

SEVEN DAYS

The news in brief

EVENTS

AlphaGo bows out

The first artificial-intelligence system to master the strategy game Go retired from competition on 27 May after beating the world's top-ranked human player, Ke Jie, in a best-of-three tournament in Wuzhen, China. AlphaGo beat the Chinese champion in each of the games at the Future of Go Summit, including one by the closest margin possible, half a point. DeepMind, the London-based firm behind the program, will now develop a teaching tool using AlphaGo's analysis of Go positions. Researchers behind the program will also concentrate on developing advanced general algorithms, such as those that could help to find cures for diseases, said the Google-owned company.

Private launch pad

Aerospace company Rocket Lab of Huntington Beach, California, sent its Electron rocket into suborbital space on 25 May from New Zealand's North Island — the world's first orbital-class launch from

SEEKING GREAT MENTORS!

For more than a decade, *Nature* has been recognizing outstanding scientific mentors around the world. This year's awards for great mentoring are focused on Spain. Two prizes of €10,000 (US\$11,200) will be given, one for a mid-career mentor and the other for lifetime achievement in mentoring. For details of the competition and guidance about nominating candidates, see go.nature.com/2qbuaqkq. Nominations must be submitted by mentees of the nominees, and the closing date is 31 July 2017.



Peer review immortalized in concrete

A Russian university unveiled the world's first monument to peer review on 26 May. The 1.5-tonne tribute (pictured) at the Higher School of Economics (HSE) in Moscow consists of a derelict concrete block fashioned into a die, displaying on its five visible sides the possible results of review — 'Accept', 'Minor Changes', 'Major Changes', 'Revise and Resubmit' and 'Reject'. The director of the HSE's Institute of

Education asked his faculty last year for ideas about how to turn the block into something meaningful. A suggestion by HSE sociologist Igor Chirikov to turn it into a 'monument to an anonymous peer reviewer' struck a chord, garnering US\$2,500 in funding from an Internet campaign. The work is also carved with the titles of 21 papers, most by the researchers who made the largest contributions to the campaign.

a private facility, and the first such launch from the island nation. The rocket did not make it all the way to orbit as planned. As a relatively small vehicle, it is intended to put payloads of up to 150 kilograms into orbit. Rocket Lab hopes to provide commercial launch services for Earth-imaging and space-exploration companies.

Copyright trial

A Colombian biologist who endured a criminal trial for posting another scientist's thesis online has been cleared of copyright violation — an offence that, under Colombia's strict rights laws, could have been punishable by up to eight years in prison. In

2011, Diego Gómez Hoyos uploaded a scientist's 2006 thesis on amphibian taxonomy to the document-sharing network Scribd, hoping to help fellow students. But two years later, he was notified that the author of the thesis was suing him, beginning a lengthy trial. Gómez, who is 29 years old, was handed down his not-guilty verdict on 24 May by a judge in Bogotá; the prosecutor in the case has appealed the decision.

SPACE

Mars crash report

The European Space Agency (ESA) Mars test lander Schiaparelli crashed

last October as a result of conflicting information in the craft's on-board computer, an independent investigation commissioned by the agency has concluded. The craft — designed to test European landing technology — crashed into Mars at a speed of around 540 kilometres per hour. The inquiry found that the problem originated when a rotation sensor exceeded its maximum capability, leading software to incorrectly estimate the craft's orientation. Combined with radar measurements, this caused the computer to calculate that it was below ground level and to abort its deceleration procedure when it was still

FABRICE COFFRINI/AFP/GETTY

3.7 km from the surface. The agency would “take the lessons learned” in preparing for the ExoMars 2020 rover mission, said David Parker, ESA’s director of human space flight and robotic exploration, in a statement.

Jupiter up close

NASA’s Juno spacecraft has revealed Jupiter as a much more complex and mysterious planet than researchers had thought. Beginning with the first of its close fly-bys last August, Juno found clusters of storms around Jupiter’s north and south poles; a plume of ammonia gas welling up from within the planet’s depths; and a magnetic field both stronger and more patchy than models had predicted. Early results also suggest that Jupiter has a large but poorly defined core of heavy elements. The findings appear in a suite of papers published last week in *Science* and in *Geophysical Research Letters*. See go.nature.com/2r5yrum for a full list of papers.

PEOPLE

New WHO chief

Tedros Adhanom Ghebreyesus, a public-health expert from Ethiopia, will be the next director-general of the World Health Organization (WHO) — the agency’s first chief to hail from



Africa. Tedros won a 23 May vote by WHO member states and will take up the post on 1 July for a five-year term, succeeding Margaret Chan. He has previously served as Ethiopia’s health minister and foreign minister, and takes the helm in troubled times: the WHO’s core budget — its contributions from its members — is falling, and the agency has been criticized for its complex, bureaucratic and ineffective management structure.

FACILITIES

LHC fires up again

Experiments at the Large Hadron Collider (LHC) began collecting data again on 23 May, kicking off the third operating run since the machine started up in 2009. The LHC at CERN, Europe’s particle-physics laboratory near Geneva, Switzerland, is the world’s most powerful accelerator; it had been closed

for technical upgrades since December. In 2017, engineers hope to achieve the same number of proton–proton collisions as they did in 2016 — a record 7 quadrillion (10^{15}) — although over a slightly shorter period. The experiments will study known particles as well as searching for rare and new phenomena beyond the standard model of particle physics.

POLITICS

US science budget

US President Donald Trump released a revised budget plan on 23 May that would slash federal spending across the federal government in 2018. His planned cuts include 18% at the National Institutes of Health and 30% at the Environmental Protection Agency. See page 19 for more.

PHARMACEUTICALS

Biomarker drugs

The US Food and Drug Administration on 23 May issued its first approval of a cancer drug that targets tumours with specific genetic mutations, or ‘biomarkers’, regardless of where in the body the tumour first took root. The agency previously required individual approvals for a drug to be deployed in different tumour locations, even if its use was linked to a specific

COMING UP

5–9 JUNE

A high-level United Nations conference on the sustainable development of the oceans takes place in New York City.

oceanconference.un.org

7–9 JUNE

Government officials, industry leaders and experts in artificial intelligence (AI) gather to discuss ethical, technical and societal issues related to AI at the AI for Good Global Summit in Geneva, Switzerland.

go.nature.com/2s9blrj

marker. The new approach allows a compound called pembrolizumab to be used in any solid tumour that has a particular defect in its ability to repair damaged DNA. The compound is made by Merck of Kenilworth, New Jersey.

ENERGY

Methane cuts

The Canadian government announced regulations on 25 May to curb methane emissions from the oil and gas industry. The proposal would require the industry to reduce leaks and minimize venting during production and transportation, and is a step towards Canada’s pledge to cut methane emissions by 40–45% by 2025, compared with 2012 levels. Methane accounts for roughly 15% of the country’s greenhouse-gas emissions, and its oil and gas sector is responsible for nearly half of the total. The rules would be phased in from 2020, although environmentalists are pushing for an earlier start date.

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SOURCE: FDA

TREND WATCH

The US Food and Drug Administration (FDA) is on track to have a bumper year for new drug approvals. It has already approved 21 drugs in 2017, nearing the 2016 total of 22. That number was unusually small — less than half of the 2015 total — and sparked concerns about the pharmaceutical industry’s new-drug pipelines. This year’s rebound, and the appointment of FDA commissioner Scott Gottlieb last month, could put those fears to rest. Gottlieb has pledged to speed up drug approvals.

US DRUG APPROVALS BOUNCE BACK

The US Food and Drug Administration has approved 21 new medicines so far this year, almost as many as it did in the whole of 2016.

