

# SEVEN DAYS

The news in brief

## AWARDS

### Nobel prizes

Three neuroscientists share this year's Nobel Prize in Physiology or Medicine for their insights into the neural basis of spatial navigation. John O'Keefe was honoured for his discovery of 'place cells', which are activated when a rat passes particular spots; May-Britt Moser and Edvard Moser discovered 'grid cells', which help to create a coordinate system in the brain. The physics prize was awarded to Isamu Akasaki, Hiroshi Amano and Shuji Nakamura for their invention of blue light-emitting diodes (LEDs), which enabled today's bright, energy-efficient white LEDs. See pages 152–154 for more. *Nature* went to press before the chemistry prize was awarded, but full details will be available at [go.nature.com/ygtzbs](http://go.nature.com/ygtzbs).

## EVENTS

### Ebola exported

A health worker in Spain has tested positive for Ebola, the country's health minister said on 6 October. The worker, the first person thought to have contracted the virus outside Africa, had treated a missionary who had returned to Spain from Sierra Leone. On 30 September, health officials confirmed the first case of Ebola diagnosed in the United States — a man who arrived in Dallas, Texas, from Liberia on 20 September. On 6 October, the US Centers for Disease Control and Prevention said that the man may have exposed up to 48 people to the virus. See page 139 for more.

### Animal care

A UK government report released on 2 October cleared Imperial College London of



COREY ACCARDO/NOAA

## Walrus seek shelter on land

A lack of sea ice has driven more than 35,000 Pacific walrus (*Odobenus rosmarus divergens*) onto land at Point Lay, Alaska, the US Geological Survey said on 1 October. The animals normally spend summers resting on ice floes, occasionally diving to the ocean floor to feed on clams, snails and worms. But with ice levels low in the Chukchi Sea this summer,

walrus have come ashore in record numbers (pictured). The animals are easily spooked, so scientists say that the risk of fatal stampedes is high. The US Fish and Wildlife Service is considering whether to protect the Pacific walrus under the Endangered Species Act owing to harm from hunting and sea-ice loss; a decision is expected in 2017. See page 140 for more.

nearly all allegations of animal cruelty raised by an animal-rights group in 2013. But the Home Office investigation noted persistent shortcomings in the management of animal care, and five instances of non-compliance — since addressed by the university — that were symptomatic of “a widespread poor culture of care” in the university's animal-research laboratories. See [go.nature.com/wyc2vz](http://go.nature.com/wyc2vz) for more.

### Telescope turns on

A 12-metre radio telescope on Kitt Peak in Arizona has begun observations, scientists at the University of Arizona in Tucson said on 2 October. The telescope is one of three

prototypes originally made for the Atacama Large Millimeter/submillimeter Array (ALMA) in Chile, and will be used to study phenomena such as molecules in interstellar space and supermassive black holes. The university lost a bid for another of the prototype dishes in 2011; that antenna is destined for Greenland (see page 147).

## FACILITIES

### Nuclear-dump plan

The US Department of Energy issued a plan on 30 September to revive the country's only deep-storage repository for nuclear waste. Operations at the Waste Isolation Pilot Plant near Carlsbad, New

Mexico, were suspended after two incidents in February: an underground fire and the accidental release of some radioactive material (see *Nature* 509, 267–268; 2014). The plan aims to resume at least some operations in 2016, and includes improving ventilation systems and retraining staff. The cost could top US\$500 million, according to the department.

### Carbon capture

The world's first commercial coal-fired plant that can capture its carbon dioxide emissions was officially launched in Canada on 2 October. The refitted Boundary Dam Power Station in Saskatchewan — a Can\$1.3-billion

(US\$1.2-billion) project — is designed to trap around 1 million tonnes of CO<sub>2</sub> a year. Most of the gas will be bought by an oil company, which will pump the compressed CO<sub>2</sub> deep underground to flush out stubborn oil reserves. See [go.nature.com/nje9il](http://go.nature.com/nje9il) for more.

