

Biofuels receive boost from US government

Three new bioenergy research centres have each won \$25 million per year for five years from the US Department of Energy to accelerate research into biofuels. Including external funding rustled up by the winning projects, the whole effort will top \$500 million.

Three beaming investigators shook energy secretary Samuel Bodman's hand at a 26 June press conference in Washington DC. They represent three consortia, each of which includes at least one national lab. The lead institutions are Oak Ridge National Laboratory in Tennessee; the University of Wisconsin in Madison; and Lawrence Berkeley National Laboratory in Berkeley, California.

The new centres will have slightly different emphases, but all will take a crack at the famously difficult problem of coaxing ethanol out of cellulose — the tough indigestible parts of plants.

Asteroid strike may have formed Siberian lake

After nearly 100 years of searching, scientists have found what may be an impact crater made by the object that caused a huge blast over the remote Siberian area of Tunguska on 30 June 1908.

Most researchers think the blast, which flattened trees over an area of more than 2,000 square kilometres, was caused by an incoming stony asteroid exploding 5 to 10 kilometres above the ground. But numerous expeditions have failed to locate a crater or any fragments of the exploding object.

Now, Luca Gasperini from the Institute of Marine Science in Bologna, Italy, and others say that an almost circular lake called Lake Cheko may be a crater left by a remnant from that blast (L. Gasperini *et al.* *Terra Nova* doi:10.1111/j.1365-3121.2007.00742.x; 2007). Gasperini and his colleagues used seismic profiling, sonar and core sampling of bottom sediments to characterize the lake, which is about 8 kilometres from the epicentre of the explosion. Unlike other lakes in the region, 300-metre-wide Lake Cheko has a steep, funnel-shaped profile. The team plans to drill deeper into the lake bottom next summer.

Ethical ruling and matured eggs offer hope for fertility

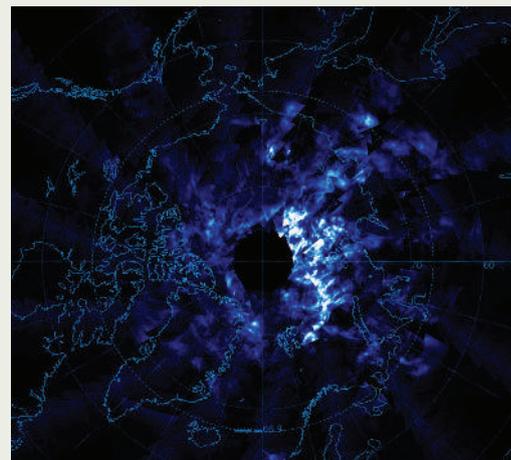
A Montreal mother has become the first woman to legally donate her frozen egg cells to her daughter. They are likely to be frozen for up to 20 years, until the daughter is ready to use them. She is now aged seven and has

AIM satellite snaps night-shining clouds

Noctilucent, or 'night-shining', clouds glow in shades of white and blue in this new image from the Aeronomy of Ice in the Mesosphere (AIM) satellite. Launched on 25 April, the mission snapped this picture on 11 June, as the season for seeing such clouds got underway in the Northern Hemisphere.

The clouds form in the mesosphere, about 85 kilometres up, and thus reflect sunlight long after the Sun has set — hence their name. They have been appearing more frequently and at lower latitudes in recent years, and some researchers suspect that may be due to climate change: as surface temperatures rise, those in the mesosphere drop, enhancing the cold conditions needed for noctilucent clouds to form.

AIM, the first mission to study these clouds, will spend the next two years looking at them above both the Northern and Southern Hemispheres.



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Turner syndrome, a congenital disease that causes ovaries to malfunction. The mother, in her early thirties, made "a very cogent argument" to the ethical review board of McGill University in Montreal, Canada, says Seang Lin Tan, the fertility expert who carried out the procedure.

Days earlier, Israeli doctors reported that they have successfully matured and frozen eggs from a girl aged five, potentially lowering the age at which cancer patients can preserve their fertility for future years. The work was led by fertility expert Ariel Revel of Hadassah University Hospital in Jerusalem.

Both results were presented at the European Society of Human Reproduction and Embryology's annual meeting in Lyon, France.

Health scare halts work on biodefence in Texas

The US government has suspended Texas A&M University in College Station from doing all federally funded biodefence research, after an oversight group found evidence that workers in its labs had been infected with biological-weapons agents.

On 26 June, the Sunshine Project based

in Austin, Texas, reported that three A&M researchers became infected with Q fever in 2006. Another lab worker was infected with the bacterium *Brucella* that same year, a fact not uncovered until April 2007. Both Q fever and *Brucella* are pathogens on the highly regulated 'select agents' list.

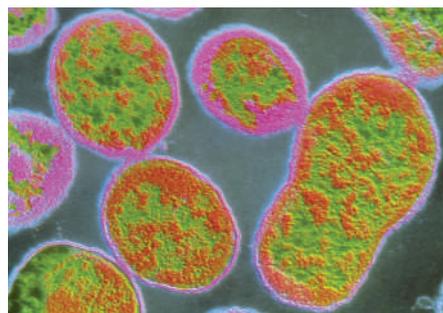
On 30 June, the US Centers for Disease Control and Prevention in Atlanta, Georgia, shut down all biodefence work at A&M, saying it will investigate the university's practices. A&M is currently on the shortlist to host a \$450-million federal complex of biosecurity labs called the National Bio and Agro-Defense Facility (see *Nature* 442, 962–963; 2006).

US institute insists on open access to research

The Howard Hughes Medical Institute (HHMI), a leading private sponsor of biomedical research in the United States, will require its 300-plus investigators to make their research publicly accessible within six months of publication (see *Nature* 443, 894–895; 2006). Articles that do not meet this requirement will not be considered when the investigators apply for contract renewals.

The policy, announced on 26 June, will come into effect at the start of 2008 and will apply only to papers on which an HHMI investigator is the first, last or corresponding author.

HHMI investigators will still be able to publish in many publications, including *Science*, *Nature* and *Cell*. The institute has agreed to cover the costs incurred by some publishers, including Elsevier and John Wiley, for making the articles publicly available.



Brucella bacteria have infected a Texas researcher.