

NEWS BRIEFING

● POLICY

Fusion delay: The European Union (EU) is backing away from a 2018 start date for ITER, a multi-billion-euro fusion reactor under construction in the south of France. At an ITER council meeting on 18–19 November, which was held near the reactor's site in St Paul lez Durance, delegates from the EU told the project's six other member states that the start date was no longer realistic, according to a source close to the negotiations. See go.nature.com/hyPdJw for more.

Birthing emissions: Providing contraception to 215 million women, mainly in developing countries, would help reduce the effects of climate change, the United Nations Population Fund says in an 18 November report. If the world's population, now at 6.8 billion, grows to 9 billion people by 2050 — the UN's 'medium-growth' scenario — an extra 1 billion to 2 billion tonnes of carbon dioxide could be emitted each year, compared with the 'low-growth' scenario of 8 billion people by 2050. See go.nature.com/nnC46x for more.

Run for the Sun: The Indian government last week approved a US\$19-billion plan that could see the country's solar power output rise from around 5 megawatts to 20 gigawatts by 2020. The boost is part of India's national action plan on climate change and, according to a draft mission document released in August, could save 42 million tonnes of carbon dioxide emissions per year (see *Nature* doi:10.1038/news.2009.774; 2009).

Science stimulus: French president Nicolas Sarkozy is next month expected to announce a multi-billion-euro stimulus package. Final recommendations on the plan were released in a 19 November report from a panel chaired by former prime ministers Alain Juppé and Michel Rocard. The report calls

DEEP-SEA DUMBO

The international Census of Marine Life has released an inventory of ocean-dwelling species that live below the depths to which sunlight can penetrate.

The decade-long project will end in October next year, but the census announced last week that its missions have already recorded 5,722 species seen only below 1,000 metres. There were 17,650 species only observed below 200 metres, where lack of light prevents photosynthesis.

The new finds include this example of a finned octopod. These octopods are also known as 'dumbos' because they flap their large ear-like fins to swim. See go.nature.com/B4FqIj for more.

for a total injection of €35 billion (US\$52 billion), with €16 billion going to higher education and research — including a €10-billion boost for universities. It says the remaining €19 billion should be shared between six priorities, including low-carbon energy and biotechnology.

Stem-cell vote: A proposed resolution to restrict human embryonic stem-cell research at the University of Nebraska has failed. On 20 November, the university's governing board split its votes 4–4, defeating a measure that would have limited research to only embryonic stem-cell lines approved under former US President George W. Bush.

Flu cover-up: The Chinese government has sent inspection teams to check on the reporting of pandemic H1N1 cases and on measures to control the epidemic after a well-known Chinese doctor accused local governments of covering up the number of deaths. Zhong Nanshan of the Guangzhou Institute of Respiratory Diseases in southern China told the *Southern Metropolis Daily* newspaper that he does not believe that



D. SHALE

only 53 people have died from swine flu nationwide, as the official figures suggest. Nanshan originally shot to prominence for rapidly reacting to the 2003 outbreak of severe acute respiratory syndrome (SARS).

● RESEARCH

Ethics conflicts continue: The US National Institutes of Health (NIH) is once again under fire for failing to adequately police the reporting of conflicts of interest by the extramural investigators it funds. In a report issued on 19 November, the inspector-general of the Department of Health and Human Services, the NIH's parent agency, examined 184 conflicts at 41 institutions during fiscal year 2006 and found that only six were eliminated by universities — all others were "reduced" or "managed". See go.nature.com/3oTe3q for more.

Climate leak: One of Britain's leading climate-research centres, the University of East Anglia's Climatic Research Unit in Norwich, confirmed on 20 November that e-mails and documents dating from 1991 to 2009 were copied and

NUMBER CRUNCH

6,900 km³

Estimated global water demand by 2030.

4,200 km³

Current reliable supply.

Source: 2030 Water Resources Group/
McKinsey & Company

subsequently published on the Internet. The university is undertaking an internal investigation and has already involved the police in the enquiry. See page 397 for more.

M. BARTLETT, NHGRI

Telescope boost: China has joined the Thirty Meter Telescope, a planned \$1-billion observatory atop Mauna Kea in Hawaii that would have nine times the light-collecting area of today's biggest telescopes. Partners in the project, due to be completed in 2018, include Japan's national observatory, the California Institute of Technology in Pasadena, the University of California system and an association of Canadian universities.

Smasher starts up: Physicists have successfully circulated proton beams around the 27-kilometre ring of the world's largest particle accelerator. The Large Hadron Collider at CERN, Europe's premier particle-physics laboratory near Geneva, Switzerland, was shut down for more than a year after an accident in September 2008. The machine's four detectors have already seen a handful of collisions.

