

SEVEN DAYS

The news in brief

POLICY

Stem-cell stay

US federal funding for human embryonic stem-cell (hESC) research can continue while a lawsuit seeking to block it works its way through the courts, a District of Columbia appeals court ruled on 28 September. The ruling puts a long-term stay on a preliminary injunction, which froze new and unpaid grant monies, that a lower court issued on 23 August. It had agreed with plaintiffs arguing that hESC research violates federal law by destroying embryos. The government is appealing that decision. Oral arguments in the case are to be scheduled shortly after 4 November, the date by which appeal briefs must be filed. For updates, see www.nature.com/stemcellfunding.

NASA budget

NASA's future priorities were firmed up on 29 September when a three-year, US\$58-billion outline budget for the agency was passed by Congress. The act instructs NASA to use resources from a cancelled Moon-rocket programme to develop a heavy-lift vehicle for missions to deep space, and provides \$1.6 billion to commercial companies building rockets to reach the International Space Station. It also calls for an additional Space Shuttle flight before the fleet retires in 2011, at a cost of \$500 million, which may divert resources from research. See go.nature.com/ngtqnb for more.

French budget

France's ministry of science and higher education was spared deep cuts in the country's deficit-reducing budget for 2011, announced last week. Research minister Valérie Pécresse said the ministry

Ocean census

The completion of a 10-year, US\$650-million project to record ocean biodiversity was announced at a symposium in London on 4 October. Begun in 2000, the Census of Marine Life employed more than 2,700 scientists to catalogue the diversity, distribution and abundance of life in the world's seas. It has logged nearly 30 million observations and has described more than 1,000 new species — such as the 'Yeti crab' *Kiwa hirsuta* (pictured, right), discovered in 2005. Despite such successes, the organization that got the project started — the Sloan Foundation in New York — is not funding a second census, and no other major sponsors have stepped up (see *Nature* **467**, 514–515; 2010).



IFREMER/A. FIFIS

would get a €4.7-billion (US\$6.4-billion) increase over last year, although €3.5 billion of this comes from last year's research stimulus package, much of which cannot be spent immediately. Cash directly for research would rise by €468 million, or 1.9% — inflation is currently 1.4%. French unions note that in real terms some core-research funding agencies — such as the marine research agency (IFREMER) and the national research centre (CNRS) will see budgets drop. See go.nature.com/sj17nq for more.

RESEARCH

Earth-like planet

Astronomers have found the first potentially habitable planet outside our Solar System. Steve Vogt of the University of California, Santa Cruz, Paul Butler of the Carnegie Institution of Washington in Washington DC and their colleagues declared the finding on 29 September. A paper is in

press at *The Astrophysical Journal*. The planet, the sixth to be detected orbiting Gliese 581, a cool red dwarf star 20.3 light years from Earth, is 3–5 times Earth's mass; its average surface temperature is 228 K, or higher if the planet has an atmosphere. Astrophysicist Sara Seager of the Massachusetts Institute of Technology in Cambridge says the discovery is both "incremental and monumental". See go.nature.com/n9eg4y for more.

China's Moon shot

China's second unmanned lunar probe, Chang'e 2, was due to be orbiting the Moon five days after its launch on 1 October. The probe is carrying a laser altimeter and a camera to survey prospective sites for a Moon lander, itself expected to launch in 2013.

Oil-spill research

Details of BP's ten-year US\$500-million research programme to monitor environmental damage

from the oil spill in the Gulf of Mexico were belatedly announced on 29 September. BP had pledged the money in May, but an edict from the White House in June stalled much of its distribution, by directing that the company coordinate its efforts with state authorities. The programme will now be administered by BP and a partnership of five Gulf Coast states; BP and the partnership will appoint an equal number of scientists to a peer-review research grants board.

Unethical study

The US government on 1 October issued a formal apology for a 1946–48 study in Guatemala on potential treatments for syphilis, in which as many as 696 prisoners, soldiers and mental-health patients were infected with or exposed to the disease. The study, conducted by US-funded scientists, was unearthed by Susan Reverby, a professor of women's studies at Wellesley College in

Massachusetts. She alerted the government to her findings before publishing them. See p.645 for more.

