

# SEVEN DAYS

The news in brief

## POLICY

### US policy flurry

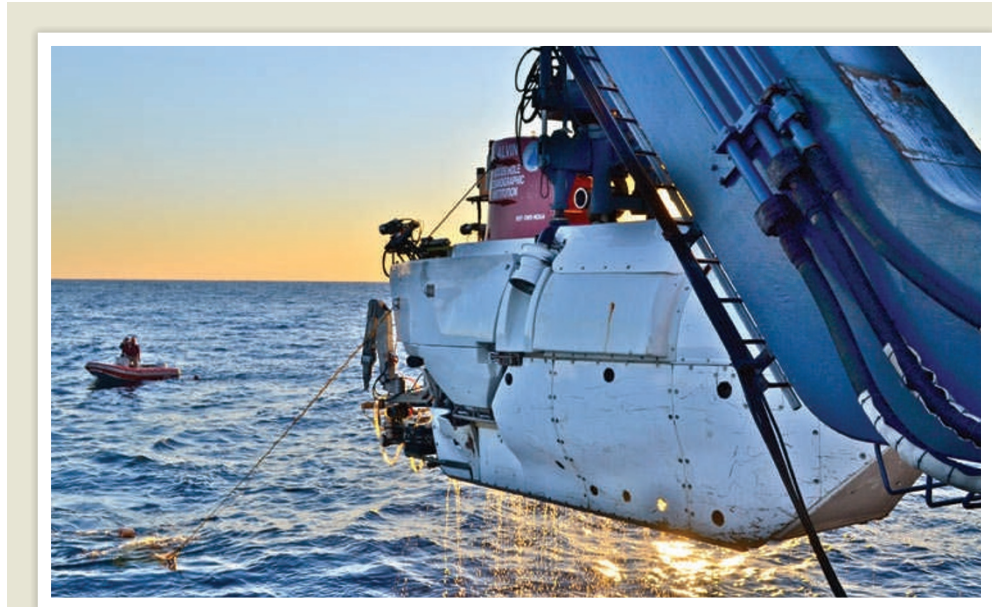
In a fit of pre-Christmas legislating, the US Senate reauthorized a version of the America COMPETES Act, which would keep on track a series of budget increases for key science funding agencies, including the National Science Foundation. If this is signed into law, money for the increases would need to be found in the 2011 budget. Last week, the Senate also passed food-safety legislation, which would give the Food and Drug Administration broad new food-policing powers. Both bills were expected to be passed by the House of Representatives as *Nature* went to press. Another bill, passed by both houses, calls for an integrated national plan to overcome Alzheimer's disease.

### Haiti cholera fight

With the death toll from Haiti's cholera epidemic passing 2,400, an expert meeting convened by the Pan American Health Organization on 17 December called for the use of cholera vaccines in the country, at least as a pilot project. It also urged the creation of an international stockpile of cholera vaccine — only about 100,000 doses are currently available for shipment. Separately, the United Nations secretary-general Ban Ki-moon announced an independent investigation into the source of the outbreak.

### Synthetic biology

US research in synthetic biology should be overseen at White House level, but not over-regulated, said a presidential bioethics commission in a report published on 16 December. Claiming to navigate a middle road between unbridled



M. SCHROPE

## Research sub set for rebirth

The venerable *Alvin* submersible — which has enabled numerous historic discoveries since it was first launched in 1964 — is undergoing a US\$40-million transformation. During its long life, *Alvin* has been involved in the discovery of deep-sea hydrothermal vents; taken humans to the wreckage of the *Titanic* for the first time; and helped to recover a lost hydrogen

bomb. Owned by the US Navy and operated by the Woods Hole Oceanographic Institution in Massachusetts, *Alvin* had its final dive (pictured) in its current form on 14 December; it will now be upgraded to have a larger crew compartment, manipulator arms and an advanced autopilot. See [go.nature.com/5adtko](http://go.nature.com/5adtko) for more.

experimentation and a regulatory straitjacket, the commission said that the field should embrace “an ongoing process of prudent vigilance”, and did not call for new laws or changes to regulations. See [go.nature.com/thidag](http://go.nature.com/thidag) for more.

### ITER squeezed

The European Parliament has rejected a plan to close a funding gap in the budget of ITER, the €15-billion (US\$19.7-billion) fusion reactor under construction near Cadarache, France. To cover a €1.4-billion shortfall in 2012–13, the European Commission had proposed using money from elsewhere in the European Union's budget, including research

funds (see *Nature* 466, 171; 2010). But on 15 December the parliament turned that down. Budget negotiations will now continue into 2011.

### Science of security

The US Department of Defense should sponsor university research programmes in cybersecurity, according to a report by the JASON group, which advises the US government on defence science and technology. The November report — released by the Federation of American Scientists on 14 December — says cybersecurity as a discipline should be thought of as an applied science akin to medicine, which would benefit from rigorous experiments.

### UN biodiversity

At its general assembly on 20 December, the United Nations gave the final go-ahead for a body that will monitor global ecology, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). It will operate much like the Intergovernmental Panel on Climate Change, conducting periodic assessments of Earth's biodiversity and ecosystems services.

