

SEVEN DAYS

The news in brief

RESEARCH

Exotic particle

Data from the Large Hadron Collider beauty experiment (LHCb) at CERN, Europe's particle-physics laboratory near Geneva, Switzerland, have confirmed the existence of an exotic particle, Z(4430). The LHCb published the finding on 9 April. The particle is exotic because it may consist of four quarks — fundamental particles that are usually bound in twos or threes and are found in everyday matter. A number of experiments have observed such exotic particles over the past 11 years, but Z(4430) is only the second sighting to be confirmed.

Scientist apologizes

Japanese stem-cell scientist Haruko Obokata apologized on 9 April for errors in her work after being found guilty of research misconduct by her institute, the RIKEN Center for Developmental Biology, earlier this month. She took full responsibility for the errors — which included the use of a duplicated image — blaming her immaturity and ignorance of research protocols. She maintains that the research on turning mature cells into stem cells, published in *Nature*, is still valid and that the inaccuracies were not deliberate. See page 299 and go.nature.com/jblotc for more.

BUSINESS

Drug firms fined

On 7 April, a court fined two drug firms US\$9 billion for not revealing links between a diabetes drug called Actos (pioglitazone) and bladder cancer. The Takeda Pharmaceutical Company, of Osaka, Japan, was ordered to pay \$6 billion and Eli Lilly, of Indianapolis, Indiana, \$3 billion. They were also



MIKE JAMES/FOUR SEAM IMAGES VIA AP IMAGES

The dark glide of the Moon

A total lunar eclipse on 15 April was the first in a 'tetrad' — a set of four consecutive total lunar eclipses. Many in the Americas glimpsed the distinctive 'blood Moon', in which the Sun's visible red light is scattered and reflected from the Moon, which is otherwise completely masked in Earth's shadow (pictured, from

Parrish, Florida). The remaining three eclipses in the tetrad will take place on 8 October, 4 April 2015 and 28 September 2015. Lunar eclipses occur around twice a year, but total lunar eclipses are less frequent, and only eight tetrads will occur in the twenty-first century; there were no tetrads from 1600 to 1990.

ordered to pay \$1.475 million in compensation. Takeda and Eli Lilly disagree with the verdict.

FACILITIES

Telescope shortlist

A committee announced the shortlist for one of two locations of the planned Cherenkov Telescope Array γ -ray detector on 10 April at a meeting in Munich, Germany. Representatives of the 12 governments that will fund the array selected Aar in southern Namibia and Armazones in Chile from a list of five for the larger site in the Southern Hemisphere. The final selection will take place by the end of the year. The funders have yet to whittle down a shortlist for

the array's smaller site in the Northern Hemisphere. See page 297 and go.nature.com/n8psod for more.

POLICY

Immigration barrier

Fewer international students are coming to the United Kingdom to study science, technology, engineering and mathematics because of tough immigration rules, and prospective students are made to feel unwelcome in the country. So finds a report from the House of Lords Science and Technology Committee published on 11 April. The report says that student numbers have fallen by more than 10% over the past two years. The government maintained that

there was no clear evidence that immigration rules were deterring international students (see *Nature* 506, 14–15; 2014).

Medical history

A trove of biomedical journal archives will be digitized and made freely available by the US National Library of Medicine in Bethesda, Maryland, and the Wellcome Library in London. The project, announced on 14 April, is expected to take three years to complete. The collection will include publications that span the past 150 years, such as the *Transactions of the Epidemiological Society of London*, the *Indian Medical Gazette* and *Mental Hygiene*. The Wellcome

Library will donate £750,000 (US\$1.25 million) to the National Library of Medicine to support the project.

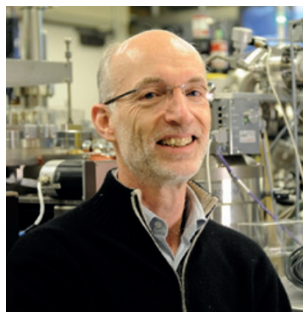
Nuclear restart

Three years after the Fukushima-Daiichi nuclear accident, the Japanese government has reapproved the use of nuclear power. An energy policy announced on 11 April says that nuclear reactors that meet tough regulatory standards will be reactivated. The plan reverses a decision by the previous government to phase out nuclear power. Japan's 48 nuclear reactors were shut down in the wake of the Fukushima disaster in March 2011.

