SEVEN DAYS *The news in brief*

POLICY

Nuclear plans in flux

Uncertainty over the future of nuclear power grew in several countries last week. Japan's prime minister Naoto Kan said his country would review its nuclear policy (for more, see page 263). In Germany, a leaked draft report from an ethics commission on safe energy, set up by Chancellor Angela Merkel, recommended shutting all nuclear plants by 2021. In the United States, inspections of nuclear plants by the Nuclear Regulatory Commission threw up a number of flaws. And European nuclear-safety regulators met in Brussels to announce details of stress testing for nuclear plants, but could not agree on criteria.

Fisheries reform

Drafts of the European Commission's proposed overhaul of Europe's fishing industry were leaked to the media last week. The commission wants to cut catch quotas so that by 2015, stocks are fished at the maximum yield that is sustainable. It also hopes to let fishermen buy and sell catch quotas, and to ban the practice of throwing back some caught fish. Some scientists worry about the expense of the research base and enforcement required to sustain and police such a system. The final proposal will be presented on 13 July. See go.nature.com/edjtqe for more.

US retains brains

In a bid to keep talented overseas researchers, the US Department of Homeland Security is giving more foreign science students extra time to search for work after graduation. Graduates can usually apply to stay in the United States for a year, receiving related postgraduate training, before having to switch visas or leave the country. But on 12 May, the department added a range of science-related subjects — including neuroscience, drug design and environmental science — to a list of degrees eligible for a 29-month postgraduate stay.

INTERNATIONAL WOW COMPANY

Shale-gas fracking faces French ban

When the Oscar-nominated documentary *Gasland* showed people setting their tap water on fire (pictured), it thrust hydraulic fracturing into the spotlight. The technique, also known as 'fracking', in which high-pressure fluids are pumped into shale formations to fracture the rock and force out natural gas, has been accused of releasing methane into well water (hence, perhaps, the flammable tap water) and of polluting groundwater with toxic chemicals.

Now France could become the first country to ban the practice. On 11 May, the French parliament's lower house voted for a ban; the upper house will vote next month. Several areas in the United States have recently issued moratoriums on fracking, and a panel set up on 5 May by Department of Energy head Steven Chu will report in three months on how to improve its safety. See go.nature.com/wkizub for more.

Openness inquiry

The Royal Society in London is asking whether scientific data should be shared more openly with the public. On 13 May, it launched an inquiry into how scientific information should be managed "to improve the quality of research and build public trust". A working group chaired by Geoffrey Boulton, a glaciologist at the University of Edinburgh, UK — and including the editor-in-chief of *Nature* — will release its conclusions in early 2012. It is accepting submissions of evidence until 5 August. See go.nature.com/w2di6n for more.

IPCC overhaul

The Intergovernmental Panel on Climate Change last week agreed to change its workings and governance. The reforms were decided at a general assembly in Abu Dhabi. See page 261 for more.

Arctic land rush

Cooperation, not conflict, was the message relayed by politicians at the Arctic Council's biennial meeting in Nuuk, Greenland, on 12 May. The rush to claim seabed territory and oil and gas resources in the melting Arctic threatens to spark international disputes. But US secretary of state Hillary Clinton described the council as the 'preeminent intergovernmental body' for solving problems. The meeting saw the signing of the council's first legally binding treaty between Arctic nations — although it relates only to cooperation on search and rescue missions in the region.

Korean science belt

South Korea's 5.2-trillion-won (US$4.8-billion) 'science belt' project will be based — unsurprisingly — in a region

already home to the country's leading science university, the Korean Advanced Institute of Science and Technology, and numerous industrial laboratories. Korean media said a site-selection committee had chosen the Daedeok research district, in the city of Daejeon, to host a planned 410-billion-won rare-isotope accelerator and 25 of the 50 laboratories of a new basic-science institute. The infrastructure is planned to be built by 2017.

FUNDING

Low odds at the NIH

Fewer than one in five research grant applications to the US National Institutes of Health (NIH) will gain funding in the 2011 fiscal year, according to Francis Collins, the agency's director. Predicted success rates of 17–18% would be "the lowest in history", Collins told a Senate committee on 11 May. In 2010, the NIH's grant-application success rate was 20%. See go.nature.com/g9nh4t for more.

UK facilities cuts

The UK government has revealed cuts to planned scientific facilities, part of an effort to shrink the national deficit. Three projects have definitely been axed: a national supercomputing service called ARCHER; a planned upgrade to the Rothera Research Station in Antarctica; and a £50-million (US$80-million) centre for computational science at the Daresbury Science and Innovation Campus in Cheshire.

