RESEARCH

Stem-cell inquiry

An investigation has been launched into last month's groundbreaking reports that simply squeezing cells or bathing them in acid can reprogram them into an embryonic state. The RIKEN Center for Developmental Biology in Kobe, Japan, said on 14 February that it was looking into alleged irregularities in the work of biologist Haruko Obokata, who works at the centre and who led the studies, which were published in Nature. The inquiry follows some failed attempts to replicate the results and allegations about problems with images in the papers. Nature is also investigating. See go.nature.com/6cagqv for more.

Neutrino study

An experiment run by the Fermi National Accelerator Laboratory in Batavia, Illinois, has detected neutrinos beamed from an unprecedented distance of 800 kilometres, according to a report released on 11 February. The further that the subatomic particles travel, the more researchers can learn about them. The NuMI Off-Axis Electron Neutrino Appearance (NOvA) experiment also

NUMBER CRUNCH

462,000

Amount in US dollars pledged by donors to the Immunity Project, a crowdfunded initiative to develop an HIV vaccine that has sparked debate among scientists. See go.nature. com/hwcnwu for more.



Politicians vow to get tough on poaching

A major political meeting in London has agreed to ramp up the fight against illegal wildlife trafficking, in the face of a huge rise in poaching. Countries including Kenya, Gabon, Tanzania, the United States, China, Germany and the United Kingdom agreed on 13 February to treat activities linked to poaching as a 'serious

crime' — a technical definition meriting tough penalties for criminals — among other measures. On 11 February, the United States also announced a domestic ban on selling African elephant ivory. More than 20,000 elephants and 1,000 rhinoceroses were poached in the past year in Africa. See go.nature.com/qjupqc for more.

hopes to shed light on why the Universe has more matter than antimatter.

POLICY

GM maize

Europe may allow farmers to grow a genetically modified (GM) variety of maize (corn) after a proposal to approve the crop did not receive enough opposition to be quashed at a meeting of European Union member states on 11 February. Of 28 countries, 19 voted against the move, but their weighted contributions did not add up to a decisive majority. The European Commission is now legally required to approve the variety, which has been declared safe by

the European Food Safety Authority in Parma, Italy. The crop, Pioneer 1507, produces a pesticide and would become the third GM crop to be approved in the European Union. See go.nature.com/ hez8v5 for more.

Open access

The publisher of Science is to launch its first openaccess journal in early 2015. The nonprofit American Association for the Advancement of Science (AAAS) announced the online-only journal, to be called Science Advances, on 12 February. Fees for publishing papers would be "within industry norms", said AAAS executive publisher and chief executive Alan Leshner. The London-based Royal Society has also announced a multidisciplinary open-access journal: on 18 February it revealed that Royal Society Open Science will launch in Autumn 2014 to complement the society's existing openaccess content. See go.nature. com/mtlcdd for more.

EU-Swiss row

European Union-Swiss research is under strain after a Swiss vote in favour of immigration quotas led the European Commission to suspend talks on the nation's participation in Europe's €80-billion (US\$110-billion) Horizon 2020 research programme. Switzerland might

PHOTOSHOT

be refused its 'associate partner' status in the programme, thus limiting scientists' ability to use European Research Council grants at Swiss institutes or to lead European Union-funded research consortia. See pages 265 and 277 for more.

Irrigation call

Global yields of maize (corn) could rise by 67% by 2050 if farmers in the developing world stopped tilling their soil and began irrigating their fields, says a study from the International Food Policy Research Institute in Washington DC. The report, published on 12 February (see go.nature.com/annqmt), assessed technologies that could most benefit food production in the global south. Increased funding for agricultural research also came high on the list of recommendations.

Disease control

The US Centers for Disease Control and Prevention and the Department of Defense announced on 13 February that they will team up with 26 countries, as well as agencies including the World Health Organization, over the next five years to improve global disease detection and control. They established a Global Health Security Agenda that calls for countries to increase immunizations

and share data. US President Barack Obama will ask for an extra US\$45 million for the programme in his budget request next month.

EVENTS

Rover resurrected



China's first Moon rover, Yutu ('Jade Rabbit', pictured), may vet be saved. The Chinese space agency initially said on 12 February that efforts to rouse the rover had failed after it experienced mechanical problems in late January before going into hibernation ahead of a two-week lunar night. But on 13 February, the space agency announced that it had resumed contact with Yutu. China is only the third country in the world to land on the Moon, after the United States and the former Soviet Union.

Fukushima water

Radioactive cooling water stored at the destroyed Fukushima Daiichi nuclear power plant might need to be dumped into the sea. The International Atomic Energy Agency, based in Vienna, raised the possibility of controlled discharges of pretreated water in its road map towards decommissioning the plant, which was delivered to Japan's government on 12 February.

BUSINESS

Power out

The US Energy Information Administration predicted on 14 February that the energy generated by coal-fired power plants in the United States will shrink by 20% (the equivalent of 60 gigawatts) by 2020. The reduction is the result of power-plant closures arising from competition from lower-priced natural gas and the need to modify plants to meet emission limits that take effect in April 2015. Power companies have already begun shutting down many smaller, inefficient facilities: 85 plants with a combined capacity of 10.2 gigawatts were retired in 2012.

Satnay success

Europe's fledgling satellitenavigation system, Galileo, is working well, the European Space Agency announced on 10 February. Tests of the network's first four satellites showed that the system

COMING UP

19 FEBRUARY

NASA announces findings from its high-energy X-ray mission, the Nuclear Spectroscopic Telescope Array (NuSTAR). The observations will reveal information about supernovae.

go.nature.com/ocxk3r

22 FEBRUARY

A spacecraft weighing just 3 kilograms will hitch a ride to the International Space Station. The miniature craft, containing 100 tiny satellites, is owned by schoolchildren and space enthusiasts. The KickSat mission was funded by the crowdsourcing website Kickstarter.

could accurately determine positions across the planet. Over the coming year, six more spacecraft will join the network, which will eventually consist of 30 satellites. The system is planned as a rival to the US-owned Global Positioning System, and services are scheduled to start by the end of 2014.

Stem-cell patent

Woo Suk Hwang, the disgraced Korean stem-cell scientist, was granted a patent from the US Patent and Trademark Office (USPTO) for human embryonic stem cell technology on 11 February. Hwang was found guilty of embezzlement and bioethics violations in 2009 (see Nature **505**, 468–471; 2014). The USPTO told Nature that it was aware of Hwang's fraudulent past and that the terms of the patent state that his stem-cell lines must be made available on request.

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TREND WATCH

SOURCE: ISAAA

Global planting of commercial genetically modified (GM) crops rose 3% last year to 175 million hectares — the smallest-ever year-on-year percentage increase. The United States planted 70.1 million hectares, just 0.9% more than the previous year, although it did plant its first drought-tolerant maize (corn) varieties, suggesting potential for future growth. The figures were released on 13 February by the non-profit International Service for the Acquisition of Agri-Biotech Applications.

