

EVENTS

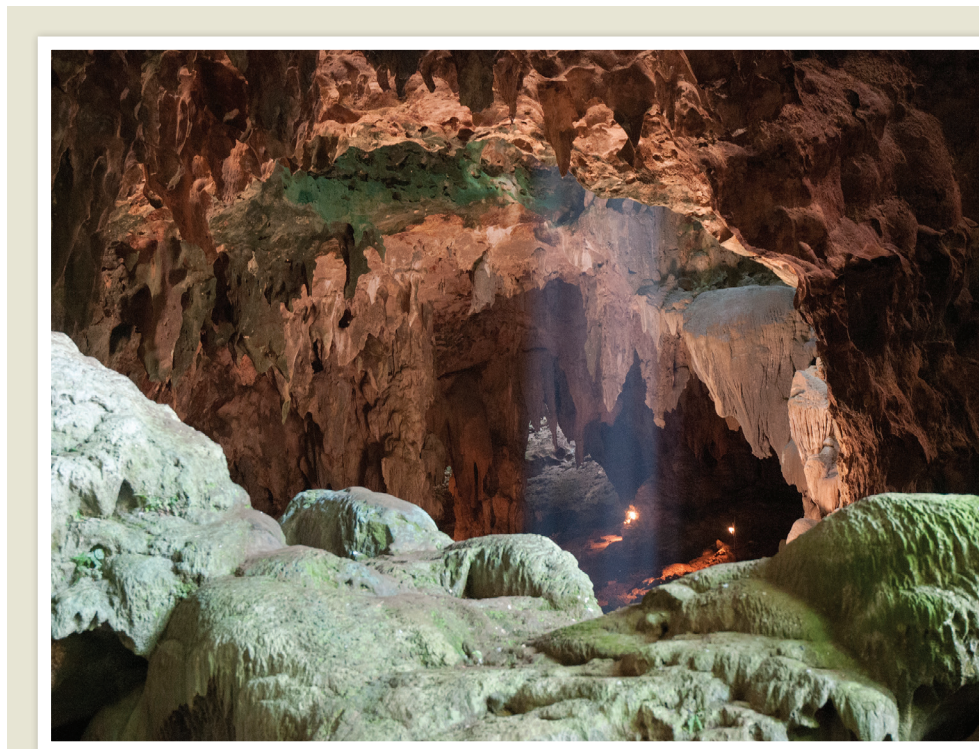
Publisher fine

A US federal court has fined the scholarly publisher OMICS US\$50.1 million for deceptive and unfair practices, including that it claims to peer-review research papers, but doesn't, and that its conferences advertise speakers who have not actually agreed to attend. OMICS, headquartered in Hyderabad, India, is widely accused of being a 'predatory' publisher — one that collects fees from researchers without providing the services it advertises, such as peer review. In 2016, the US Federal Trade Commission (FTC), the nation's consumer-trading authority, filed a lawsuit against the firm. On 29 March, a judge in Nevada — where the firm is legally incorporated — ruled in the FTC's favour and ordered the company to stop its deceptive practices in the United States. The case did not go to trial, and the ruling was made on the basis of evidence provided by the FTC. OMICS told *Nature* that it would appeal against the decision.

POLICY

Stem-cell warnings

The US Food and Drug Administration (FDA) is cracking down on clinics offering unproven stem-cell treatments. On 3 April, the agency sent letters to 20 companies whose names it did not disclose, warning them that they needed FDA approval to continue treating patients. The agency also sent a letter to Cord for Life, an umbilical-cord stem-cell company in Altamonte Springs, Florida, asserting that the treatments it offers violate federal law, and that it does not meet hygiene standards. As *Nature* went to press, Cord for Life had not responded to a request for comment. The



CALLAO CAVE ARCHAEOLOGY PROJECT

New hominin species found in Asia

Researchers have announced the discovery of an ancient-human species on the island of Luzon in the Philippines. A handful of bones and seven teeth found in Callao Cave (pictured) are distinct from those of any other known hominin, scientists report in *Nature* (see page 181). The remains date to around 50,000 years ago and are small, suggesting that the species — which researchers have named *Homo luzonensis* — was less than 1.2 metres

tall. Scientists were unable to extract DNA from the remains, so it is unclear how the species is related to other hominin species that were present in Asia at the same time, such as *Homo sapiens* and Denisovans. *H. luzonensis* is the second ancient-human species of short stature to be discovered in southeast Asia: in 2004, scientists found the remains of *Homo floresiensis*, known as the 'hobbit', on the Indonesian island of Flores.

FDA has sent 45 regulatory letters concerning stem cells in the past year, and is suing two companies that market stem-cell treatments the agency deems risky.

FUNDING

Climate report

A group of climate scientists disbanded by US President Donald Trump two years ago has released a report calling for better resources to help the United States cope with climate change. The group,

the Independent Advisory Committee for Applied Climate Assessment, wants to start a consortium to translate cutting-edge climate science into practical information to help communities and businesses plan for rising seas, increasingly frequent wildfires and other effects of climate change. Many of the committee's members served on a climate-adaptation panel created by the US National Oceanic and Atmospheric Administration in 2015. After the agency dissolved the

group in 2017, its members restarted their work with funding from the state of New York, Columbia University, the American Meteorological Society and others.

