

POLICY

Israeli settlement

The Israeli government and the European Union (EU) have resolved a political stand-off that had threatened to stop Israeli scientists from participating in Horizon 2020, the EU's €80-billion (US\$109-billion) research-funding programme for 2014–20. EU guidelines banned money from being spent on research in territories outside Israel's pre-1967 borders, a measure that Israel objected to (see *Nature* **501**, 293–294; 2013).

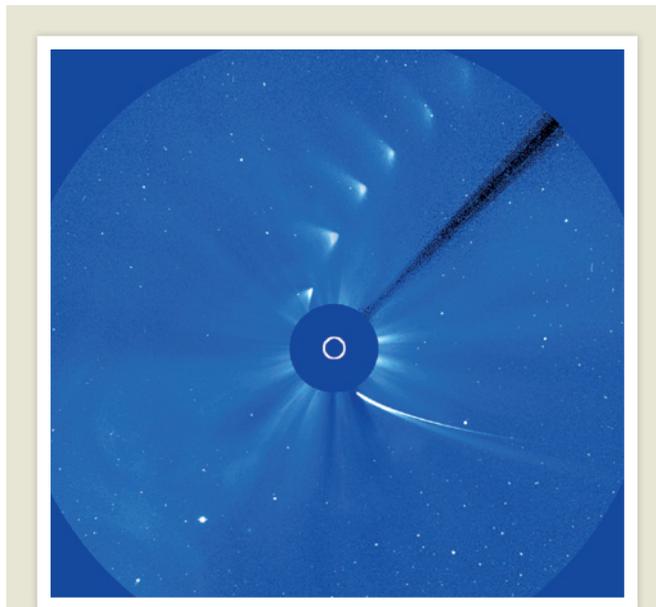
On 26 November the country signed up to the programme, but will note in an appendix that it has legal and political objections to the guidelines — a compromise that satisfied both sides.

Drug U-turn

US regulators have removed the safety restrictions that they put on the diabetes drug Avandia (rosiglitazone) in 2010, after it was linked to an increased risk of heart attack. The Food and Drug Administration reversed its stance on 25 November; it said that a reanalysis of a pivotal clinical trial suggested that people taking the drug were not more likely than others to die from heart complications. Avandia, made by GlaxoSmithKline, remains banned in Europe. See go.nature.com/kwnznmj for more.

HIV up in Europe

The number of new HIV infections reported in Europe increased by 8% between 2011 and 2012, the European Centre for Disease Prevention and Control and the World Health Organization said on 27 November. About 78% of the roughly 131,000 new cases were reported in Eastern Europe and central Asia, the groups found, with AIDS



Death of a comet

Comet ISON apparently broke apart as it passed close to the Sun on 28 November, leaving behind what is probably only a cloud of dust. The disintegration disappointed skywatchers across the Northern Hemisphere, who had hoped for a naked-eye view of a bright comet as ISON emerged on the other side of the Sun. Images from the Solar and Heliospheric Observatory (see time-lapse picture) and other Sun-watching satellites showed the comet's brightness and dust production peaking just before it swung past the Sun within a distance of 1.2 million kilometres. ISON was unusual because it was both a first-time visitor to the inner Solar System and a 'sungrazer' comet. See go.nature.com/2fgjtd for more.

diagnoses in Eastern Europe growing by 113% in 2006–12. The organizations say that poor access to preventive measures and to antiretroviral therapy has contributed to the spike.

Science education

China, Singapore, Japan and Finland topped rankings of educational excellence in science among school students, according to the latest Programme for International Student Assessment (PISA) results released on 3 December. The study, which is performed every three years by the Organisation for

Economic Co-operation and Development in Paris, surveys attainment in mathematics, reading and science in 15-year-old students. Boys and girls performed similarly in science.

EVENTS

Non-human rights

On 2 December, a group called the Nonhuman Rights Project filed the first of three US lawsuits intended to grant legal 'personhood' rights to chimpanzees. The Florida-based group is suing on behalf of four chimps in New York state — one suit

involves two chimps at Stony Brook University and the other two are for animals under private ownership. The group charges that the animals are being denied bodily freedom. In May, India's environment ministry banned the use of captive dolphins in entertainment, adding that they should be seen as "non-human persons".

On track to Mars

India's mission to Mars has left Earth's orbit. On 1 December, the Mars Orbiter Mission spacecraft (informally called Mangalyaan) fired its engines and began its 300-day journey to the red planet. Launched on 5 November, the 4.5-billion-rupee (US\$72-million) mission is the country's first interplanetary probe.

RESEARCH

X-ray vision

An X-ray telescope will be the European Space Agency's next large mission, the agency confirmed on 28 November. Scheduled for launch in 2028, the €1-billion (US\$1.4-billion) craft will study how gas evolves into galaxies and how black holes grow and influence their surroundings (see details at *Nature* **503**, 13–14; 2013).