Plants under threat

More than 20% of the world's 380,000 plant species are at risk of extinction, making plants more threatened than birds, says the first global analysis of plant biodiversity. The study, called the Sampled Red List Index for Plants, was conducted by researchers at the Royal Botanic Gardens, Kew in the UK, and was published on 28 September. Seed-bearing plants, or gymnosperms, are most at risk; habitat loss is the biggest threat to survival. See nature.com/7gf5lu for more.

BUSINESS

Patent pool nudge

The US National Institutes of Health has given a small but symbolic boost to a fledgling effort to speed access to affordable HIV/AIDS medicines in developing countries. The agency said it would become the first to share a drug patent with the three-month-old Medicines Patent Pool (MPP), an initiative backed by the international drug-purchasing facility UNITAID. The health agency will license to the MPP its patent on the anti-retroviral drug darunavir. That won't

immediately allow a cheaper generic version, as additional darunavir patents are held by drug maker Tibotec, a subsidiary of US firm Johnson & Johnson. Tibotec is in discussions with the MPP, a spokeswoman said.

Herpes vaccine fail

An experimental vaccine against herpes simplex virus (HSV) failed to prevent infection in a trial of more than 8,000 women, its manufacturer GlaxoSmithKline announced last week. The drug firm, based in London, plans to scupper the Simplirix vaccine. Despite a huge potential market, investors didn't have high expectations for Simplirix, says Hedwig Kresse, at Datamonitor in London. There were already questions over its effectiveness.

PEOPLE

Nobel physicist dies

Georges Charpak, who won the 1992 Nobel Prize in Physics for inventing the principles behind modern particle detectors, died on 29 September aged 86. From 1959, he worked at CERN, Europe's premier particle-physics laboratory near Geneva, Switzerland. His designs enabled researchers to track many particles electronically in real time. The



technique involved an array of parallel wires suspended in a gas. A particle passing through the gas would create ions, which were attracted to the wires, producing a current. That design "wasn't the most elegant", he said, "but it was useful".

NSF head approved

The US Senate on 30 September confirmed Subra Suresh as director of the National Science Foundation (NSF) for a six-year term. Nominated for the post by President Barack Obama's administration in June, Suresh was previously dean of engineering at the Massachusetts Institute of Technology in Cambridge (see *Nature* 465, 673; 2010). He replaces nuclear engineer Arden Bement.

Schön keeps PhD

A court in Freiburg, Germany, on 27 September upheld the right of disgraced physicist Jan Hendrik Schön to keep

COMING UP

10–13 OCTOBER

Evidence on what drove the evolution of marine animals that once lived on land, such as penguins and sea turtles, is presented at the Society of Vertebrate Paleontology's 70th anniversary meeting, in Pittsburgh, Pennsylvania.

go.nature.com/tlkswu

11–13 OCTOBER

Cancer genome sequencing and the Human Microbiome Project are discussed at a Beyond the Genome meeting, at Harvard Medical School in Boston, Massachusetts.

go.nature.com/9avsai

his doctoral degree. The judgement reverses a 2004 decision by Schön's alma mater, the University of Konstanz in Germany, to withdraw his 1997 PhD because his later behaviour showed him "unworthy" to hold it. The university is considering an appeal. Schön, who was a staff physicist at Lucent Technologies' Bell Labs in New Jersey, is notorious for perpetrating a remarkable string of fabrications in high-profile papers published between 2000 and 2002 in the fields of organic and molecular electronics.

AWARDS

Nobel winners

Robert Edwards won the 2010 Nobel Prize in Physiology or Medicine for his development of *in vitro* fertilization. The Nobel Prize in Physics went to Andre Geim and Konstantin Novoselov for their experiments on graphene. See pages 641–642 for more. *Nature* went to press before the chemistry prize was awarded, but full details will be available at go.nature.com/4bmndd.

BUSINESS WATCH

Amyris Biotechnologies, a synthetic-biology start-up co-founded by engineer Jay Keasling at the University of California, Berkeley, has had a modest stock-market debut. The firm, of Emeryville, California, engineers yeast to make hydrocarbon fuels and other chemicals from sugarcane. On 28 September, Amyris raised US\$85 million, selling 5.3 million shares at \$16 apiece; the price climbed 8% by the end of that week. It had hoped for \$100 million. The launch can still be considered a success, as the biofuels market is weak and many firms are seeing low valuations, says Mark Bunger, research director of business consultancy Lux Research in San Francisco, California.

GREENTECH IPO

Investors cautiously welcomed the initial public offering of synthetic biology start-up Amyris.

