

SEVEN DAYS

The news in brief

POLICY

Stem-cell finale

The US Supreme Court has guaranteed that government-funded researchers will continue to be able to work with human embryonic stem cells. In declining to take up an appeal by the plaintiffs in the case of *Sherley v. Sebelius*, the high court ended a 3.5-year legal battle in which two researchers working with adult stem cells challenged the legality of the National Institutes of Health (NIH) funding the work, which requires the destruction of days-old embryos. NIH director Francis Collins said he was “very pleased” with the 7 January decision. See go.nature.com/ouwpo2 for more.

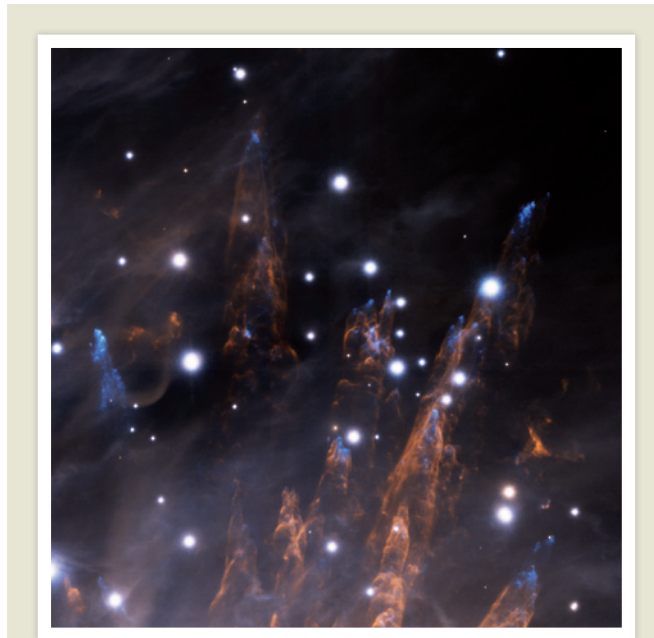
Poland GM ban

The Polish government on 2 January imposed a ban on the cultivation of two genetically modified (GM) crops: MON 810, an insect-resistant maize (corn); and Amflora, a starchy potato used in the paper industry. They are the only GM crops approved by European Union (EU) science advisory committees as safe for agriculture. Poland is one of nine EU members that have

NUMBER CRUNCH

17 bn

Number of stars in the Milky Way that harbour a roughly Earth-sized planet in a close orbit, according to researchers at the Harvard-Smithsonian Center for Astrophysics. They presented their study on 7 January at the American Astronomical Society meeting in Long Beach, California.



Orion bullets shot in detail

The Gemini South telescope in Chile has been fitted with five lasers and three deformable mirrors, allowing astronomers to correct for atmospheric distortions over an exceptionally large field of view. On 9 January, at a meeting of the American Astronomical Society in Long Beach, California, astronomers unveiled the telescope's ultra-sharp portrait of the ‘bullets’ of gas seen in the Orion Nebula. In the image, clumps of iron gas (blue) race through the nebula, leaving behind pillars of hot, glowing hydrogen gas (orange).

sought to impose such bans — despite EU legislation that requires all member states to permit cultivation of approved crops. European courts have ruled against bans in two countries. Many of the bans rely on a legal loophole, with countries claiming that there is new information on harm caused by the crops that is yet to be evaluated.

Energy tax credits

The US alternative-energy industry received a bundle of tax incentives in the budget deal that was passed by Congress on 1 January to avert sweeping cuts in government spending. The

deal offered an extra year for electricity producers to claim 10 years of tax credits for wind, geothermal and biomass projects. Lawmakers also reinstated a tax credit of US\$1 per gallon (26.5 cents per litre) for biodiesel production, applied retroactively to 2012 when the credit expired, and extending through 2013.

Indian aspirations

India is setting its sights on becoming one of the top five global scientific powers by 2020, and should double its research expenditure to 2% of its gross domestic product in five years, according to

prime minister Manmohan Singh. He was speaking as a new policy on science, technology and innovation was unveiled at the opening of the Indian Science Congress in Kolkata on 3 January. The policy is aimed at increasing the number of scientists in India by 66% by 2017, and at enhancing private-sector participation in research. Some of its aims, including spending targets, were proposed in India's Twelfth Five Year Plan, released on 27 December 2012. See go.nature.com/8te55t for more.

US food safety

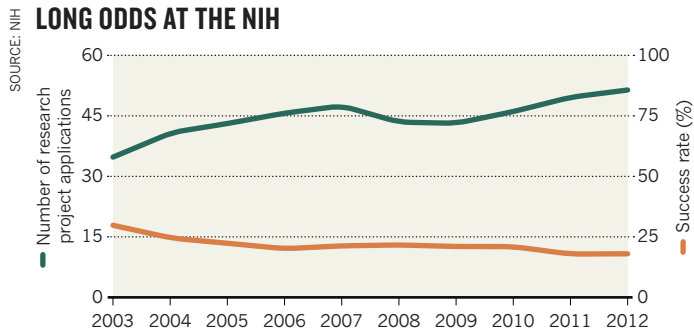
On 4 January, the US Food and Drug Administration released the first of its long-awaited proposals for protecting food safety. The draft regulations are a result of the Food Safety Modernization Act, signed into law in January 2011, and are intended to shift the agency to a preventive, rather than reactive, stance on food-borne illness. One of the two proposed regulations requires food makers to develop plans for preventing contamination; the other sets safety standards for farms that grow produce, including, for example, permitted levels of microbes in irrigation water.

