

SEVEN DAYS

The news in brief

RESEARCH

Sea ice minimum

Arctic sea ice this year retreated to its third-lowest extent since satellite measurements began in 1979. The US National Snow and Ice Data Center in Boulder, Colorado, declared on 15 September that the ice had reached its summer minimum on 10 September, falling back to 4.76 million square kilometres — 1.62 million square kilometres below the average minimum for 1979–2009.

Ranking reshuffle

There were big changes to the top ten institutions in a well regarded league table of the world's best universities, published by the United Kingdom's *Times Higher Education* magazine last week. Only Harvard University in Cambridge, Massachusetts, maintained its position from last year, again ranking number one in the world. Four universities still in the top ten lost ground, including the University of Cambridge, UK, which slipped four places to sixth. The 2010 table used indicators such as research

SOUND BITE

“A sense of helplessness is spreading among scientists.”

Biologist Jesús Avila, at the Severo Ochoa Centre for Molecular Biology in Madrid, on rumoured research budget cuts in Spain. See go.nature.com/Lyr7ed for more.



R. L. WOLLENBERG/UP/NEWS.COM

Efficient cars snap up X Prize

Three cars have shared the US\$10-million Automotive X Prize, a competition to build an environmentally friendly mass-market vehicle. The non-profit X Prize Foundation announced the results on 16 September. The 'Very Light Car' (pictured centre), made by Edison2 in Lynchburg, Virginia, won \$5 million in the mainstream, four-passenger class; it runs on 85% ethanol and 15% gasoline (petrol), and

weighs 376 kilograms. In the alternative two-passenger class, two lithium-ion-battery cars — one by Li-ion Motors Corp of Mooresville, North Carolina (left), and one by X-Tracer of Winterthur, Switzerland (right) — split the \$5-million prize. The cars had to achieve a fuel-efficiency equivalent to at least 43 kilometres per litre of petrol (100 miles per US gallon), and be cheap enough to sell in the tens of thousands.

income and citation impact to rank institutions; previously, it had relied on the reputation and size of universities.

Animal abuse

A company that provided animal testing for pharmaceutical firms has halted research and will hand over its animals, the US Department of Agriculture (USDA) announced on 15 September. The shutdown comes after the animal rights organization People for the Ethical Treatment of Animals, based in Norfolk, Virginia, released an undercover video revealing abuse of lab animals at Professional Laboratory and Research Services in Corapeake, North Carolina. The USDA has launched an investigation of the laboratory.

Research conduct

A global statement on the responsible conduct of research was released on 22 September by delegates who attended the 2nd World Conference on Research Integrity in Singapore on 21–24 July. The statement (singaporestatement.org), intended as a global guide, includes paragraphs on reporting and responding to irresponsible research practices.

POLICY

NIH merger

A panel of advisers to the National Institutes of Health (NIH) voted decisively on 15 September to recommend the creation of a new NIH institute, merging the National

Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA). The consolidated institute would also house addiction and substance-abuse research currently located elsewhere at the biomedical agency. Advocates including former NIDA director Alan Leshner have long urged the uniting of NIDA and NIAAA, with their respective 2010 budgets of US\$1 billion and \$462 million, into one institute. NIH director Francis Collins will make the final decision.

Swedish election

Sweden's ruling centre-right coalition remains on track to shake up the country's stagnating research performance after it

H. CLARK/AP

dominated national elections on 19 September. The coalition's failure to win an outright majority is unlikely to affect plans — published in a position paper in July — to increase funding for 'wild card' researchers with bold ideas, and to support promising young scientists. See go.nature.com/1YRq7K for more.

Badger cull

Farmers in England could soon be allowed to kill badgers to combat the spread of bovine tuberculosis (TB) carried by the animals, despite objections from scientists. On 15 September, the UK coalition government began a consultation on plans to allow groups of farmers to vaccinate or kill badgers at their own expense. Some experts think that the government proposals may worsen the bovine TB problem by encouraging infected badgers to flee their territories and spread disease farther afield. See Editorial, p.368.

