

# NEWS BRIEFING

## ● RESEARCH

**Genome blitz:** The Wellcome Trust plans to sequence 10,000 human genomes in the next three years. The UK-based medical charity announced the UK10K project on 24 June, to be funded by a £10.5-million (US\$15.8-million) award to the Wellcome Trust Sanger Institute near Cambridge, UK. Four thousand participants, who are already taking part in two long-term clinical studies, will have their full genomes sequenced. The other 6,000 people, who have diseases thought to have a genetic component, will have only those genes that code for proteins (the exome) sequenced.

**Japanese research:** Japan's science ministry has approved 14 projects worth a total of ¥56.4 billion (US\$632 million), supplementing its ¥100-billion 'FIRST' initiative (Funding Program for World-Leading Innovative R&D on Science and Technology; see *Nature* 464, 966–967; 2010). The largest slice, ¥10 billion over three years, went to Japan's High Energy Accelerator Research Organization (KEK) to upgrade its B-meson facility in Tsukuba. The 'Super KEKB' will pump out B-mesons and anti-B-mesons at a rate 40 times greater than the current collider. The University of Tokyo, meanwhile, won ¥9.8 billion over three years to build a cryogenic detector to spot gravitational waves.

**Medical isotopes:** TRIUMF, Canada's national laboratory for particle physics at the University of British Columbia in Vancouver, will start building a Can\$62.9-million (US\$60.8-million) linear particle accelerator to produce rare chemical isotopes, after it was granted Can\$30.7 million by the British Columbia provincial government last week. The research project, named ARIEL, will investigate new ways to make isotopes for medical imaging, and is scheduled to start producing isotopes by 2015.



J. SUTTON-HIBBERT/ALAMY

## WHALING DEADLOCK

Talks on a proposed deal between whaling and non-whaling nations, which would have condoned some whale-hunting under international quotas, fell through last week at meetings of the International Whaling Commission in Agadir, Morocco. The compromise proposal had hoped to reduce the yearly whaling catch by setting decadal catch limits for whaling nations such as Iceland, Japan and Norway, which hunt whales under special permits or objections to a 1986 moratorium and impose their own catch quotas.

Earlier in June, Canada's federal government responded to a worldwide shortage of medical isotopes by issuing a Can\$35-million tender to find a new mid- to long-term supply source.

## ● BUSINESS

**Carbon observatory:** Orbital Sciences of Dulles, Virginia, has been given a US\$70-million contract to launch the Orbiting Carbon Observatory-2 (OCO-2) mission on one of its Taurus rockets, NASA announced on 22 June. The first OCO crashed into the ocean in February 2009 after the clamshell fairing of the Taurus rocket carrying the probe didn't separate (see *Nature* 457, 1067; 2009). The replacement mission, which will measure sources and sinks of carbon, is expected to launch in February 2013.

**Patent sidestep:** In a much-anticipated decision, the US Supreme Court on 28 June struck down a patent for a business method — but refused to define more broadly what constitutes a 'patentable process'. A definition might have jeopardized many

gene-testing or software patents. A federal appeals court ruling had found in the *Bilski v. Kappos* case that a method was unpatentable because it neither contributed to the construction of a machine, nor transformed anything from one state to another. The Supreme Court upheld the decision, but said that this 'machine-or-transformation' test should not have been used to guide it. See [go.nature.com/PRRlhD](http://go.nature.com/PRRlhD) for more.

**Chemicals deal:** German chemicals company BASF will buy competitor Cognis in a deal worth about €3.1 billion (US\$3.8 billion). BASF, based in Ludwigshafen, confirmed the acquisition on 23 June. It will pay €700 million in cash and take on debt and pension commitments for the smaller firm, which is headquartered in Monheim, Germany.

## SOUND BITES

**"Maybe they think that Italy can stay in the G8 just by producing bags and shoes."**

Emilio Campana, head of research at Rome's maritime and naval institute, is not impressed with the Italian government's planned science funding cuts. For more, see page 16.

Source: Research Europe

SOURCE: IPCC

rejected 42 disease-specific stem-cell lines for US government funding last week, saying that they did not pass ethical muster because of language on the consent forms that waived the donors' rights to sue (see *Nature* 465, 852; 2010). The lines, derived by the Reproductive Genetics Institute in Chicago, Illinois, included mutations for cystic fibrosis, inherited breast cancer, Huntington's disease, sickle-cell anaemia and 15 other diseases. The NIH says that it will reconsider approving the lines if the donors sign consent forms that meet ethical guidelines.

**Australia power-shift:** Julia Gillard became Australia's first female prime minister when she replaced Kevin Rudd on 24 June. She said she was committed to tackling climate change and would try to set a price on carbon dioxide if she survived national elections later this year. Rudd stepped down after his popularity with voters tumbled, in part because of his failure to push through a promised greenhouse-gas-emissions trading scheme.

