

# SEVEN DAYS

The news in brief

## EVENTS

### Solar mission

NASA's latest solar mission reached orbit safely on 27 June. The Interface Region Imaging Spectrograph was released by an Orbital Sciences Pegasus XL rocket, which was launched from Vandenberg Air Force Base in Lompoc, California. The US\$181-million spacecraft carries a 20-centimetre ultraviolet telescope and spectrograph, designed to probe the layers of the Sun between its bright surface and its outer atmosphere, or corona (see *Nature* **498**, 279–280; 2013).

## POLICY

### DNA transplants

On 28 June, the UK government announced that it will publish draft regulations later this year with a view to allowing and governing DNA transplants in *in vitro* fertilization that could prevent certain heritable diseases. The United Kingdom may become the first country to legalize the technique, which involves transplanting nuclear DNA from eggs or embryos with faulty mitochondria into healthy donor cells. The regulations will be open to public consultation and debated by parliament in 2014.

### Clinical-trial ethics

US regulators announced plans on 26 June for a public meeting to discuss ethical issues in studies of 'standard of care' treatments — those commonly used in clinical practice. In March, the Office for Human Research Protections (OHRP) criticized a study in infants — the Surfactant, Positive Pressure, and Oxygenation Randomized Trial (SUPPORT) — for failing to adequately disclose risks associated with different blood-oxygen-

saturation levels used to support extremely premature babies. But the criticism stirred controversy among researchers, ethicists and National Institutes of Health officials, prompting the OHRP to schedule a 28 August meeting.

### African power

Over the next five years, the US government will invest US\$7 billion in an initiative to double access to electricity in sub-Saharan Africa, President Barack Obama announced on 30 June. It is estimated that more than two-thirds of people in the region lack electricity. The United States will initially work with six countries — Ethiopia, Ghana, Kenya, Liberia, Nigeria and Tanzania — to increase generation capacity by more

than 10,000 megawatts. The project, called Power Africa, also includes \$9 billion in contributions from industry partners around the world.

### Russian reform

The Russian Academy of Sciences, Russia's main basic-research organization, is facing the most radical overhaul in its 290-year history. A government bill launched on 28 June sets out a plan to merge the academy with two minor academies for medicine and agriculture. Responsibility for its more than 400 research institutes would be transferred to a new government agency. The Russian parliament's final vote on the bill is expected in October. See page 5 and [go.nature.com/be5pyw](http://go.nature.com/be5pyw) for more.

### Obama on climate

Faced with continued political gridlock on climate policy, US President Barack Obama has ordered the Environmental Protection Agency (EPA) to regulate carbon dioxide emissions from existing power plants. The Clean Air Act regulations are the centrepiece of a broader climate strategy unveiled on 25 June and will be developed over the next two years. The president also ordered the EPA to complete work on an existing regulatory proposal covering new power plants. See page 5 for more.

## RESEARCH

### HIV treatment

Two men with HIV may be on the road to being cured, their doctors said on 3 July at



NASA

## Alaskan volcano eruption escalates

An ongoing eruption of Alaska's Pavlof volcano intensified on 25 June, when it spewed an ash plume up to 8.5 kilometres high. Located 1,000 kilometres southwest of Anchorage, Pavlof is one of the state's most active volcanoes. It began erupting in mid-May (pictured on 18 May), and the Alaska Volcano Observatory is watching it closely because of its potential

impact on aeroplane flights across the North Pacific. But four of the nine seismic stations that monitor Pavlof have stopped working in recent years, and budget cuts have prevented the observatory from repairing them. Funding cutbacks have halted real-time monitoring of at least four of Alaska's volcanoes. See [go.nature.com/at8eue](http://go.nature.com/at8eue) for more.

## COMING UP

## 2–9 JULY

Researchers discuss cosmic-ray physics, neutrino astronomy and dark-matter physics at the 33rd International Cosmic Ray Conference in Rio de Janeiro, Brazil.  
[go.nature.com/ip1jwn](http://go.nature.com/ip1jwn)

## 9–11 JULY

Imperial College in London hosts SB6.0, the Sixth International Meeting on Synthetic Biology, where topics include biosecurity risks and applications to human health.  
[go.nature.com/w8dokr](http://go.nature.com/w8dokr)

on 1 July (A. Waldron *et al.* *Proc. Natl Acad. Sci. USA* <http://dx.doi.org/10.1073/pnas.1221370110>; 2013). The study created a global database of annual conservation spending, and found that funding correlates with a country's land area, gross domestic product and threats to biodiversity. The list of underfunded countries includes Iraq, Senegal and France; such knowledge could inform international spending to prevent species loss, the authors say.