Hepatitis C report

The World Health Organization unveiled its first global treatment guidelines for hepatitis C virus (HCV) on 9 April. The recommendations will guide health officials in treating the world's estimated 185 million cases of HCV. Newly available drugs can cure most infections, but the price of the drugs must be reduced, the report says. The virus is blood-borne, and is often transmitted through sharing injection needles and by poor sterilization of medical equipment. It causes cirrhosis and liver cancer. See page 295 for more.

AWARDS



Technology prize

British physicist Stuart Parkin (pictured) was awarded the 2014 Millennium Technology Prize on 9 April. The award recognizes Parkin, who is director of the Max Planck Institute of Microstructure Physics in Halle, Germany, for his work in spin electronics. His research has enabled a 1,000-fold increase in the storage capacity of hard-disk drives, and led to innovations such as cloud computing and online video streaming. The €1-million (US\$1.4-million) prize is awarded every two years by the Technology Academy Finland.

PEOPLE

Health chief quits

The US secretary of the Department of Health and Human Services, Kathleen Sebelius, resigned on 11 April after the troubled roll-out of sweeping health-care reforms.

US President Barack Obama nominated Sylvia Burwell, director of the Office of Management and Budget, as her replacement. Sebelius notably overruled the scientific advice of the US Food and Drug Administration in 2011 when she sought to restrict access to the 'morning after' pill (levonorgestrel) for girls aged under 17, although a judge later ordered that it must be available over the counter for all ages (see *Nature* 496, 138; 2013).

Plagiarism battle

Germany's former education and research minister, Annette Schavan, announced on 10 April that she will give up the fight to have her doctorate reinstated after the University of Düsseldorf withdrew it on the grounds of plagiarism. The university revoked her title last year after identifying parts of her PhD thesis that had been copied from sources that had not been correctly cited. On 20 March, a court rejected her claim that the university handled her case unfairly. She will not appeal the court ruling.

Stem-cell move

The former stem-cell chief at the US National Institutes of Health (NIH) will join the New York Stem Cell Foundation, a non-profit organization that funds

COMING UP

28 APRIL–7 MAY

Countries that are signatories to the Antarctic Treaty meet in Brasília to discuss how the treaty is being implemented. Talks at the meeting will include how to manage access for research, environmental protection and tourism.

go.nature.com/e7jfwq

23–25 APRIL

Researchers at the Stem Cell Summit 2014 in Cambridge, Massachusetts, will discuss developments in stem-cell therapies, regenerative medicine and regulation of stem-cell research.

go.nature.com/ui4q3m

research into the technology, it was announced on 9 April. Mahendra Rao resigned last month as director of the NIH Center for Regenerative Medicine, saying that the NIH was not pushing through enough stem-cell therapies to clinical trial. See go.nature.com/eptx5e for more.

China investigation

Shen Weichen, a high-ranking politician at China's national science association, is under investigation for "suspected serious violation of discipline and laws", Chinese state media reported on 12 April. Shen has been Communist Party secretary at the China Association for Science and Technology in Beijing since April 2013. He is also a member of the organization undertaking the probe: the party's Central Commission for Discipline Inspection, which has been leading the recent crackdown on corruption, state media said.

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TREND WATCH

After a promising start to 2014, biotechnology stocks are taking a tumble. The NASDAQ Biotechnology Index (NBI), an amalgam of 121 biotechnology and pharmaceutical companies, has fallen by 21% since its peak on 25 February. The broader NASDAQ Composite Index fell by 6% over the same period. The NBI fall has befuddled analysts, and spurred fears that a biotechnology bubble is bursting (see *Nature* 500, 513; 2013). But it may simply be a correction to an especially sharp rise that began in January.

BIOTECH BUBBLE BURSTING?

An index fund of biotechnology companies had soared above the NASDAQ Composite Index, but is now falling back.

