and possible treat-

ments for the future," Dr. Mowry added. According to a statement released by the university, Dr. Mowry and Dr. Thara met in the late 1990s when they discussed studying a population in India.

"Thara is a driving force for research into schizophrenia in India and her team in Chennai has been central in recruiting patients, while QBI has been able to fund the processing of blood samples they've collected," Dr. Mowry said.



Arctic mission to 'trap' researchers in ice to study climate

Teams from 17 nations will take part in the year-long programme, where a research ship will allow itself to get stuck among floes in the ocean

**ASSOCIATED PRESS
BREMERHAVEN**

In a couple of months, the German icebreaker *RV Polarstern* will set out for the Arctic packed with supplies and scientific equipment for a year-long mission to explore the planet's frigid far north. The icebreaker will be the base for scientists from 17 nations studying the impact of climate change on the Arctic and how it could affect the rest of the world.

Scientists plan to sail the ship into the Arctic Ocean, tether it to a large piece of sea ice and allow the water to freeze around them, effectively trapping themselves in the vast sheet of white that forms over the North Pole each winter.

The organisers say that the project is unprecedented in scale and ambition. As temperatures drop and the days get shorter, the scientists will build temporary winter research camps on the ice, allowing them to perform tests that wouldn't be possible at other times of the year or by satellite sensing.



"So far we have always been locked out of that region and we lack even the basic observations of the climate processes in the central Arctic from winter. We are going to change that for the first time," said Markus Rex of Germany's Alfred Wegener Institute, who will lead the €140 million expedition. The mission's aim to un-

derstand global warming means there's no time for national rivalry, said Mr. Rex. Scientists from United States, China, Russia and other countries will be rotating every two months as other icebreakers bring fresh supplies.

By combining measurements on the ice with data collected from satellites,

scientists hope to improve the increasingly sophisticated computer models for weather and climate predictions.

"We can do a lot with robotics and other things but in the end the visual, the manual observation and also the measurement, that's still what we need," said Marcel Nicolaus, a German sea ice



Sea fever: The German Arctic research vessel *Polarstern*, left, is docked for maintenance in Bremerhaven, Germany, while atmospheric scientist and leader of the MOSAIC expedition Markus Rex, above, inspects maps on the bridge of the ship. AP

physicist who will be part of the international mission.

Fully funded

The mission has received funding from U.S. institutions such as the National Science Foundation, the Department of Energy, the National Oceanic and Atmospheric Administration and NASA.

Once the *Polarstern* is carried into the depth of the Arctic night, far off the coast of northern Greenland, the scientists will be on their own, making any emergency evacuation almost impossible. Nonetheless, the ship has a fully equipped medical station to avoid any calamity on board, said Verena Mohaupt, a logistics expert who

has prepared elaborate safety measures for the ship.

The MOSAIC mission which stands for Multidisciplinary drifting Observatory for the Study of Arctic Climate, comes about 125 years after Norwegian explorer Fridtjof Nansen first managed to seal his wooden expedition ship, *Fram*, into the ice during a three-year expedition to the North Pole.

Scientists now believe that the cold cap that forms each year is key to regulating weather patterns across the Northern Hemisphere. Mr. Rex cited the polar vortices that blasted cold air as far as Florida last winter and the early summer heat wave in Europe as prime examples of the impact.

"The dramatic warming of the Arctic doesn't stay in the Arctic. We as scientists, I think, have the obligation to produce the robust scientific basis for political decisions," Mr. Rex said, adding that understanding the processes is crucial for world leaders to tackle climate change effectively.

Man files cheating case against Hrithik over gym advertisement

Claims false promises were made by fitness company

**PRESS TRUST OF INDIA
HYDERABAD**

Actor Hrithik Roshan has been named in a charge of cheating along with three representatives of a health and wellness start-up, for which he was a brand ambassador.

The Hyderabad police registered the case based on a complaint by a customer who said that "false promises" were made by the company's advertisement on its fitness centre.

The complainant alleged that he was not given daily workout sessions at Cult.Fit wellness centre although he had paid the fee for "unlimited" classes. The company claimed that the customer had behaved "inappropriately and violently" with its staff and that he was wrong to drag the brand ambassador into the issue.



Hrithik Roshan

Bengaluru-based CureFit operates its chain of fitness centres under the brand 'Cult.Fit'.

The client lodged the complaint with police here on June 22 stating that in November 2018 he had enrolled at the fitness centre/gym paying ₹17,490 as mem-

ber for 10 months of unlimited classes, but was "cheated by not getting workout sessions daily".

"Most of the time the workout session is not available which is denying good health benefits," he said.

Following the complaint, a case under IPC sections 420 (cheating) and 406 (criminal breach of trust) was registered against the actor, being the firm's brand ambassador and three senior officials of the company, police said.