## UK funding

The UK science budget, which has been frozen at an annual £4.6 billion (US\$7 billion) since 2010, will not go up in the 2015–16 financial year, the government said on 26 June. But spending on infrastructure such as research facilities and buildings will increase from £0.6 billion to £1.1 billion, and will rise in line with inflation until 2020–21. The budget also gives an extra £185 million to the Technology Strategy Board, which funds business-led research projects. See [go.nature.com/popd9a](http://go.nature.com/popd9a) for more.

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a meeting of the International AIDS Society in Kuala Lumpur, Malaysia. The men received stem-cell transplants to treat blood cancer, then stopped taking their antiretroviral medications, yet have no detectable trace of HIV DNA or RNA in their blood. It is still too early to say whether the men may be the third and fourth people to be essentially cured of HIV (see [go.nature.com/2ka1lq](http://go.nature.com/2ka1lq)). Also at the meeting, the World Health Organization said that HIV patients should begin antiretroviral treatment earlier than previously recommended, while their immune systems are still relatively strong. See [go.nature.com/xchc4b](http://go.nature.com/xchc4b) for more.

## Chimp conclusion

The US National Institutes of Health (NIH) will retire more than 300 research chimpanzees to sanctuaries over the next several years. No more than 50 animals will be available for future studies, which must continue to meet stringent ethical and regulatory standards. The NIH's 26 June announcement acts on a 2011 report by the US Institute of Medicine, which declared most NIH-funded chimpanzee research scientifically unnecessary. The United States is the only major country that conducts invasive chimpanzee research, and the NIH provides

virtually all US federal funding for such work. See [go.nature.com/1nb6rr](http://go.nature.com/1nb6rr) for more.

## PEOPLE



## No trial for Stapel

Dutch social psychologist Diederik Stapel (pictured), who in 2011 was found to have fabricated data in at least 30 published papers, will not face trial for misappropriating government research funds. Instead, in a pre-trial settlement, he has agreed to undertake 120 hours of community service. The Netherlands' public prosecutor's office said on 28 June that the public grants were not misused, as the money was mainly used to pay staff for their work — even though that work was based, in part, on fabricated data. See [go.nature.com/zcquw8](http://go.nature.com/zcquw8) for more.

## Commerce head

Billionaire business executive Penny Pritzker was confirmed by the US Senate on 25 June

as the new US secretary of commerce. Her job will include overseeing the US\$5.3-billion National Oceanic and Atmospheric Administration (NOAA), which accounted for nearly 66% of the commerce department's 2013 budget. Pritzker replaces John Bryson, who resigned in June 2012. The top job at NOAA remains open, however, after marine ecologist Jane Lubchenco left the agency in February.

## FUNDING

## Horizon 2020

European Union (EU) member states and the European Parliament agreed last week on details for Horizon 2020, an EU-wide research initiative set to begin in January 2014. The deal, which must still be formally approved, includes a highly simplified funding model for all participants in the 7-year, €70-billion (US\$91.2-billion) programme. Universities, research institutes and companies will be paid the full direct project costs, plus a 25% flat rate to cover overhead expenses. See page 18 for more.

## Conservation aid

Boosting international aid to the 40 countries where conservation is most underfunded could help to protect one-third of the world's threatened mammals, according to a report released

## TREND WATCH

Researchers are submitting skyrocketing numbers of manuscripts for processing by PubMed Central, the freely accessible repository of the US National Institutes of Health (NIH). PubMed has received an average of 8,800 manuscripts per month this year, up from 5,100 per month in 2011 and 2012. Last November, the NIH said that, from spring 2013, it would more rigorously enforce its policy of requiring NIH-funded research to be freely accessible to the public within 12 months of publication.

## PUBLIC-ACCESS SURGE FOR NIH

The US National Institutes of Health has seen a sharp rise in the number of manuscripts submitted to its PubMed Central (free access) database.

