

POLICY

Encryption crisis

The US National Institute of Standards and Technology (NIST) was last week struggling to maintain trust among information scientists, after media reports that the US National Security Agency had compromised NIST-approved algorithms used to encrypt data. “NIST would not deliberately weaken a cryptographic standard,” the agency, headquartered in Gaithersburg, Maryland, said in a statement on 10 September. A day earlier, it had said that one of its approved algorithms should not be used because of a problem with how it generated random numbers. See page 282 for more.

No science minister

Australia's incoming government will do without a science minister — or so it seems from Prime Minister-elect Tony Abbott's cabinet, announced on 16 September. Abbott avoided explicitly naming science in any minister's portfolio (the first such omission since 1931). Much of the science portfolio would come under the industry ministry, he said.

Nuclear restart

North Korea may be restarting its nuclear reactor, a 5-megawatt plant in Yongbyon that could produce plutonium for nuclear weapons. Satellite imagery suggests that a building near the reactor is venting steam, reported analysts on the website 38 North (go.nature.com/pgcyqf), a programme of the US–Korea institute at the Paul H. Nitze School of Advanced International Studies in Washington DC. North Korea had said in April that it would restart the reactor, which



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More protection for endangered rhinos

The US Fish and Wildlife Service has added the southern white rhinoceros (*Ceratotherium simum simum*, pictured) to the list of animals protected under the US Endangered Species Act, to fight an increase in poaching abroad. The sub-species was already protected under international rules on trade in wildlife, but

sales of hunting trophies were allowed. This left a loophole under which horns from more endangered — and better protected — animals such as the northern white rhino (*Ceratotherium simum cottoni*) were passed off as trophies from southern white rhinos. The new rule increases restrictions on horn sales in the United States.

was shut down and partly demolished in 2008 as part of now-stalled disarmament talks.

Chemical weapons

Syria's agreement to join the Chemical Weapons Convention last week means that only six states — Egypt, Israel, Angola, North Korea, South Sudan and Myanmar — have not joined the treaty. Russia and the United States were waiting this week to see whether Syria would disclose its chemical-weapons arsenal and related facilities, a necessary step before the weapons can be destroyed. There is “clear and convincing evidence” that rockets containing the nerve gas Sarin were used in Damascus on 21 August, United Nations weapons inspectors said on 16 September.

Biofuels overhaul

The European Parliament has voted to limit crop-based biofuels, after criticisms that fuels such as biodiesel from palm oil can produce greater greenhouse-gas emissions than fossil fuels, and can contribute to deforestation and rising food prices (see *Nature* 499, 13–14; 2013). The new policy retains a target that 10% of transport fuels should come from renewable sources by 2020 — but sets a 6% cap on crop-based biofuels. However, another vote will be needed because some politicians objected. See go.nature.com/yqzrug for more.

Laureate scuttled

A proposal to create a ‘US science laureate’ position has hit a roadblock. The US House of Representatives cancelled a

planned 10 September vote on a bill to establish the unpaid, honorary position after a conservative group objected to the plan as wasteful and unnecessary. The bipartisan group of lawmakers behind the laureate plan says that it will hold a hearing on the measure next month.

RESEARCH

Voyager breakthrough

The Voyager 1 spacecraft has entered interstellar space 36 years after its launch, physicists reported on 12 September (D. A. Gurnett *et al.* *Science* <http://doi.org/nsv>; 2013). According to plasma-density measurements, the spacecraft left the heliosphere — the Sun's cocoon of charged particles — in late August 2012. The findings settle an argument

that has raged among Voyager team members for more than a year (see *Nature* 489, 20–21, 2012). The probe remains short of the Oort cloud, a reservoir of comets that is still part of the Solar System. See go.nature.com/cdkxck for more.

