Virgin offers big reward for capturing carbon

A US\$25-million prize — one of the largest science prizes around — is on offer to the inventor of a device that will remove 'significant amounts' of carbon dioxide from the atmosphere.

"The winner must be able to demonstrate a commercially viable design which will result in the net removal of anthropogenic, atmospheric, greenhouse gases each year for at least ten years without countervailing harmful effects," state the rules of the Virgin Earth Challenge competition.

Among the judges are NASA climate scientist James Hansen; James Lovelock, inventor of the Gaia hypothesis; UK environmentalist and retired diplomat Crispin Tickell; and Australian conservationist and author Tim Flannery.

The competition is open for at least the next five years. British billionaire entrepreneur Richard Branson and former US vice-president Al Gore launched the prize on 9 February in London.

Historian to lead science forward at Harvard

Harvard University's new president, Drew Gilpin Faust, is a historian. But she is expected to continue many of the sciencebased initiatives that her predecessor, the controversial Larry Summers, put in place.

Plans are moving apace to create a science research complex in the Boston suburb of Allston — one of Summers' signature projects. He announced his resignation last February, in part over the furore about his comments on differences between men and women in science.

After her appointment on 11 February, Faust said that much remained to be done to address gender inequality in the sciences. She was the founding dean of the Radcliffe Institute for Advanced Study, a former women's college, which has put on science conferences on topics such as computational biology and tissue engineering. She also led two task forces looking at the status of



Pointing the way: Harvard boss Drew Gilpin Faust wants to address sexual inequality in science.

Horse genome to help human conditions

Twilight, the thoroughbred mare pictured here, is now the gold standard for all other horses: her DNA has been sequenced as the reference genome of the horse (*Equus caballus*).

The draft sequence, released on 7 February, should help the study of human conditions such as allergic disease, arthritis, exercise physiology and fertility. These studies will be aided by the fact that people have been breeding horses for 4,000 to 6,000 years and keeping close records of the bloodlines, allowing particular genes to be traced back through time.



women faculty at Harvard, including one on women in science and engineering, following Summers' controversial remarks.

Biologist Thomas Cech, head of the Howard Hughes Medical Institute in Chevy Chase, Maryland, was also a finalist for the president's job, but withdrew from the running last month.

UK's Diamond synchrotron turns on the lights

Britain's Diamond synchrotron, a £260-million (US\$505-million) device that is one of the country's largest pieces of new scientific infrastructure in decades, welcomed its first users late last month.

Diamond's initial users will study materials used in computer memories, a protein involved in cancer, and mineral samples from a meteorite that could shed light on conditions in the early Solar System. The facility currently has seven beamlines, producing X-rays with energies of between 100 and 20,000 electronvolts. It has funding to build another 15, which should all be online by 2011.

The debut of Diamond, situated near Oxford, marks the return of a world-class synchrotron to Britain: the first synchrotron was run in London in 1946. In 1993, government advisers warned that the country needed to build a new device to compete with systems elsewhere.

Catholic college sells land, but blocks stem-cell work

The University of Sydney in Australia will not conduct fetal stem-cell research in a new Aus\$350-million (US\$270 million) biomedical research centre planned on land obtained from a Roman Catholic college.

The 5 February compromise was reached after the university paid at least Aus\$11 million to St John's College for land the Catholic school had controlled under a trust. St John's governing council sought the stem-cell restrictions even though the university had not planned such research at the new centre, which is expected to be completed by 2012.

University officials say they don't believe the agreement will create a precedent limiting stem-cell research at Australian public universities, such as Sydney.

Mars probe gets tunnel vision — in monochrome

The High-Resolution Imaging Science Experiment (HiRISE) on board the Mars Reconnaissance Orbiter — the newest and most powerful craft to arrive at the red planet — has lost its peripheral vision. And its colour vision is fading too.

Seven of HiRISE's 14 detectors are sending back spurious data, the mission team reports, and one of the four colour detectors has stopped working completely. This has led to only a 2% loss of signal so far, but the problem looks set to hit all of the detectors eventually.

"We do think it's a systematic problem for all of them," says Alfred McEwen, HiRISE's principal investigator, who is based at the University of Arizona in Tucson. "It's going to be a real irritant as it worsens."

Correction

The Editorial 'Light at the end of the tunnel' (Nature 445, 567; 2007) should have referred to projects such as the Thames Barrier as 'adaptation' not 'mitigation'. In the related News story 'What we don't know about climate change' (Nature 445, 580; 2007), the 2001 IPCC estimate for the range of sea-level rise should have read 9 to 88 centimetres, not millimetres.