

Congress to vote on open access and NIH funds

US investigators funded by the National Institutes of Health (NIH) may soon be compelled to publish only in journals that make their research papers freely available within one year of publication.

Congress is this week expected to take final votes on a bill incorporating this directive. The measure is contained in a spending bill that boosts the biomedical agency's effective budget by 3.1%, to \$29.8 billion in 2008.

President George W. Bush has vowed to veto the bill, which will fund the Department of Health and Human Services and other agencies, because it includes what he calls "irresponsible and excessive" levels of spending.

But congressional Democrats have attached to the measure an unrelated but politically popular bill funding the Department of Veterans Affairs. They hope that this will generate the two-thirds support needed in both houses of Congress to override a presidential veto.

The open-access requirement in the bill would apply only during fiscal year 2008; it would need to be renewed in yearly spending bills in the future.

Argo system makes a splash with final float

A global network of floats gauging the vital signs of the world's oceans was completed last week, with the launch of the 3,000th device.

Buoy-like floats in the Argo project periodically dive to depths of 2,000 metres, where they drift for 10 days recording temperatures, salinity and current velocity,



Floating vote: crew onboard the *Kaharoa* deploy the 3,000th device in the Argo network.

and then surface — sending the data to a satellite for transmission to a central repository (see *Nature* 415, 954–955; 2002). More than 30 nations in the Argo system will use the data to create ocean profiles, which then will be monitored for changes over time.

Eight years after deployments began, the New Zealand research vessel *Kaharoa* on 1 November dropped what were designated as the final floats at latitude 45° south in the southern Pacific Ocean.

Biomedical agency puts epigenetics on the map

The US National Institutes of Health (NIH) is set to roll out the latest highway on its 'roadmap for medical research' (see *Nature* 448, 406–407; 2007). It is seeking project proposals worth \$191 million in epigenetics.

The agency already spends about \$240 million per year on epigenetics, the study of stable, inherited genetic modifications that affect gene expression and function without altering the DNA sequence.

Several projects will be funded in the push. These include the development of 'reference' epigenomic maps; studies

Factory delay leaves flamingos in the pink

The lesser flamingos (*Phoenicopterus minor*) of Tanzania's Lake Natron (pictured) may get a temporary reprieve from a US\$400-million soda-ash plant that was to have been built nearby. An environmental advisory committee has recommended the government block the factory's construction unless its Indian-Tanzanian developer provides more details of plans to protect the local ecosystem.



Environmentalists are up in arms over the factory because the lake is a major breeding ground for East Africa's roughly 2 million lesser flamingos and also home to a number of rare species, says Lota Melamari, chief executive of the Wildlife Conservation Society of Tanzania.

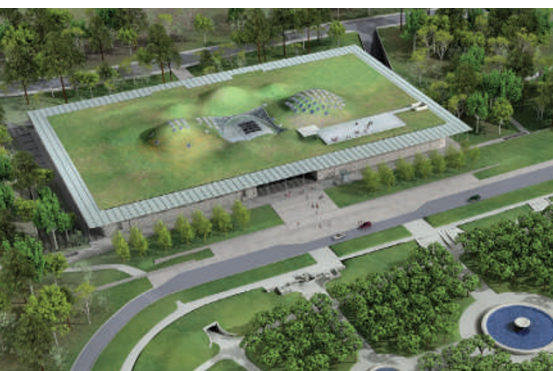
Melamari, who served on the advisory panel, says developers presented few details about how the plant would affect the lake ecosystem. "The main concern was a lack of information," he says. The government is now deciding how to handle the proposal.

of epigenetic contributions to ageing, development and disease, and responses to environmental exposures; the discovery of new epigenetic targets; and the development of technology, data analysis and computational infrastructure. The deadline for proposals is March, and five-year funding will begin next autumn.

San Francisco gets a green natural history museum

Last week, the California Academy of Sciences received the keys to its new environmentally friendly headquarters. The building sits on the site of its historic home, which was damaged during the 1989 Loma Prieta earthquake. Nestled in scenic Golden Gate Park, in environmentally conscious San Francisco, it is in an ideal location for an ecologically inspired museum.

The new \$484-million building was designed by architect Renzo Piano and incorporates so many green design features,



Going green: a model of the California Academy of Sciences' new home.

including a green roof (pictured above) and insulation made from recycled blue jeans, that it beats the energy-use standards set by the US Department of Energy by 30%. Even the steel and rubble from the old headquarters were recycled to make other buildings and new roads.

It is also expected to be the first museum to earn the highest stamp of approval from the US Green Building Council's Leadership in Energy and Environmental Design Green Building Rating System — a nationally accepted set of benchmarks for green design.

Partnership paves way for global carbon market

A coalition of countries, US states and Canadian provinces formed a partnership last week to promote the establishment of a global carbon-trading market.

Officials billed the International Carbon Action Partnership as a central repository for sharing information among various

nations and coalitions that are adopting market-based regulations for greenhouse gases. The goal is to align the development of independent markets so that they can serve as the foundation for an integrated global market.

The European Union has a functioning carbon-trading market under the Kyoto Protocol, and the Chicago Climate Exchange, a smaller market based on voluntary emissions reductions, is operational in the United States.

The new coalition includes nine members of the European Union, the European Commission, ten US states and two Canadian provinces that are organizing two regional greenhouse-gas markets. New Zealand and Norway are also founding members.

White males maintain pole positions in US science

If you are studying science in the United States, the chances are that your mentor is a white male. And although more underrepresented minorities and women are earning degrees, fields such as chemistry and mathematics are among the worst in helping them make the leap to faculty positions, according to a report led by Donna Nelson, a chemist at the University of Oklahoma in Norman (see <http://tinyurl.com/yqwjqyq>).

The department-by-department breakdown of the 100 top-spending science and engineering departments shows that some fields are more inclusive than others. In sociology, one of the best disciplines at training minorities, the percentage of blacks, Hispanics and Native Americans earning PhDs equals the percentage of assistant professors from those groups in the top 50 departments surveyed. In chemistry, by contrast, minorities earn 8.5% of PhDs — but just 3.7% of all professorships and 4.7% of assistant professorships.

For women, children and lower self-confidence may help to explain the gap, suggests a separate survey by the US National Institutes of Health of more than 1,300 postdocs (E. D. Martinez *et al.* *EMBO Rep.* 8, 977–981; 2007). Women are more likely than men to sacrifice their careers for kids, the survey found, and 60% of males versus 40% of females felt confident that they would find a faculty job after completing their postdoc.

Correction

The News Feature 'Space invaders' (*Nature* 448, 746–748; 2007) stated that Omar Yaghi was the first to design a metal-organic framework (MOF) in 1998. But in the early 1990s, before the term MOF was coined, a similarly open three-dimensional polymeric network structure linking organic ligands and metal centres had been reported (B. F. Hoskins and R. Robson *J. Am. Chem. Soc.* 112, 1546–1554; 1990).