

# SEVEN DAYS

The news in brief

## POLICY

### Racial bias at NIH?

The US National Institutes of Health (NIH) is investigating whether its reviewers are racially biased, after an agency-funded study found that black scientists were less likely to win funding for grant applications than white scientists were, even when educational background, nationality, training and other variables were taken into account. “The situation is not acceptable,” says NIH director Francis Collins. The study was published on 18 August (D. K. Ginther *et al. Science* 333, 1015–1019; 2011), together with a commentary in which Collins committed the NIH to action. See [go.nature.com/dpnb31](http://go.nature.com/dpnb31) for more.

### Lab safety at Yale

US federal investigators have criticized safety standards at a machine lab at Yale University in New Haven, Connecticut, where 22-year-old undergraduate Michele Dufault died in April (see *Nature* 472, 270–271; 2011). But Yale disputes the findings, saying that they contained “significant inaccuracies”. The US Occupational Safety and Health Administration (OSHA) found faults with the lathe at which Dufault was

## NUMBER CRUNCH

# 86%

The proportion of Earth’s species yet to be discovered, according to a 23 August study showing that the planet is host to between 7.4 million and 10 million species. See [go.nature.com/gbw9pg](http://go.nature.com/gbw9pg) for more.

Source: C. Mora *et al. PLoS Biol.* 9, e1000606 (2011)



AL DIAZ/MIAMI HERALD/MCT/NEWSCOM

## Key test agreed for private spaceflight

The first flight to the International Space Station by a commercial vehicle should take place later this year. Private spaceflight company SpaceX, based in Hawthorne, California, said on 15 August that NASA

had given it a 30 November date to launch its Dragon capsule for a mission to dock with the station. The capsule, which is intended to carry astronauts in the future, will be sent to space on the company’s Falcon 9 rocket (pictured).

working, and said Yale should ensure that students don’t work alone. But OSHA did not fine the university over the problems because it has jurisdiction over workplace incidents only if they involve paid employees. See [go.nature.com/1uai86](http://go.nature.com/1uai86) for more.

### Zone of no return

Japan’s government is expected to officially confirm this week that many people will not be allowed to return to their homes around the Fukushima Daiichi nuclear plant — probably for decades. A survey released last week by the science and education ministry found that levels of radiation are still beyond government safety limits in

most areas on the edge of a 20-kilometre exclusion zone around the plant (set up soon after the nuclear crisis began). See [go.nature.com/d4g4n2](http://go.nature.com/d4g4n2) for more.

### All change in Italy

Italian science politics is set for a shake-up after new heads were nominated for 11 research institutes on 13 August. Scientists say the changes could protect budgets and lead to more transparent recruitment. See page 386 for more.

## BUSINESS

### Melanoma hope

A cancer drug that yielded remarkable results against seemingly intractable

advanced melanoma in clinical trials (see *Nature* 467, 140–141; 2010) was approved by the US Food and Drug Administration on 17 August. The drug, vemurafenib (Zelboraf), targets cancers that bear a particular mutation in the B-RAF protein. Regulators also approved a test to identify cancers with this mutation. Vemurafenib was developed by the biotechnology firm Plexxikon, based in Berkeley, California, and Swiss drug company Roche.

### Lymphoma drug

In another cancer drug approval last week, Seattle Genetics, based in Bothell, Washington, has been given the green light from

IBM RESEARCH the US Food and Drug Administration to sell its targeted lymphoma therapy, brentuximab vedotin (Adcetris). The drug combines an antibody that targets lymphoma cells with a poison that is released inside the cell. See page 380 for more.

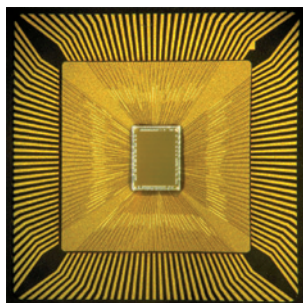
## RESEARCH

## Higgs signal fades

The Higgs boson is proving tougher to find than physicists had hoped. In July, a flurry of 'excess events' (see *Nature* 475, 434; 2011) hinted that the Higgs was popping up inside the Large Hadron Collider, the particle accelerator at CERN, Europe's high-energy physics lab near Geneva, Switzerland. But data presented on 22 August at the Lepton Photon 2011 conference in Mumbai, India, show the signal fading. That means that the excess "is probably just a statistical fluctuation", says Adam Falkowski, a theoretical physicist at the University of Paris-South in Orsay, France. See [go.nature.com/shww4r](http://go.nature.com/shww4r) for more.