Funding freeze

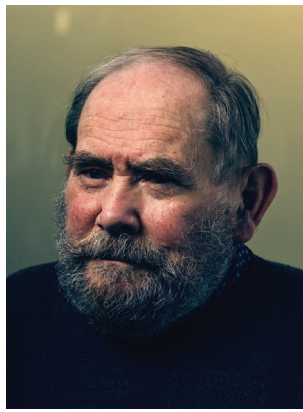
Brazilian President Jair Bolsonaro's government announced late last month that it had frozen 42% of the budget for the country's science and communications ministry (MCTIC). Brazil's congress approved 5.1 billion reais (US\$1.45 billion) for the

MCTIC in 2019; the freeze, announced on 29 March, leaves the ministry with just 2.9 billion reais for the rest of the year. It is not yet clear how the move will affect the MCTIC's agencies and 16 federal research institutes. But the government also announced a nearly 80% funding freeze on the same day for the ministry's spending on infrastructure — including its new Sirius synchrotron facility in Campinas, which physicists hope to use to study the structure of matter. Scientists fear delays to projects, wasted research efforts and a brain drain. See page 155 for more.

PEOPLE

Worm legend dies

Pioneering molecular biologist Sydney Brenner (pictured) died on 5 April, aged 92. Among Brenner's most notable achievements was turning the nematode worm *Caenorhabditis elegans* into a model system for human-disease research in the 1960s and 1970s. For this feat, he shared the 2002 Nobel Prize in Physiology or Medicine with biologists John Sulston and Robert Horvitz. Brenner also co-discovered messenger RNA — intermediary molecules that convey a cell's genetic code to the cellular



machinery that translates it into a protein. Brenner, born in Germiston, South Africa, in 1927, earned his PhD from the University of Oxford, UK. He later became director of the prestigious Laboratory of Molecular Biology in Cambridge. He spent the later part of his career in the United States, and had close links with Singapore, helping to build up its medical-research capacity.

Topology pioneer

Theoretical physicist and Nobel prizewinner David Thouless died on 6 April, aged 84. Beginning in the 1970s, Thouless pioneered the use of ideas from the mathematical branch of topology to understand the strange physics of atom-thin materials. Thouless and others used the mathematical

properties of features such as vortices to predict properties of materials, including phase transitions that were once thought to be impossible, but which were later demonstrated experimentally. He and his collaborators also explained the quantum Hall effect — in which a material's electrical resistance varies in discrete steps — as another type of topological persistence. He shared the 2016 Nobel Prize in Physics with two others for this work. Thouless also made fundamental contributions to mesoscopic physics, the study of matter at scales between the micro- and macroscopic. He was born in Bearsden, UK, and taught at the University of Washington in Seattle from 1980 until his retirement in 2014.

SPACE

Moonshot projects

The Japanese government plans to spend ¥100 billion (US\$897 million) on an ambitious 'moonshot' research project that seeks to solve some of the country's biggest challenges. The goals of the project have yet to be decided, but an advisory committee met for the first time on 29 March in Tokyo. Tackling rising carbon emissions and creating a

plastic-free society were two goals discussed by the committee, says Akira Tsugita, director of strategic planning and management at the government-run Japan Science and Technology Agency in Tokyo. The government approved the five-year project in February, and has also asked the public for moonshot suggestions — these should be decided by June.

Asteroid explosion

Over the past year, the space probe Hayabusa2 has pelted the asteroid Ryugu with bouncing probes, fired a bullet at it, and taken a bite out of it — all for science. But on 5 April, the mission performed its most daring manoeuvre yet: dropping an explosive onto the surface of the asteroid to create a small crater. The first images show that the explosion went off, and in the following weeks, the probe will take further images to confirm whether there is a crater. Then, at a later date, the mission team will lower the probe right into the crater and collect a sample. It is hoped that the experiment will give astronomers the opportunity to study material from under the asteroid's surface, which could reveal details about the early Solar System.

TREND WATCH

Almost half of research-focused universities seem to consider journal impact factors when deciding who to promote, a survey of North American institutions has found.

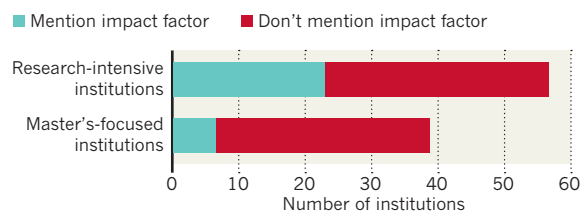
The study, published on 9 April in *PeerJ Preprints*, examined the wording of more than 800 documents used in the review, promotion and tenure process across 129 institutions in the United States and Canada. Just under one-quarter of all institutions mentioned "impact factor" or similar phrases in their documents. But this rose to 40% for the 57 research-intensive universities included in the survey.

More than 80% of the mentions at these universities used language that encouraged the use of the impact factor in academic evaluations. Only 13% of mentions came with any cautionary words about the metric.

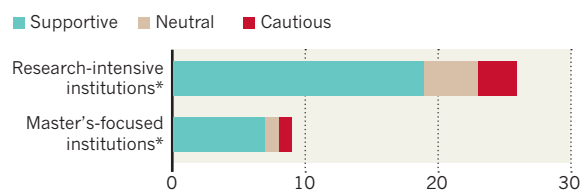
The use of journal impact factors to evaluate the performance of individual scientists has been widely criticized. Yet these data might represent just the tip of the iceberg, the study authors say, because documents might use other terms, such as "high-ranking journal", that refer to impact factors indirectly.

HIGH IMPACT

A survey of 129 North American universities found that 23% mention impact factors in documents used for promotion decisions.



Most mentions support the use of journal impact factors in academic evaluations.



*Some institutions had multiple mentions that fell into more than one category.