### Periodic-table shift

Natural geographic variations in the abundance of a chemical element's isotopes should be noted on the periodic table, chemistry's governing body,

the International Union of Pure and Applied Chemistry, has decided. The decision means that ten common elements — including hydrogen, carbon and oxygen — will be assigned a range, rather than a single average number, for their atomic weight. Hydrogen will be [1.00784; 1.00811], for example, rather than [1.00794].

## Integrity guidelines

Long-awaited guidelines on scientific integrity in government were released on 17 December by the White House Office of Science and Technology. See page 1009 for more.

### PEOPLE



## Zerhouni move

Elias Zerhouni (pictured), who directed the US National Institutes of Health (NIH) from 2002 to 2008, will head research and development at

French pharmaceutical giant Sanofi-aventis. The company, headquartered in Paris, announced the appointment on 16 December.

### BUSINESS

## Drug tug-of-war

Swiss pharmaceutical company Roche intends to challenge the US Food and Drug Administration (FDA) over its 16 December decision to withdraw approval of the drug Avastin (bevacizumab) for the treatment of advanced breast cancer. The FDA's announcement came five months after a panel of advisers decided that the drug's benefits did not outweigh its risks in patients with breast cancer. See [go.nature.com/7mjlea](http://go.nature.com/7mjlea) for more.

## Carbon trading

California's Air Resources Board has approved regulations to create the United States' largest market in carbon trading. From 2012, the scheme will cap greenhouse-gas emissions from the state's electric utilities and heavy industry, allowing companies to trade emissions permits to reach their targets. Transportation fuels will be included by 2015. The system may later allow firms to reduce emissions elsewhere — such as by protecting forests in Brazil — in order to meet state

requirements. California is pushing to cut emissions to 1990 levels (15% below today's levels) by 2020.

## Conflicts of interest

US medical schools are quickly improving policies on conflicts of interest between faculty and pharmaceutical companies — such as restrictions on gifts and consulting relationships. According to a scoreboard released on 15 December by the American Medical Student Association in Reston, Virginia (see [www.amsascorecard.org](http://www.amsascorecard.org)), 52% of schools scored 'A' or 'B' for their policies, up from 30% in 2009 and 14% in 2008.

### RESEARCH

## IceCube telescope

Researchers at the South Pole have completed construction of a giant neutrino telescope that consists of an array of wires and detectors set deep in Antarctic ice. The IceCube Neutrino Observatory has been under construction since 2005; 86 wires, at depths of between 1,450 and 2,450 metres, each have 60 basketball-sized detectors that look for cosmic neutrinos hitting oxygen atoms in the water molecules of the ice. The final detector string was laid on 18 December; the full array can start taking data in May. See [go.nature.com/kqqlen](http://go.nature.com/kqqlen) for more.

## COMING UP

### 1 JANUARY

Hungary assumes a six-month presidency of the European Union.

### 3–7 JANUARY

The Society for Integrative and Comparative Biology meets in Salt Lake City, Utah.

[www.sicb.org/meetings/2011](http://www.sicb.org/meetings/2011)

## Carbon storage

The state of Queensland, Australia, has said it will not fund a proposed flagship demonstration project to capture carbon dioxide (CO<sub>2</sub>) emissions from a coal-fired power station and store them underground. The ZeroGen project — on which the state had already spent A\$192 million (US\$191 million) — was intended to be a A\$4.3-billion coal-gasification plant with a 530-megawatt capacity, storing about 2 million tonnes of CO<sub>2</sub> per year, and in operation by 2015. But Queensland premier Anna Bligh said early research had shown that the idea was “not viable at this time on a commercial scale.” ZeroGen will now go it alone, becoming an entity owned and run by industry, Bligh said.

## UK medical hub

The UK Centre for Medical Research and Innovation has received the go-ahead to begin construction. On 16 December, the London borough of Camden, which will host the £500-million (US\$778-million) facility, approved the project, which is being funded jointly by the government, Cancer Research UK, the Wellcome Trust and University College London. Construction should begin next spring and finish by 2015.

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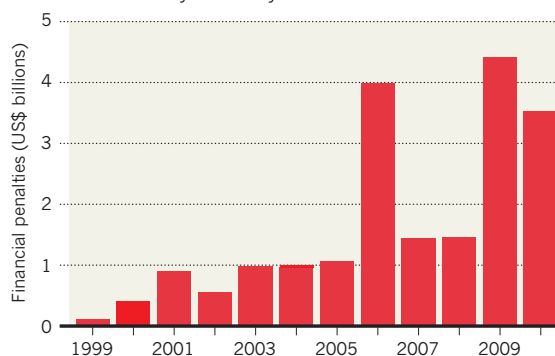
[www.nature.com/news](http://www.nature.com/news)

## BUSINESS WATCH

Public settlements paid by pharmaceutical companies to US governments — both state and federal — for illegal behaviour climbed to US\$14.8 billion over the past five years, according to a study released on 16 December by Public Citizen, a non-profit group in Washington DC. Illegal off-label promotion was responsible for the largest amount of federal penalties, and settlements under the False Claims Act — for activities such as inflating drug prices — now exceed those made by the defence industry.

### US PHARMA FINES

The penalties paid out by US pharmaceutical companies have increased dramatically in recent years.



One settlement with GlaxoSmithKline for \$3.4 billion accounts for the spike in financial penalties in 2006. 2010 data include only the first 10 months of the calendar year to 1 November 2010.