**India's telescopic sights:** In a rare foray into international telescope projects, India said on 24 June that it would join the planned Thirty Meter Telescope, a US\$1-billion project atop Mauna Kea in Hawaii that is set to be finished in 2018. If the financial outlay for full membership (yet to be determined) is approved by the government, three of the country's institutes say they want to become partners in the

## NUMBER CRUNCH

# 0.3%

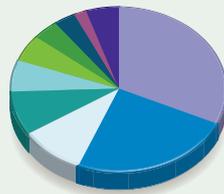
**The dip in spending on research and development by pharmaceutical companies in 2009 — after earlier years of rapid growth.**

Source: Reuters, CMR International

project, says Ajit Kembhavi, director of the Inter-University Centre for Astronomy and Astrophysics in Pune. His centre is already a partner in the 11-metre Southern African Large Telescope in Sutherland and is the only Indian institute to have joined an international telescope project, he says.

**Climate authors:** The Intergovernmental Panel on Climate Change (IPCC)

**AUTHORS ANNOUNCED**  
Experts affiliated with European and North American institutions dominate authors compiling the IPCC's 5th assessment report.



in Geneva, Switzerland, has announced the experts who will, unpaid, compile the panel's fifth assessment report (AR5), due in 2014. The 831 coordinating lead authors, lead authors and review editors were chosen from about 3,000 nominations. A quarter of them are female and 60% are new to the IPCC process. The three AR5 working groups — on the physical-science basis for climate knowledge, on adaptation to climate change, and on mitigation strategies — are dominated by experts affiliated with European and North American institutions (see chart).

**Animal antibiotics:** The US Food and Drug Administration (FDA) proposed on 28 June that the country's animal industry should drop its use of medically important antibiotics to enhance the growth and production of animals, such as cattle, used in

# THE WEEK AHEAD

**1 JULY**  
**Christiana Figueres replaces Yvo de Boer as head of the United Nations Framework Convention on Climate Change in Bonn, Germany.**

**2-7 JULY**  
**The Euroscience association, which promotes science and technology across Europe, holds its biennial multidisciplinary meeting, ESOF, in Turin, Italy.**  
[go.nature.com/8umUPH](http://go.nature.com/8umUPH)

**3-7 JULY**  
**Neural stem cells will be among the topics discussed at the 7th Forum of European Neuroscience in Amsterdam.**  
[go.nature.com/biJuYD](http://go.nature.com/biJuYD)

**3-7 JULY**  
**Researchers at the meeting of the Society for Conservation Biology in Edmonton, Canada, will discuss whether a global strategy is needed to unite the fractured divisions of the conservation movement.**  
[go.nature.com/JFOURD](http://go.nature.com/JFOURD)

human food. The draft proposal, which is open to public comment for 60 days, calls the widespread, growth-boosting use of the drugs in healthy animals "injudicious". The proposal, called a "guidance", is not binding on the industry when finalized, but represents what the FDA calls its "current thinking".

## BUSINESS WATCH

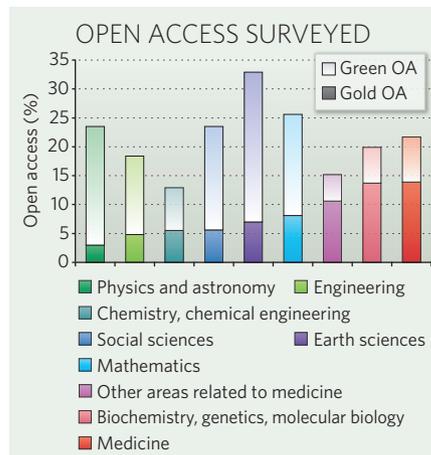
One in five research papers published in 2008 is now freely available on the Internet, according to a recent survey that is itself free to view (B.-C. Björk *et al.* *PLoS ONE* 5, e11273; 2010).

Bo-Christer Björk and his colleagues at the Hanken School of Economics in Helsinki manually checked the availability of 1,837 articles randomly sampled from 1.2 million in Elsevier's Scopus database. Of those, 8.5% were free to view on publishers' websites — known as the 'gold' open access (OA) route. Two-thirds of these were in full open-access journals; the rest were in subscription journals, available either because authors had paid to make their article free or because the journal opted to open up an

article's full content after a delay.

Another 11.9% could be found only on authors' websites or in repositories — 'green' OA. Repositories set up by universities or institutions accounted for one in four of these green OA articles; 43% of them, meanwhile, could be found in subject-based repositories such as arXiv and PubMed.

Breaking down the articles by discipline (see 'Open access surveyed'), the researchers found that Earth sciences had the highest overall OA share with 33%, whereas chemistry had the lowest, with 13%. In life sciences, the majority of OA articles were gold; in other disciplines, most were green.



SOURCE: B.-C. BJÖRK/PLOS ONE