Meningitis triumph

A cheap vaccine against meningitis A has proved a huge success, boosting hopes of cleaning up Africa's 'meningitis belt' — where the disease periodically kills thousands in intense epidemics. Mass vaccination of 1.8 million people in Chad cut cases of meningitis by 94% relative to unvaccinated parts of the country, researchers reported on 12 September (D. M. Daugla *et al. Lancet* <http://doi.org/nr6>; 2013). The GAVI Alliance in Geneva, Switzerland, will have rolled out the vaccine in 12 countries by the end of 2013, and has committed US\$267 million to reach another 14 countries by 2016.

Kenya strikes water

Massive reserves of groundwater have been discovered in parched northern Kenya. Exploration firm Radar Technologies International (RTI) used satellite and seismic data to find aquifers that contain at least 250 billion cubic metres of water, it announced on 11 September. Confirmed by drilling



(pictured), the renewable part of the water reserve (replenished by rainfall each year) amounts to 3.4 billion cubic metres, boosting Kenya's renewable water resources by 17%, RTI says.

HeLa data approval

An advisory committee within the US National Institutes of Health gave researchers permission to use genomic data from the HeLa cell line for the first time on 16 September. The announcement follows several months of negotiations over data-use rights with the family of Henrietta Lacks, whose cervical tumour gave rise to the HeLa cell line in 1951. See go.nature.com/xbscgv for more.

UK trial registry

Medical researchers in the United Kingdom will need to register their clinical trials in a publicly accessible database to gain ethical approval, under

a policy that comes into effect from 30 September. The Health Research Authority in London announced the policy on 11 September. Compulsory registration has been a key demand of campaigners for greater openness in medical research; some trials must already be registered in some jurisdictions, but compliance has been patchy.

Brain roadmap

The US National Institutes of Health in Bethesda, Maryland, has revealed nine broad research goals for its ambitious, multi-year brain-mapping initiative, which was announced in April by US President Barack Obama. Priorities include improving knowledge of the brain's cell types, how they are connected and how they communicate, says the agency's 16 September report. The plan will be further refined up to June 2014. See go.nature.com/iyruqe for more.

FACILITIES

Flash flooding

Unusually heavy rains have flooded more than 6,100 square kilometres of Colorado. Between 11 and 17 September, rising waters destroyed roughly 1,500 homes in the state's most populated region, killed at least 8 people and displaced 11,750 more, according to the

COMING UP

21–24 SEPTEMBER

The European Molecular Biology Organization meets in Amsterdam. Discussions will include the future of cancer genomics. <http://the-embo-meeting.org>

Colorado Office of Emergency Management. The floods also closed major scientific facilities in Boulder, including the University of Colorado and the National Center for Atmospheric Research, for several days.

BUSINESS

Fracking laws

California passed a bill on 11 September that puts strict requirements on companies that produce oil and gas through hydraulic fracturing ('fracking'). State governor Jerry Brown is expected to sign the law, which requires firms to seek permits before fracking, and to disclose to the state all of the chemicals they use. Southern California's San Joaquin and Los Angeles basins hold 64% of the technically recoverable US shale-oil reserve, according to the US Energy Information Administration.

Sclerosis success

The monoclonal antibody alemtuzumab was approved to treat multiple sclerosis (MS) by the European Commission on 17 September. The immune-quieting antibody was first developed in the 1980s, and found use in treating lymphomas and preventing rejection of organ transplants. The drug was developed for MS treatment by Genzyme, based in Cambridge, Massachusetts. See go.nature.com/phawy5 for more on alemtuzumab's clinical-trial success.

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TREND WATCH

Each year, the European Union's 'innovation scoreboard' puts the region behind the United States on an index based on a raft of measures, including scientific publications, research spending and patents. But on 13 September, the European Commission announced a new index focusing on innovation output — broadly speaking, how well nations squeeze economic value out of their ideas. This scores the regions as equal. The two indicators will be published alongside each other in future.

TRANSATLANTIC INNOVATION RACE

A new measure of innovation output puts the European Union (EU) on level pegging with the United States, unlike the old Scoreboard.