## FUNDING

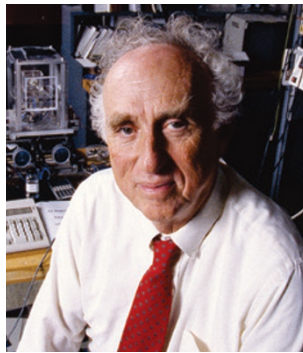
**BRAIN bucks**

The US National Institutes of Health has awarded its first US\$46 million in grants for the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative. The agency announced 58 awards on 30 September, ranging in size from about \$370,000 to \$1.9 million. The White House also announced that two more government agencies — the US Food and Drug Administration and the Intelligence Advanced Research Projects Activity — would join the multi-agency effort. See [go.nature.com/8trpex](http://go.nature.com/8trpex) for more.

## PEOPLE

**Physicist dies**

Martin Perl, who shared the 1995 Nobel Prize in Physics, died on 30 September, aged 87. Perl was honoured for his role in discovering the tau lepton, a subatomic particle that is 3,500 times



heavier than an electron. The discovery was the first sign of a previously unknown family of leptons, and filled in a missing piece of the standard model of particle physics. Perl (pictured) also received the Wolf Prize in Physics in 1982.

**PhD pulled**

The University of Constance in Germany was within its rights to revoke the PhD of physicist Jan Hendrik Schön, according to a final ruling announced on 1 October by a German constitutional court in Karlsruhe. In 2002, Schön was dismissed from Bell Laboratories in Murray Hill, New Jersey, for falsifying research findings, including several that were published in *Nature* and *Science*. Two years later, the university decided to revoke the doctorate that it had awarded to Schön in 1998 because of his actions at Bell Labs. See [go.nature.com/kb89km](http://go.nature.com/kb89km) for more.

## POLICY

**Stem-cell saga ends**

Italy's health ministry will not support a trial of a controversial stem-cell therapy that it had promised last year — marking the end of a two-year battle between the therapy's inventor and Italian scientists who had declared the treatment ineffective and possibly dangerous. Health minister Beatrice Lorenzin announced her final decision on 2 October, on the basis of conclusions from an expert committee that was convened after a court ruled a previous committee had been illegally biased. See [go.nature.com/zlryhz](http://go.nature.com/zlryhz) for more.

**PNAS rules tighten**

The *Proceedings of the National Academy of Sciences* (PNAS) closed one of its avenues to publication on 1 October. Editor-in-chief Inder Verma said that the journal will discontinue its 'pre-arranged editor' process, whereby authors could submit manuscripts through a member of the academy. See [go.nature.com/szpjio](http://go.nature.com/szpjio) for more.

**US-India space pact**

The US and Indian space agencies signed an agreement on 30 September to increase their collaborative efforts. A working group will coordinate observations between NASA's MAVEN mission and the Mars

## COMING UP

**15-16 OCTOBER**

Ministers arrive in Pyeongchang, South Korea, to discuss progress towards world biodiversity targets, at the final stages of global talks between nations that have signed the Convention on Biological Diversity. [go.nature.com/lvg1dl](http://go.nature.com/lvg1dl)

Orbiter Mission of the Indian Space Research Organisation — which arrived at Mars on 21 and 24 September, respectively — and explore cooperative efforts on future Mars missions. They will also jointly launch an Earth-observing satellite in 2020.

**Trial data freed**

Clinical-trial data in the European Union are to be released to the public after the European Medicines Agency agreed a transparency policy on 2 October. As of 1 January 2015, the medical regulator will proactively publish clinical reports from companies seeking marketing authorization from the agency for medicines. The policy had been the subject of fierce debate, which pitted transparency campaigners against pharmaceutical companies. See [go.nature.com/p7slov](http://go.nature.com/p7slov) for more.

## BUSINESS

**Virology mega-deal**

US pharmaceutical giant Johnson & Johnson said on 30 September that it will pay about US\$1.75 billion in cash to acquire Alios BioPharma, a private biotechnology company in South San Francisco, California. Alios is known for its work on treatments for viral infections, such as respiratory syncytial virus.

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## TREND WATCH

Solar power could provide 27% of the world's electricity by 2050, the International Energy Agency says — up from the 22% figure it suggested 4 years ago. In a strategy report published on 29 September, the Paris-based agency increased its projections for electricity supplied by photovoltaic modules from the 2010 value of 11% to 16%, because of the rapidly falling cost of the modules. The projections, however, assume the introduction of policies that encourage low-carbon electricity.

**SOLAR SIGHTS SET HIGH**

Photovoltaics and solar thermal energy could together become the world's leading source of electricity by 2050.

