

# SEVEN DAYS

The news in brief

## PEOPLE

### Fraud punished

A Parkinson's disease researcher in Australia pleaded guilty to research fraud and was handed a two-year suspended prison sentence by a court in Brisbane on 31 March. Bruce Murdoch, formerly of the University of Queensland in Brisbane, was found to have falsified results published in the *European Journal of Neurology* in 2011; three of his papers have been retracted. In a statement to the blog Retraction Watch, University of Queensland vice-chancellor Peter Høj said that the university had reimbursed around Aus\$175,000 (US\$132,000) to funding bodies associated with Murdoch's work.

## EVENTS

### Emergency over

The Ebola outbreak that has killed more than 11,000 people in Guinea, Liberia and Sierra Leone is no longer a public-health emergency, said the World Health Organization (WHO) in Geneva, Switzerland, on 29 March. The WHO noted that the virus is now unlikely to spread internationally, and that the affected countries have the capacity to deal with new cases. A campaign in Guinea last month administered an experimental Ebola vaccine to nearly 800 people who may have come into contact with 8 individuals with the virus. Liberia has recorded two new cases since the announcement: a woman who died on 31 March and her five-year-old son.

### ET search starts

The SETI Institute in Mountain View, California, has kicked off a search for signals from extraterrestrial civilizations that might be living on



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## Ice wall to stem Fukushima leak

The Tokyo Electric Power Company (TEPCO) on 31 March began freezing the soil surrounding reactors 1 to 4 of the disaster-stricken Fukushima Daiichi nuclear power plant. A refrigeration system (pictured) is creating a 30-metre deep, 1.5-kilometre-long wall of frozen ground that aims to stop groundwater from flowing under

the plant and carrying radioactive isotopes into the sea. More than 300 tonnes of water per day are pumped into the damaged reactors to stop their cores from overheating and contributing to the radioactivity leak. TEPCO expects that it will take months for the ¥35-billion (US\$316-million) project to seal the zone.

planets orbiting any of the 20,000 nearest red dwarf stars. Red dwarfs are dimmer and cooler than the Sun, but they make up the bulk of stars in the Galaxy, increasing the odds of finding life there. The two-year search will be conducted at the Allen Telescope Array in northern California, the institute announced on 30 March.

### China's Go

A team of Chinese scientists plans to challenge Google DeepMind's Go-playing artificial-intelligence algorithm with its own program by the end of 2016, Chinese state news has reported. The DeepMind program, known as AlphaGo, beat a leading human player, South Korea's Lee Sedol, by four games to one in March. Reporting from an event

organized by the Chinese Go Association and the Chinese Association for Artificial Intelligence, *Shanghai Securities News* said on 31 March that a team from China will issue the challenge by the end of the year.

### Science in space

Two scientific payloads travelled to the edge of space on 2 April in the latest test of Blue Origin's commercial space vehicle, New Shepard. Amazon founder Jeff Bezos's reusable spacecraft took off from a Texas launch site, flew to an altitude of 103 kilometres and successfully landed 11 minutes later. On board was an experiment from the University of Central Florida in Orlando investigating how dust and rubble settle in microgravity, and the 'box of rocks experiment' from the

Southwest Research Institute in San Antonio, Texas, to work out how regolith forms on asteroids.

## RESEARCH

### Crater drilling

A two-month expedition to drill into the 200-kilometre-wide Chicxulub crater, which formed 66 million years ago when an enormous asteroid smashed into the planet, began on 1 April. The aftermath of the impact obliterated most life on Earth, including the dinosaurs. From a drill-ship off the coast of Yucatán, Mexico, researchers will start to penetrate one of Chicxulub's most striking features — its 'peak ring', a circle of mountains within the crater floor. Scientists have yet to fully explain how peak rings form, even though they

are common in big impact craters across the Solar System. See [go.nature.com/pgxb18](http://go.nature.com/pgxb18) for more.

## Gorilla decline

Numbers of the largest primate on the planet, Grauer's gorilla (*Gorilla beringei graueri*), have plummeted since 1995, according to a report from the Wildlife Conservation Society (WCS). The report, published on 4 April, says that the numbers have dropped from an estimated 17,000 in 1995 to 3,800 today, a 77% decrease. Grauer's gorillas live in the wild only in the eastern Democratic Republic of the Congo, and the WCS report blames the decline on illegal hunting around mining sites, the civil war in the country from 1996 to 2003, and habitat loss.

### POLICY

## Nuclear security

More than 50 countries, most represented by their heads of state, made a variety of commitments intended to prevent nuclear terrorism at the conclusion of a nuclear summit in Washington DC on 1 April. The meeting was the fourth biennial summit in a process initiated in 2009 by US President Barack Obama (pictured with Canadian Prime Minister Justin Trudeau). Much of the focus has been on reducing civilian



stocks of highly enriched uranium at research reactors. At least 28 reactors have been shut down or converted to low-enriched uranium since 2009, but challenges remain in converting 11 high-performance research reactors. See page 5 for more.

### BUSINESS

## Patent pledge

Drugmaker GlaxoSmithKline (GSK) has announced plans to improve access to its medicines in the world's poorest countries. The company said on 31 March that it would stop filing drug patents in many developing countries. That means that generic manufacturers in those nations would be able to supply copycat versions of GSK's drugs without worrying about lawsuits. GSK also signalled that it intended to improve access to low-cost drugs that can help to address the growing burden of cancer in the developing world.

Public-health advocates have embraced the news and are urging other drug companies to follow suit. See [go.nature.com/nqhgjg](http://go.nature.com/nqhgjg) for more.

### FACILITIES

## Laser beam added

The Linac Coherent Light Source (LCLS), the world's brightest X-ray free-electron laser, began a US\$1-billion construction project on 4 April to add a second beam. LCLS-II, based at the SLAC National Accelerator Laboratory in Menlo Park, California, will accelerate electrons through superconducting niobium cavities to produce X-ray pulses 10,000 times more concentrated and firing 8,000 times faster than X-rays produced by the \$414-million LCLS, which started operations in 2009. This will enable it to image processes that occur on smaller scales and faster timescales. Construction will last until the early 2020s.

### FUNDING

## Career boost

Four philanthropic organizations have created an international research programme focused on early-career scientists. Announced on 29 March, the International Research Scholars Program will select up to 50 members who are not originally from one of the G7 countries, but have trained in the United States or the United Kingdom for at least one year. Awardees will each receive a total of US\$650,000 over five years. The sponsors are: the Howard Hughes Medical Institute in Chevy Chase, Maryland; the Bill & Melinda Gates Foundation in Seattle, Washington; the London-based Wellcome Trust; and Lisbon's Calouste Gulbenkian Foundation.

### CORRECTION

The item 'Boaty McBoatface' (*Nature* 531, 419; 2016) wrongly described NERC as the 'National' instead of the Natural Environment Research Council.

### NATURE.COM

For daily news updates see: [www.nature.com/news](http://www.nature.com/news)

## TREND WATCH

More of the global population is now obese than is underweight, according to a study of 186 countries from 1975 to 2014 (see *Lancet* 387, 1377–1396; 2016). The proportion of obese men more than tripled and that of obese women more than doubled during that period. Many people are still underweight in the world's poorest regions, particularly in Asia and Africa. But the global average weight of a person grew by 1.5 kilograms each decade. See [go.nature.com/yyslifh](http://go.nature.com/yyslifh) for more.

## OBESITY RISE OVER 40 YEARS

Data from 1975 to 2014 show that obesity has risen dramatically, more than tripling in men and more than doubling in women.