In a statement, Cult.Fit said it was cooperating with authorities "as per due process and evaluating remedial action". "The customer against whom we were constrained to take action had behaved inappropriately and violently with our staff," it said.

Circle of life



Cooling off: A tiger, named Chota Matka, making a brief appearance at a pool in the Tadoba National Park after concealing a partly-eaten kill in a nearby culvert on Thursday. C.V. SUBRAHMANYAM

King Tut's statue sold amid protests

**ASSOCIATED PRESS
LONDON**

Christie's, a British auction house, has gone forward with the auction of a 3,000-year-old stone sculpture of the famed pharaoh Tutankhamun despite protests from the Egyptian government.

The brown quartzite head depicting King Tut, one of the most prominent symbols of Egypt's history, was sold for more than \$5.9 million on Thursday evening.

The Egyptian Foreign Ministry had demanded that the auction house provide documents proving the statue's ownership and said Egypt holds rights to the piece based on its current and previous laws.

But the auction house defended the sale saying that it carried out "due diligence" to verify the provenance of the statue.

Fingerprinting to track users online is on the rise. Here's what to do

The technique, which involves looking at device characteristics and triangulating data to follow users, happens invisibly in the background in apps and on websites

BRIAN X. CHEN

If there's one lesson to learn about digital privacy, it's that we can never grow complacent. Even if we secure our data so we are not tracked online, the ad tech industry will find ways to monitor our digital activities.

And so it is with the rise of so-called fingerprinting, which security researchers are calling a next-generation tracking technology.

Fingerprinting involves looking at the many characteristics of a mobile device or computer, like the screen resolution, operating system and model, and triangulating this information to pinpoint and follow users as they browse the web and use apps. Once enough device

characteristics are known, the theory goes, the data can be assembled into a profile that helps identify the user the way a fingerprint would.

"Get enough of those attributes together and it creates essentially a bar code," said Peter Dolanjski, a product lead for Mozilla's Firefox web browser, who is studying fingerprinting. "That bar code is absolutely uniquely identifiable."

And here's the bad news: The technique happens invisibly in the background in apps and websites.

Growing slowly

Security researchers discovered fingerprinting as a tracking method about seven years ago, but it was rarely discussed until recently. On-



Fingerprinting can create user profiles. NY TIMES/GLENN HARVEY

ly about 3.5% of the most popular websites use it today for tracking, but that's up from about 1.6% in 2016, according to Mozilla. And an unknown number of mobile apps also use fingerprinting.

There are restrictions to the data that apps and web-

sites can get about your device. On iPhones and Android phones, for example, a user must give an app permission to gain access to location data, the camera and the microphone.

But fingerprinting collects seemingly innocuous characteristics that are generally shared by default to make apps and websites work properly.

Blocking solutions

Here are some solutions for blocking browser fingerprinting. For those who use iPhones and Macs, Apple introduced a fingerprinting defence mechanism in its Safari browser last year. It basically makes many Macs and iPhones look the same to a website by sharing the bare minimum of information that the site needs to load properly.

To take advantage of this defence, just make sure of running a recent version of the iPhone and Mac operating systems. Android users and Windows users can try

the Firefox web browser. Mozilla introduced fingerprint blocking in its Firefox browser this year, but the feature can prevent content for some websites from loading or a shopping site from processing a payment properly, so it's not turned on by default, the company said.

Mozilla said it was making progress and expected to block fingerprinting by default in a future release. For now, a user can enable the feature by opening the browser preferences, clicking on the privacy and security page, selecting "Custom" and checkmarking "fingerprinters".

Google announced this year that it planned to introduce fingerprint defence for its Chrome browser, but it

did not specify when the feature would be released.

Other desktop browsers can install an add-on, such as "Disconnect" which works on Google's Chrome browser.

For mobile phones

Mobile fingerprinting is a different beast.

Fingerprinting can be done directly inside apps, without people easily seeing what data an app is gathering in the background or when it runs.

One example of this surfaced in 2017 when *The New York Times* revealed that Uber used a form of fingerprinting inside its iPhone app to identify users even after they erased content from their devices.

Fingerprint defences in

mobile apps are only beginning to emerge. "Disconnect" offers mobile apps for blocking trackers inside other apps.

For iPhones and Android devices, Privacy Pro and Disconnect Premium can analyse app activities on devices to detect and block trackers. The problem with the Disconnect apps is that it is difficult to decipher which specific apps are doing the fingerprinting so that you can delete them.

So what's the most practical thing you can do for mobile? Start by deleting apps you rarely use, especially the ones from obscure brands. Free apps are most likely to be loaded with trackers, though some paid ones track you, too. NY TIMES