PEOPLE

Whistleblower out

A scientist who set up a whistle-blowing website to flag up problems in the scientific literature revealed his identity last week, after he shut down the site following legal threats. Paul Brookes, a biologist at the University of Rochester, New York, said he had registered www.science-fraud.org in July 2012, motivated by frustration at the channels available for dealing with scientific misconduct.

LONG ODDS AT THE NIH



RESEARCH

Success rates stuck

The success rate for grant applicants to the US National Institutes of Health (NIH) remained unchanged at a historic low of 18% in 2012 (see **graph**), the agency announced on 2 January. Sally Rockey, the NIH's deputy director for extramural research, wrote on her Rock Talk blog that the rate for research project grants was the same as that in the 2011 fiscal year, despite a 3.5% increase in applications to 51,313, a record high.

Average grant size increased by 1.1%, to US\$454,588. In all, the agency spent \$15.9 billion of its \$30.9-billion budget on research grants.

Boston pathogen lab

The US National Institutes of Health (NIH) will support a plan for a laboratory in Boston, Massachusetts, to work with some of the world's most dangerous

pathogens. On 2 January, the NIH announced its final determination that Boston University's National Emerging Infectious Diseases Laboratory poses little risk to the surrounding community. The laboratory, which had been under review at NIH since 2001, must win approvals from state and local authorities before it can upgrade its research to biosafety level 4, the highest level of containment.

BUSINESS

Pharma split

Abbott Laboratories has spun off its drug-discovery business into an independent company called AbbVie, it said on 2 January. Abbott, based in Abbott Park, Illinois, will retain its medical devices, diagnostics, nutritional products and generic pharmaceutical business. AbbVie, headquartered in North Chicago, Illinois,

previously functioned as an Abbott subsidiary; it earned US\$17.4 billion in 2011. The now-separate firm plans to expand the market for its blockbuster anti-inflammatory antibody Humira (adalimumab), and to push forward candidate drugs that include several hepatitis C antivirals.

Stem-cell transfer

Pioneering biotechnology company Geron is shedding its assets in human embryonic stem cells. The company, based in Menlo Park, California, announced its plans on 7 January. It will transfer cell lines, its early clinical programme in spinal-cord injury, and some 400 patents and patent applications to a subsidiary of BioTime, a company in Alameda, California, which is run by two former Geron heads. Geron funded initial academic work to isolate human embryonic stem cells in the 1990s, but current management said that the technology is a poor investment.

Fetal DNA sale

A firm that develops non-invasive tests for fetal DNA was sold to DNA-sequencing leader Illumina of San Diego, California, for US\$350 million, the two companies announced on 7 January. Verinata Health, based in Redwood City,

COMING UP

15-17 JANUARY

The nexus between water and energy comes under tighter focus at Abu Dhabi's annual World Future Energy Summit, which this year is held jointly with the inaugural International Water Summit.

go.nature.com/1b68r1

16-18 JANUARY

Experts on gravitational waves discuss frontiers in the field at a meeting in Seoul.

go.nature.com/jugqyh

California, markets a test for chromosomal abnormalities, such as Down's syndrome, that involves sequencing fetal DNA circulating in a mother's blood. The company is embroiled in intellectual-property disputes with two other firms in a prenatal genetic-testing market potentially worth billions (see *Nature* **486**, 454; 2012). On the same day, Illumina's share price dropped by 7% after drug giant Roche said that it did not plan to buy the company.

Spill settlement

Drilling company Transocean, based in Vernier, Switzerland, reached a US\$1.4-billion settlement with the US Department of Justice on 3 January for charges related to the 2010 Deepwater Horizon disaster, in which one of the company's oil platforms in the Gulf of Mexico exploded. The deal follows a \$4.5-billion settlement last year by oil-and-gas giant BP (see *Nature* **491**, 501; 2012). It includes \$150 million each for the National Academy of Sciences and the National Fish and Wildlife Foundation, to support environmental restoration and protection and health research in the region.

TREND WATCH

Around 9,500 people lost their lives last year in natural disasters — less than one-tenth of the ten-year average. Had it not been for Hurricane Sandy, material losses from storms, floods, droughts and earthquakes would also have been exceptionally low. Overall damage from natural disasters in 2012 was US\$160 billion, less than half the 2011 figure and slightly below the ten-year average, according to the German reinsurance group Munich Re. Sandy alone accounted for an estimated \$50 billion.

COUNTING CATASTROPHES

Deaths from natural disasters were relatively low in 2012, as few catastrophes occurred in developing countries.

