

SEVEN DAYS

The news in brief

POLICY

US budget deal

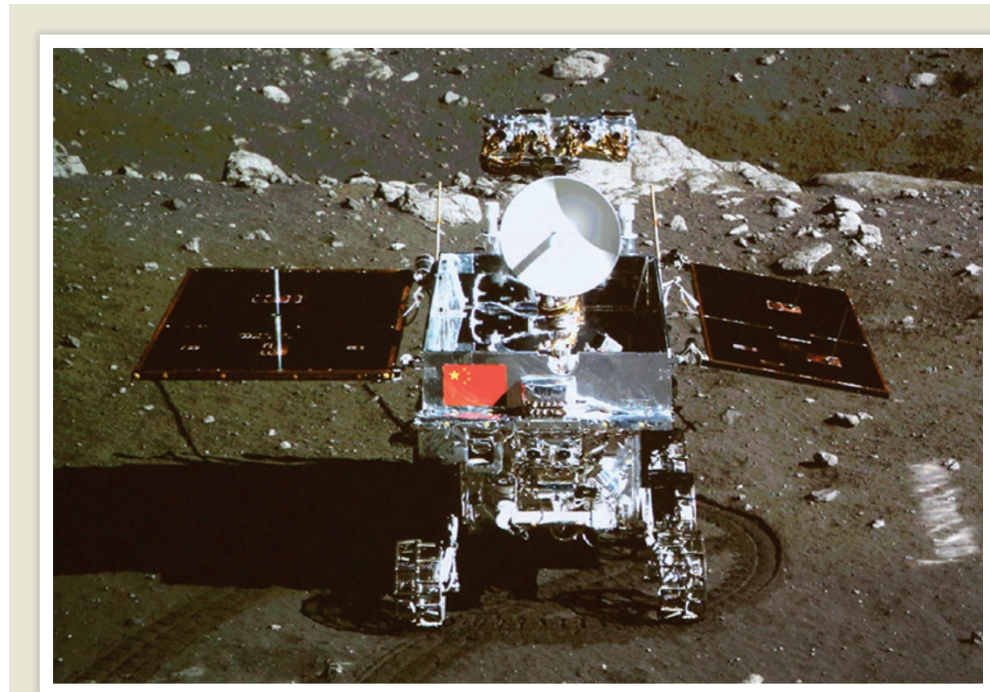
The US government's battles over spending, which culminated in October with a 16-day government shutdown, are close to an end. On 12 December, the House of Representatives approved a measure that would eliminate planned 'sequestration' spending cuts for the next two years — increasing the government's discretionary spending by roughly 4.5% this year, to US\$1.012 trillion. The Senate is expected to approve the bill before 20 December, its last scheduled working day this year. That would clear the way for approval by President Barack Obama, who has said he will sign the measure into law.

German reshuffle

German chancellor Angela Merkel's new coalition government, announced on 15 December, includes a new 'super ministry' for energy and the economy, helmed by Sigmar Gabriel. As Merkel's likely vice-chancellor, he will be responsible for advancing the nation's transition to a renewable-energy-dominated economy. Johanna Wanka was renominated as minister for research and education; she has held the post since February, and will oversee a record budget of around €14 billion (US\$19 billion) next year. Barbara Hendricks will be the country's new environment minister.

Antibiotics curb

The US Food and Drug Administration has issued guidelines to help phase out the widespread use of antibiotics in livestock — a practice that contributes to the spread of antibiotic-resistant microbes. Under the voluntary plan, pharmaceutical companies have 90 days



DING LIN/XINHUA NEWS AGENCY/NEWSCOM

China lands rover on Moon

China has become only the third country to soft-land a craft on the Moon — and the first to do so since the Soviet Union in 1976. Its Chang'e 3 spacecraft dropped safely to the surface on 14 December in the northern part of the Mare Imbrium (Sea of Rains), a site that may allow

exploration of relatively late-forming basalts that could hold clues to the Moon's evolution. Seven hours later, the Yutu ('Jade rabbit') rover (pictured) drove off the lander: it is due to carry out a three-month tour of the Moon's surface. See go.nature.com/zcrvwq for more.

from 11 December to choose whether to change labels on their drugs so that the medicines cannot be used to boost animals' growth. The guidelines still allow farmers to add drugs to animal feed to prevent outbreaks of disease. See go.nature.com/huzuae for more.

Shark cull

The government of Western Australia said last week that it would start culling sharks to mitigate risk to humans, after a series of high-profile attacks in the region. Marine researchers have objected to the move, arguing that it could severely damage populations of threatened great white

sharks, and that it contradicted scientific advice given to the government last year warning against the environmental impacts of shark-control programmes. See go.nature.com/3eypym for more.