Trial request: A second company has asked for permission to conduct clinical trials involving cells generated from human embryonic stem cells. The biotech company Advanced Cell Technology, based in Santa Monica, California, applied to the US Food and Drug Administration on 18 November for approval to treat vision loss with stem-

NEWS MAKER



Eric Green

The new director of the US National Human Genome Research Institute in Bethesda, Maryland, starts on 1 December. See go.nature.com/6khwOn for more.

cell-derived retinal cells in 12 patients with the childhood eye disease Stargardt's macular degeneration.

PEOPLE

Fresh start: Controversial psychiatrist Charles Nemeroff will start as chair of psychiatry

at the University of Miami in Florida on 1 December. Nemeroff was ousted as psychiatry chair at Emory University in Atlanta 11 months ago, after a probe led by Senator Charles Grassley revealed he had failed to declare at least US\$1.2 million in income from drug companies. The psychiatrist was also forbidden by Emory to act as an investigator or co-investigator on National Institutes of Health grants for at least two years (see *Nature* 461, 330–334; 2009). Nemeroff will be eligible to apply for new grants when he starts at Miami.

Research reformer: Economist Achilleas Mitsos, director general of the European Commission's research directorate from 2000 to 2006, has been formally appointed general secretary for research in Greece. The country has one of the lowest expenditures on research in Europe, but the new socialist government has pledged to treble this over its four-year term. Mitsos plans sweeping changes to the Greek research system by, for example, making research institutes compete for funds (see *Nature* doi:10.1038/news.2009.1042; 2009 for an interview with Mitsos).

Energy-lab leader: Chemist Paul Alivisatos is the new director of the Lawrence Berkeley National Laboratory in California. Alivisatos, who has worked on nano-patterning of solar cells to improve their efficiency, says the lab will continue its push to expand

THE WEEK AHEAD

30 NOVEMBER

An expert review panel appointed by the Canadian government submits its final report on the shortage of isotopes for medical imaging and therapy.

▶ go.nature.com/rYTb4m

30 NOVEMBER–3 DECEMBER

A summit to celebrate the 50th anniversary of the signing of the Antarctic Treaty takes place in Washington DC.

▶ www.atsummit50.aq

2–6 DECEMBER

The American Anthropological Association meets in Philadelphia, Pennsylvania.

▶ www.aaanet.org/meeting

research programmes in energy and the environment. His appointment was approved last week by the board of regents of the University of California, which manages the laboratory. Alivisatos has been interim director of the lab since January, when Steven Chu, the previous director, was appointed as US energy secretary.

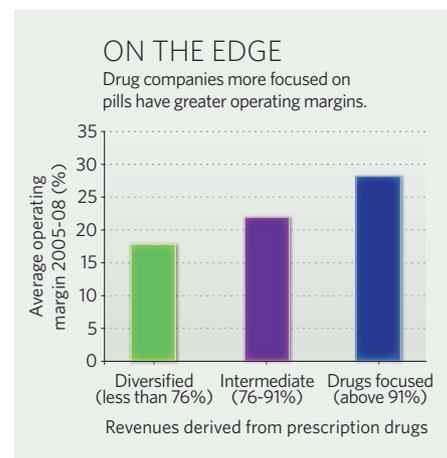
Final flight: Russian spacecraft designer and cosmonaut Konstantin Feoktistov died at the age of 83 on 21 November. Feoktistov was one of three men to take part in the first group space flight, in 1964, and was the first civilian in space.

BUSINESS WATCH

Some pharmaceutical companies, such as GlaxoSmithKline, are seeking to diversify into areas including consumer products to hedge against plunging revenues once a plethora of patents starts to expire in 2011, in what's called a 'patent cliff' (see *Nature* 462, 17; 2009).

But Datamonitor, a London-based business-information firm, has found that, among 14 huge drug firms, those that derived the largest percentage of their revenues from pill-peddling had the highest operating margins between 2005 and 2008. Operating margins are the proportion of revenue left over after production costs have been accounted for. Merck and AstraZeneca, for example, derived more than 91% of their revenue

from prescription drugs in 2008 and enjoyed margins of 28%. That compares with 18% for highly diversified firms such as Bayer and Abbott and 22% for companies in the middle, such as Sanofi-Aventis and Roche. As the patent cliff approaches, diversification may be less rewarding than remaining firmly anchored in prescription drugs, says Pam Narang, the report's author. "The branded pharmaceutical sector is the best place to be," she says. "You can make it work by diversifying, but you are likely to be the exception rather than the rule." Instead, she suggests that firms expand geographically into emerging markets and into biological drugs, which carry hefty price tags.



SOURCE: DATAMONITOR