

SEVEN DAYS

The news in brief

RESEARCH

Misconduct update

Haruko Obokata, a stem-cell researcher at the RIKEN Center for Developmental Biology in Kobe, Japan, has agreed to retract one of her two controversial research papers, according to media reports in Japan on 28 May. In the papers published in *Nature* in January, Obokata claimed that she had created a new type of stem cell using simple exposure to acid or physical stress. But the work was found to have included manipulated and duplicated images, and in April a RIKEN investigation found Obokata guilty of misconduct. See go.nature.com/wsfox5 for more.

Weight issues

Obesity is on the rise throughout the world, researchers announced on 28 May. Data from more than 19,000 individuals in 188 countries show that the prevalence of overweight and obese people rose by 27.5% for adults and by 47.1% for children between 1980 and 2013. Almost two-thirds of obese people live in developing countries. The study found no countries in which obesity rates had fallen significantly (M. Ng *et al. Lancet* <http://doi.org/szv>; 2014).

POLICY

IQ on trial

Some defendants with intelligence-quotient (IQ) scores of more than 70 may now escape execution on the basis of intellectual disability, after a US Supreme Court ruling on 27 May. The ruling came in favour of Freddie Lee Hall, a convicted murderer in Florida who has spent 35 years on death row. Federal law prohibits the execution of

intellectually disabled people, defined under Florida law as an IQ of less than 70. In his latest test, Hall had an IQ of 71. The Supreme Court affirmed the position of psychiatrists that IQ tests have a ten-point margin of error. The case now returns to Florida's court for a reassessment. See go.nature.com/xiiitc for more.

EU clinical trials

New rules governing clinical trials across Europe became law on 27 May when they were published in the *Official Journal of the European Union*. The rules were overhauled to simplify how trials are approved, including

harmonizing application procedures across all 28 member states, and include an obligation to disclose research results. They will come into force in mid-2016.

Patent clarity

The US Supreme Court moved to rein in ambiguous patents in a ruling on 2 June. The decision relates to a case concerning a patent on heart-rate monitors used during exercise. A lower court had ruled that the patent was valid despite being somewhat ambiguous. The Supreme Court said that the lower court should have higher standards for patent clarity. The move

as the Bruce Mansfield Plant in Pennsylvania, pictured) are the single largest source of carbon pollution in the country. Regulations exist to limit emissions of pollutants such as arsenic and mercury, but there are no national controls on carbon-emission levels. The EPA expects to finalize the plan by June 2015, after a 120-day period for public comment. See go.nature.com/gjyruv for more.

could have implications for 'patent trolls', who take advantage of ambiguous patents to sue companies for infringement. See page 7 for more.

Rights to therapy

Patients do not have an automatic right to try a compassionate therapy when there is no scientific evidence that it works, according to a landmark ruling of the European Court of Human Rights in Strasbourg, France. The 28 May ruling referred to the case of Nivio Durisotto, who wanted his daughter, who has a degenerative brain disease, to be treated with



ROBERT NICKELBERG/GETTY IMAGES

Cleaner power in prospect

Existing US power plants will have to cut their carbon dioxide emissions by 30% below 2005 levels by 2030 under a plan from the Environmental Protection Agency (EPA) released on 2 June. The proposal will help to steer the United States towards reducing total greenhouse-gas emissions by 17% below 2005 levels by 2020, to meet a 2009 pledge from President Barack Obama. Power plants (such

a controversial stem-cell therapy offered by the Stamina Foundation in Brescia, Italy. Stamina's president Davide Vannoni — who is facing charges of fraud — had encouraged patients to appeal for the right to treatment on compassionate grounds. See go.nature.com/xqdpfb for more.

GM compromise

The European Union (EU) reached a compromise on the cultivation of genetically modified (GM) crops, in a closed-door meeting on 28 May. EU member states are currently supposed to allow cultivation of any GM crop that the European Food Safety Authority deems safe for health and the environment. But some countries have refused, creating a constitutional stand-off. Now, EU member states will be allowed to opt out of growing GM crops on non-scientific grounds, such as issues relating to town and country planning. European environment ministers will vote on the proposal on 12 June; it also requires parliamentary approval.

AWARDS

Kavli prizes

Nine scientists shared the three 2014 biennial Kavli prizes (worth US\$1 million



each), announced on 29 May. Alan Guth, Andrei Linde and Alexei Starobinsky won in astrophysics, for their work developing the theory of cosmic inflation. The nanoscience prize went to Thomas Ebbsen, Stefan Hell and John Pendry, for studies defeating the 'resolution limit' of optical imaging and microscopy — showing that light can interact with nanostructures smaller than the light's wavelength. In neuroscience, Brenda Milner (pictured), John O'Keefe and Marcus Raichle won for pinpointing brain regions involved in memory and the key functions of specialized nerve cells. See go.nature.com/ifevbf for more.

Shaw prizewinners

The Shaw Prize Foundation in Hong Kong announced the winners of its annual prizes on 27 May. Worth US\$1 million, the prizes

are awarded in the areas of astronomy; mathematical sciences; and life science and medicine. The winners include Daniel Eisenstein of Harvard University in Cambridge, Massachusetts, for his work on waves originating in the early Universe called baryonic acoustic oscillations, and Kazutoshi Mori of Kyoto University in Japan for his part in discovering a key mechanism involved in degenerative diseases. See go.nature.com/vrpwla for more.

FUNDING

Stem-cell petition

The European Commission has rejected a petition for legislation to ban the funding of research that uses human embryonic stem cells. The petition, signed by 1.7 million European citizens, came from a pro-life organization based in Brussels called One of Us. On 28 May, the commission said that stem-cell research held great promise and it was therefore in the public interest to support it. It also agreed that human embryonic stem cells are still sometimes required in such research. See go.nature.com/aa6tuv for more.

Brain grants

The first round of awards from a large US multi-agency funding effort to study the

COMING UP

8–13 JUNE

Geoscientists will meet at Goldschmidt2014 in Sacramento, California. Up for discussion are the potential habitability of Mars, and the environmental legacy of California's gold rush. See go.nature.com/o8iznc

brain have gone to work on neuropsychological disorders. On 27 May, the Defense Advanced Research Projects Agency in Arlington, Virginia, awarded the University of California, San Francisco, US\$26 million and Massachusetts General Hospital in Boston \$30 million over five years. The projects are funded under the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) initiative. They will focus on creating devices that stimulate areas deep in the brain and record brain activity for research on soldiers and veterans with conditions such as post-traumatic stress disorder.

BUSINESS

Sequencing boost

Swiss drug company Roche, based in Basel, moved to boost its genetic-sequencing business by acquiring Genia Technologies of Mountain View, California. Roche announced on 2 June that it will pay up to US\$350 million for Genia, which is developing a semiconductor-based DNA-sequencing technology that uses nanopores to read single genetic molecules. Roche wants to use sequencing in its diagnostics business. In 2012, it unsuccessfully tried to buy Illumina of San Diego, California, which owns most of the global sequencing market.

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TREND WATCH

This year, the United States has already experienced the greatest number of measles cases for 20 years, researchers from the Centers for Disease Control and Prevention in Atlanta, Georgia, announced last week. The country declared the disease eliminated in 2000, and more than 90% of its young population are vaccinated. The most likely reason for the rise, the researchers say, is that the virus is being imported by unvaccinated US travellers who then mingle with other unvaccinated people.

MEASLES SPIKE

US public-health experts urge vaccination after largest outbreak in 20 years.