EVENTS

XINHUA/GAMMA-RAPHO VIA GETTY

Iran goes nuclear

Self-sustaining nuclear reactions have begun inside Iran's first commercial nuclear power plant. On 10 May, Atomstroyexport, a Russian state-owned firm building the Bushehr nuclear plant (**pictured**), said it had begun power tests of the 915-megawatt pressurized-water reactor. Construction was begun in 1975 by Siemens but was suspended after the 1979 Islamic Revolution. Russia resumed construction in 1995.

Reactor meltdown

The unit 1 reactor at Japan's Fukushima Daiichi nuclear plant melted down entirely after a massive earthquake and tsunami struck on 11 March, according to analysis from the plant's owners, the Tokyo Electric Power Company. Data provided by recalibrated equipment inside the reactor indicates that the fuel rods had lost their surrounding coolant four and a half hours after the tsunami arrived. Most of the fuel had probably already fallen to the bottom of the vessel by the time it was flooded with sea water. The full meltdown will complicate future clean-up efforts. See go.nature.com/frm7uk for more.

Shuttle launch

NASA's space shuttle *Endeavour* launched from the Kennedy Space Center in Florida for its final flight on the morning of 16 May. The trip is the penultimate mission of the shuttle fleet. See page 262 for more.

BUSINESS

Chilean dams

Officials in Chile last week approved the construction of five hydropower dams across two major rivers in Patagonia — part of the US$7-billion HidroAysén project, which aims to generate 2.75 gigawatts of power for Chile. But violent demonstrations followed the approval of the dams, and scientists have criticized the environmental-impact assessment used to justify the scheme. Chilean electricity utilities Colbún and Endesa still need permission to build a transmission line that would carry power thousands of kilometres from the remote Aisén region to Santiago. See go.nature.com/gnbvasl for more.

Genomics research

Mount Sinai School of Medicine in New York is setting up a genomics research institute in collaboration with Pacific Biosciences, of Menlo Park, California, which is developing technology for real-time, single-molecule DNA sequencing. The company's chief scientist, the charismatic computational biologist Eric Schadt, will direct the new institute and retain his position with Pacific Biosciences, the Mount Sinai School announced on 16 May.

Hepatitis milestone

On 13 May, the US Food and Drug Administration approved the first drug to directly target the hepatitis C virus. The drug, boceprevir (Victrelis), is made by Merck, based in Whitehouse Station, New Jersey. Another drug telaprevir (Incivek) — made by Vertex Pharmaceuticals in Cambridge, Massachusetts — is expected to be approved by 23 May.

COMING UP

22–26 MAY
The American Astronomical Society meets in Boston, Massachusetts.
go.nature.com/q4otmo

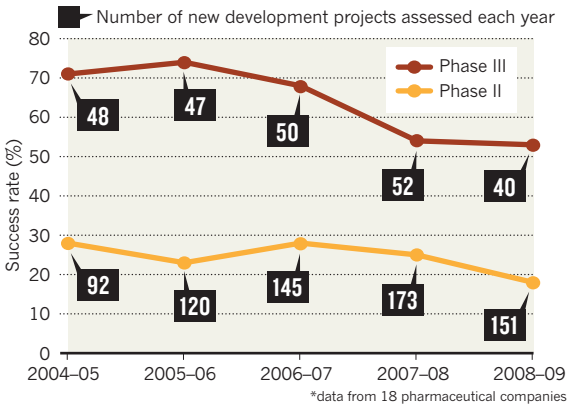
22–27 MAY
At its general meeting in Paris, the World Organisation for Animal Health will celebrate the global eradication of rinderpest, a devastating cattle disease.
go.nature.com/z3n2hj

TREND WATCH

The number of drug candidates entered into early clinical trials increased from 2000 to 2009, but that hasn't led to more drugs in the clinic. Success rates for late-stage (phase II and phase III) trials are falling, says the Centre for Medicines Research in London. John Arrowsmith, a scientific director at Thomson Reuters, which owns the centre, says the attrition rate is "unsustainably high" (*Nature Rev. Drug Discovery* **10**, 328; 2011). A clear-out of weak candidates in 2009 may improve future success rates, he adds.

PHARMA'S FALLING SUCCESS RATE

Although more drugs were pushed into clinical trials over the past few years, success rates at key stages declined.



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