## Brainy microchips

Researchers at computing giant IBM have unveiled experimental microchips that they say emulate the brain's architecture. Conventional chips have their computational elements in the



central processing unit, with the random-access memory off to one side. But in IBM's 'cognitive computing' chips (pictured), the two are wired together, allowing signals to flit between memory and computation. Because less energy is wasted shuttling electrons around, the main benefit is decreased power consumption. The chips may also be good at crunching through problems such as pattern recognition. See [go.nature.com/7ipigl](http://go.nature.com/7ipigl) for more.

## Research for hire

A US company that encourages researchers to outsource their experiments online last week launched its eBay-like website, [scienceexchange.com](http://scienceexchange.com). Science Exchange, based in Palo Alto, California, hopes that scientists will post experiments on the website, and that other researchers and institutions with the facilities and expertise will

submit bids to do the work. Elizabeth Iorns, the company's co-founder, says that this could speed up research and use facilities more efficiently. See [go.nature.com/5tzarv](http://go.nature.com/5tzarv) for an interview with Iorns.

## Deforestation up

Deforestation in the Amazon rainforest is 15% greater than last year, according to preliminary results from coarse-resolution satellite data released by Brazil's National Institute for Space Research in São José dos Campos. The rise in the August 2010 to July 2011 season is disappointing, given the drastic cuts in deforestation that Brazil has managed since 2004. But it could have been worse: stronger enforcement seems to have countered sudden spikes of forest clearing seen earlier in the year, as farmers and loggers anticipated a weakening in Brazil's 'forest code' (see *Nature* 476, 259–260; 2011). That legislation is still being debated.

## Future space tech

NASA is putting about US\$175 million into three space missions to develop technology that might be used on future science probes, the agency announced on 22 August. A mercury-ion atomic clock to test ultra-precise timing in deep space should be ready to launch in

## COMING UP

28 AUG–1 SEPT

The American Chemical Society holds its 2011 autumn meeting in Denver, Colorado. Talks include the use of chemistry to produce cleaner air and water. [go.nature.com/mmnd5d](http://go.nature.com/mmnd5d)

31 AUGUST

Rumours from Beijing hint that China's first experimental space laboratory, Tiangong 1, may launch by the end of this month.

three years, as should a solar sail seven times larger than any yet deployed in space. A demonstration in which lasers will be used to transmit data from a spacecraft (radio waves are used at present) should launch in four years. See [go.nature.com/icw5bp](http://go.nature.com/icw5bp) for more.

## PEOPLE

## NIH resignation

The director of a soon-to-be-dissolved centre at the US National Institutes of Health (NIH) is stepping down. Barbara Alving, who has headed the National Center for Research Resources (NCRR) since 2005, announced her resignation on 16 August. It takes effect on 1 October, the start of the US government's 2012 budget year. That is also when NIH director Francis Collins hoped to have congressional approval to create a new translational medicine centre, which is expected to absorb some of the functions of the dismantled NCRR (see *Nature* 471, 15–16; 2011). But the future of this reorganization is uncertain, with Congress yet to pass an NIH 2012 spending bill.

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## TREND WATCH

Biotech company Dendreon in Seattle, Washington, reported on 4 August lower-than-expected earnings for its Provenge prostate cancer vaccine (see [go.nature.com/p1729i](http://go.nature.com/p1729i)), sending its shares, and those of some other biotech companies, into a tailspin in a volatile August market. Three other companies (see graph) that had just launched or were about to launch products were hit by worries that financial woes would drive down demand for expensive biotech medicines.

## US BIOTECH STOCKS PLUNGE IN AUGUST

In a volatile market, poor results from Dendreon seem to have dragged down the share prices of other biotech companies this month.