Fossil protection

China is implementing tighter rules for palaeontological explorations, hoping to halt illicit trade in valuable specimens such as dinosaur bones. Historically, provinces have been able to issue permits for explorations and the export of fossils, which are sometimes not returned. The

new regulations, to take effect from 1 January 2011, vest authority for issuing permits with the Ministry of Land and Resources, which can also levy fines for infractions. The rules were issued on 11 September by China's state council.

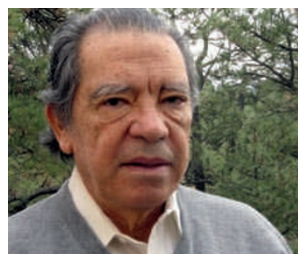
ITER budget snub

A proposal to cut Europe's research budget to fund the experimental ITER fusion reactor has been frostily received by members of the European Parliament (MEPs), who must ultimately approve the deal. This summer, the European Commission proposed plugging a €1.4-billion (US\$1.75-billion) budget deficit at ITER with funds from sources such as Europe's Seventh Framework Programme for research. But MEPs are not happy with the plan: Reimer Böge, a German MEP and rapporteur to the parliament's budget committee, told *Nature* that the parliament, European ministers and the commission must work on a better solution.

PEOPLE

Espionage arrest

Two former employees of the Los Alamos National Laboratory in New Mexico — physicist Pedro Leonardo Mascheroni, 75, and his wife, Marjorie Roxby Mascheroni,



67 — were arrested on 17 September and charged with offering nuclear secrets to Venezuela. The couple face life sentences if found guilty on 22 charges. The FBI had been investigating Mascheroni (pictured) since March 2008, when an undercover agent approached him posing as a government official for the South American country. Criminal charges allege that Mascheroni asked for about US\$800,000 and Venezuelan citizenship in exchange for a document containing "restricted data" on nuclear weapons development.

BUSINESS

Oil well sealed

A last squirt of cement sealed the Macondo oil well in the Gulf of Mexico on 18 September, permanently shutting down the site. Engineers drilled a relief well about 4,000 metres beneath the sea floor and injected cement into the ruptured well shaft from below. Capped since July, the well had earlier spilled

COMING UP

27–28 SEPTEMBER
Scientists who study the structure and growth of the World Wide Web meet to discuss the future of the resource — including its possible fragmentation — at the Royal Society in London.

go.nature.com/XhAt5a

28 SEPT–2 OCT
The genes and molecular processes that control the ageing of cells and organisms are explored at a meeting at Cold Spring Harbor Laboratory in New York.

go.nature.com/wUQAAd

29 SEPT–1 OCT
Rotterdam, the Netherlands, hosts a conference on river deltas in times of climate change. Flood-risk management, salt-water intrusion, delta governance and methods for financing adaptation will be discussed.

go.nature.com/XBTJbs

around 4.9 million barrels (780 million litres) of oil after the explosion of the Deepwater Horizon rig on 20 April.

Vaccine venture

Johnson & Johnson (J&J) may be the next big pharmaceutical company to enter the vaccine market. On 17 September, the company announced that it is in late-stage negotiations to buy Crucell, a vaccine developer based in Leiden, the Netherlands, for €1.75 billion (US\$2.3 billion). J&J, based in New Brunswick, New Jersey, already owns 17.9% of Crucell, which makes vaccines against flu, hepatitis A, hepatitis B and cholera, among others. If the deal goes through, Crucell will become the headquarters of J&J's vaccine efforts.

SOURCE: BMBF

FUNDING WATCH

Germany's Federal Ministry of Education and Research (BMBF) is set for a budget increase of 7.2% to €11.65 billion (US\$15.2 billion) under proposals for 2011, unveiled on 15 September — despite an overall fall in federal spending. The plan marks a 54% rise in the BMBF's budget since 2005 (see chart); the ministry gets about 70% of federal research funding. The proposal will be debated in coming weeks. Germany is on track to raise its research spending to 3% of the gross domestic product within a few years, to meet European Union targets.

GERMAN BOOST TO RESEARCH

A proposed cut in federal spending is not affecting plans to increase public investment in research and development.