Biofuel delay

A proposal to get the European Union (EU) to limit the use of biofuels made from food crops failed to pass last week, after member-state ministers could not agree on a compromise deal. The EU has previously mandated that, by 2020, 10% of transport fuels must come from renewable sources, but scientists warn that fuels such as biodiesel from palm oil can produce more greenhouse-gas

emissions than do fossil fuels (see *Nature* **499**, 13–14; 2013). A final deal to cap food-crop biofuels is now unlikely to be made before 2015, because European Parliament elections in May 2014 will probably set back negotiations.

Israel joins CERN

Israel has become the 21st nation — and the first non-European country — to join CERN, Europe's high-energy physics lab near Geneva, Switzerland. The country spent an obligatory two years as an associate member, ramping up its financial contributions, before it took the expected leap to full membership. The new status

DONNA COVENEY/MIT

gives Israel voting rights and removes some previous limits on benefits such as employment opportunities. Brazil also looks set to join, after CERN's council agreed last week that the country had fulfilled criteria for associate membership.

Trawling vote

The European Parliament passed legislation last week to limit deep-sea fishing, but did not approve an amendment banning bottom trawling, in which nets are dragged across or anchored to the sea bed. Some scientists say that the practice causes heavy damage to sensitive ecosystems such as cold-water corals, which are slow to recover. But their arguments failed to sway enough parliament members. See page 341 for more.

FUNDING

Europe funds open

Researchers can now submit proposals for grants from Europe's new funding programme, Horizon 2020 (see go.nature.com/ttiscs). European research commissioner Máire Geoghegan-Quinn launched the programme — which is handing out €7.8 billion (US\$10.7 billion) in 2014 — on 11 December. Concerned about high application numbers, the

European Research Council has introduced new rules that ban authors of low-quality applications from resubmission for up to two years. And peer-reviewed science articles produced from European funding must be made open to read at an online repository within six months of publication.

Dementia promise

The G8 group of leading industrial countries has agreed to “increase collectively and significantly” its funding for dementia research, with the aim of developing a cure or disease-modifying treatment by 2025 (matching the date set by the United States last year on Alzheimer's disease). The commitments were made on 11 December at a London summit dedicated to dementia. Ahead of the meeting, the United Kingdom said that it would double its annual public and private dementia research funding by 2025; it currently stands at £52 million (US\$85 million).

PEOPLE

Charles Vest dies

Mechanical engineer Charles Vest (pictured), who served as president of the Massachusetts Institute of Technology (MIT) in Cambridge from 1990 to 2004, died on 12 December, aged



72. Under Vest, the university increased its endowment from US\$1.4 billion to \$5.1 billion; added several research centres, including centres in nanotechnology and genomic medicine; and set up its OpenCourseWare initiative to make course materials freely available online. After leaving MIT, Vest served as president of the US National Academy of Engineering from 2007 until June of this year.

Millionaire prizes

Six biologists, including Robert Langer of the Massachusetts Institute of Technology in Cambridge and Mahlon DeLong of Emory University in Atlanta, Georgia, have each won US\$3 million in the latest tranche of Breakthrough Prizes in Life Sciences, announced on 12 December. Two physicists — Michael Green of the University of Cambridge, UK, and John Schwarz of

COMING UP

19 DECEMBER

The European Space Agency's €1-billion (US\$1.4-billion) Gaia spacecraft is scheduled to launch, to make a high-precision map of stars in the Universe. sci.esa.int/gaia

20 DECEMBER

The US Senate's last scheduled working day — by which time it should have cleared a budget bill that would eliminate cuts from federal science agencies. go.nature.com/xbybbo

the California Institute of Technology in Pasadena — shared the fundamental-physics award. Internet entrepreneur Yuri Milner, who founded the megaprizes in 2012, initially as a physics award, says that there will be a new mathematics prize next year. See go.nature.com/n5q4ew for more.

BUSINESS

Water sharing

Israel, Jordan and the Palestinian Authority have signed a water-sharing agreement that may also see brine piped more than 180 kilometres downhill from the Red Sea to replenish the rapidly shrinking Dead Sea. A desalination plant planned for construction in Aqaba, Jordan, would convert Red Sea salt water into fresh water, with its reject brine potentially destined for the Dead Sea — an idea that has been under discussion for decades (see *Nature* <http://doi.org/qg7>; 2013). The memorandum of understanding was signed in Washington DC on 9 December at the World Bank.

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TREND WATCH

The number of animals used for scientific purposes in the European Union continues to fall. Half a million fewer animals were used in 2011 than in 2008, according to statistics released on 16 December by the European Commission. The number of mice, the most commonly used species, fell by 1.7%, and rat numbers fell by 24.5%. The relatively small number of monkeys used declined further, by 27.6%. However, the number of fish rose by 28.5%.

EU ANIMAL USE FALLS

The number of animals used for scientific purposes in Europe fell by 4.3% between 2008 and 2011.