The next mission after that, a €1-billion gravitational-wave space observatory, is scheduled for 2034, the agency said. See go.nature.com/xwf7yc for more.

Clinical publishing

The results of some US clinical trials are not being published completely enough, or even at all, according to an analysis published on 3 December (C. Riveros *et al.* *PLoS Med.* **10**, e1001566; 2013). A random selection of nearly 600 trials with results posted on the website ClinicalTrials.gov found that

50% had not had their results published in a paper. For trials that had been published in articles, data on negative side effects, adverse events and treatment efficacy were more clearly and completely reported on the website than in the paper. See go.nature.com/gqjbjk for more.

GM study retracted

Bowing to scientists' near-universal scorn, *Food and Chemical Toxicology* has retracted a controversial paper (G.-E. Séralini *et al.* *Food Chem. Toxicol.* **50**, 4221–4231; 2012) that claimed that Monsanto's genetically modified (GM) maize (corn) causes serious disease in rats. The authors had earlier refused to withdraw it. The paper showed “no evidence of fraud or intentional misrepresentation of the data”, said a 28 November statement from publishers Elsevier, but the small number and type of animals used in the study mean that “no definitive conclusions can be reached”. See go.nature.com/fk2auz for more.

China Moon rover

China has launched its first mission to land a rover on the Moon. The Chang'e 3 probe carrying the rover, which will survey lunar geology, blasted off on 2 December from the Xichang Satellite Launch



Center in southwest China (pictured). The spacecraft is designed to soft-land (rather than crash-land) on the Moon (see *Nature* **503**, 445–446; 2013), and is expected to touch down in mid-December. If the mission succeeds, China will become the third country behind the United States and the former Soviet Union to achieve a soft landing on the Moon.

Dance retraction

An eight-year-old *Nature* paper that reported a strong correlation between the symmetry of Jamaican dancers and their dancing ability was retracted on 27 November (W. M. Brown *et al.* *Nature* <http://doi.org/p9m>; 2013). No reason is given in the retraction notice, but in April co-author Robert Trivers, an evolutionary biologist at Rutgers University in New Brunswick, New Jersey, publicly released a university investigation report alleging that then-postdoc and

co-author William Brown had faked data for the paper (see *Nature* **497**, 170–171; 2013). Brown disputed the findings. Trivers has sought since 2008 to retract the paper, which implied that dancing ability might have evolved under sexual selection in humans.

BUSINESS

CRISPR company

The CRISPR technique for editing genes — which has rapidly become influential because of its efficiency and precision — has now been spun out into a commercial venture. Editas Medicine, based in Cambridge, Massachusetts, announced its launch last week, with an initial US\$43-million investment by four US-based venture-capital firms. It hopes to develop therapies by using CRISPR and other techniques to edit disease-related genes. Founding members include neuroscientist Feng Zhang of

COMING UP

9–13 DECEMBER

The American Geophysical Union hosts a meeting in San Francisco, California, including discussion of latest findings from the Mars Curiosity rover. fallmeeting.agu.org/2013

11 DECEMBER

London hosts a G8 Dementia Summit, where scientists and politicians will discuss the state of funding and research, and set out a global action plan for tackling dementia. go.nature.com/rv7tjz

the Massachusetts Institute of Technology in Cambridge, geneticist George Church of Harvard University in Boston, Massachusetts, and biochemist Jennifer Doudna of the University of California, Berkeley. See go.nature.com/yzhkki for more.

PEOPLE

Integrity advocate

Scientist Francesca Grifo, an influential campaigner for reform of US government policies on scientific integrity, is moving to the Environmental Protection Agency (EPA) to oversee implementation of its own integrity policy. Grifo, previously at the Union of Concerned Scientists, an advocacy group based in Cambridge, Massachusetts, published an analysis in March comparing such policies across federal agencies. In it, she praised the EPA for clearly stating scientists' rights to express personal opinions with appropriate disclaimers, but noted gaps in online accessibility of the agency's key scientific-integrity documents.

NATURE.COM

For daily news updates see: www.nature.com/news

TREND WATCH

Biologic drugs have grown increasingly dominant in the research and development efforts of pharmaceutical companies in the past decade — a marked shift from the industry's strong focus on small-molecule drugs in the 1990s. Biologic products, which include monoclonal antibodies, vaccines and cell therapies, made up 8% of total pharmaceutical sales in 2002 but 17% in 2012, according to a recent report by the Tufts Center for the Study of Drug Development in Boston, Massachusetts.

SHIFTING R&D STRATEGY

Between 2001 and 2012, the number of biologics in clinical development grew by 155%.

