#### **EVENTS**

# Zika link declared

The US Centers for Disease Control and Prevention (CDC) has declared that the mosquito-borne Zika virus causes microcephaly — babies born with abnormally small heads — and other fetal brain defects. The announcement, on 13 April, is based on a review of evidence by CDC researchers (see S. A. Rasmussen et al. http://doi.org/bfc2; 2016). The mosquito season in the southern US states is looming, and the agency says that strong causal messages will reinforce advice about precautions. Some scientists caution that the proof is not yet unequivocal, but that the CDC is justified in erring on the side of caution.

### **Antarctic cruise**

Swiss coordinators of the planned international Antarctic Circumpolar Expedition announced on 18 April the 22 scientific projects selected to take place on the research cruise. On 20 December, a 55-strong research crew involving scientists from 30 countries will set out from Cape Town on a three-month voyage on board the Russian research vessel Akademik Treshnikov. The scientists hope to extensively probe the Southern Ocean and map unexplored biota around Antarctica. The expedition is largely funded by the Swedish philanthropist Frederik Paulsen, founder of Ferring Pharmaceuticals.

### **Vaccine switch**

Between 17 April and 1 May, 155 countries will introduce a new kind of polio vaccine as part of a global push to eradicate the disease. The switch will replace a 'trivalent' vaccine against the three serotypes of poliovirus with



# **Earthquakes strike Ecuador and Japan**

A magnitude-7.8 earthquake struck Ecuador's coast on 16 April, collapsing buildings and killing hundreds of people. The death toll was 413 as Nature went to press. It was the country's most powerful quake since 1979 and it devastated towns near the coast. Separately, a series of

shallow earthquakes shook Japan's Kyushu island last week, culminating in a magnitude-7 tremor on 16 April that killed at least 42 people. Buildings including a student residence, as well as turrets on a seventeenth-century castle, collapsed in Kumamoto prefecture.

targets the two types of virus that are still circulating. Just 10 cases of polio caused by a wild virus have been reported this year, in Pakistan and Afghanistan.

# **Future health spend**

The provision of aid for global health has stagnated since the 2008 financial crisis, following years of increases during the early 2000s, and international health-spending inequalities will persist as a result, predicts a report (J. L. Dieleman et al. Lancet http://doi.org/bfdr; 2016). In a companion report, data extrapolated from health spending between 1995 and 2013 suggest that nearly half of low- and lower-middleincome countries are likely to miss an internationally agreed goal to spend at least US\$86

per person on health by 2040 (J. L. Dieleman et al. Lancet http://doi.org/bfds; 2016). By that time, the wealthiest countries will spend an average of \$9,019 per person on health, compared with \$164 per person by the poorest countries.

#### POLICY

# **Glyphosate rule**

The European Parliament has called on the European Commission to restrict its marketing authority for the widely used herbicide glyphosate to seven years, amid controversy over whether the chemical may be harmful to health. The commission had instead proposed a 15-year renewal of the authority which expires in June — to market glyphosate in European Union member states. Parliament's resolution on

13 April also calls for a new independent safety review and a restriction of glyphosate use in public areas. The resolution has no legal authority, but might influence a May vote by member states on the proposal. **-UIS ACOSTA/AFP/GETTY** 

# **CRISPR** crops

The US Department of Agriculture said on 13 April that it will not regulate a mushroom genetically modified with the CRISPR-Cas9 gene-editing tool. The mushroom can now be cultivated and sold without passing through the agency's regulatory process; it is the first CRISPR-edited organism to receive a green light from the US government (see page 293). And on 18 April, DuPont Pioneer in Johnston, Iowa, announced plans to commercialize high-starch varieties of maize (corn)

a more effective vaccine that

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that have been genetically modified with CRISPR to boost yields. The company aims to have the maize available within five years.

# **Untested drug**

Brazil's President Dilma Rousseff has signed a law allowing patients to access an untested, unapproved compound that some claim is a miracle cure for cancer. The law, which went into effect on 14 April, allows those with a certificate verifying that they have cancer to obtain the drug; no prescription is required. The news came just weeks after Brazil's Ministry of Science, Technology and Innovation released laboratory results showing that the compound does not kill cancer cells grown in culture. See go.nature.com/ gwzswx for more.

## Whales threat

Marine-mammal experts have urged US President Barack Obama to halt permits for seismic oil and gas surveys along the mid- and southeastern US Atlantic coast. Fewer than 500 North Atlantic right whales (Eubalaena glacialis, pictured) remain in the wild, 27 right-whale experts from the United States, Canada and Britain said in a 14 April letter to Obama. Noise pollution from the airgun blasts used to return information about oil and



gas deposits would affect the animals on important feeding and breeding grounds, the letter says.

# **Warming review**

The Intergovernmental Panel on Climate Change will review the possible effects on humans and ecosystems of a rise in global temperature of 1.5 °C above pre-industrial levels. At a meeting on 11-13 April in Nairobi, the group agreed to produce three special reports: one looking at the impacts of 1.5°C of warming, with the other two assessing the impacts of climate change on land use and terrestrial ecosystems, and on oceans, glaciers and polar ice sheets. See go.nature.com/ aq3yhf for more.

# **Green light**

The European Space Agency's ambitious plans to build a space-based gravitational-wave

detector are feasible and the mission could launch sooner than planned, an expert panel reported on 12 April (see Nature 531, 30; 2016). The chair of the Gravitational Observatory Advisory Team, University College Dublin physicist Michael Perryman, told the BBC that the group will suggest a launch in 2029, which would bring forward the proposed start date of the €1-billion (US\$1.1-billion) mission by 5 years.

#### FUNDING

# Exxon sponsorship

The board of the American Geophysical Union (AGU) has decided to continue to accept sponsorship money from the oil and gas giant ExxonMobil, despite a February letter from more than 170 AGU members and others complaining about the company's past role in spreading climate misinformation. "We

# **COMING UP**

#### 21 APRIL

The United Nations hosts a high-level debate on implementing its sustainable development goals for 2030, in New York. go.nature.com/ku8o5l

#### 22 APRIL

Sentinel-1B, a radar observation satellite developed by the European Space Agency, will launch from Sinnamary, French Guiana.

go.nature.com/9pmfp7

The Paris Agreement on climate change, adopted in December, will be signed in New York. go.nature.com/7fpxfw

concluded that it is not possible for us to determine unequivocally whether ExxonMobil is participating in misinformation about science currently," AGU president Margaret Leinen wrote in a blog post on 14 April describing the board's vote. Last year, the AGU accepted US\$35,000 in support from ExxonMobil.

### **Cancer institute**

The Parker Foundation, a charity in San Francisco, California, has committed US\$250 million to harnessing the immune system to fight cancer. The money will support more than 40 laboratories at 6 centres of medical research, which together will form the Parker Institute for Cancer Immunotherapy, the foundation announced on 12 April. The institute — to be led by immunologist Jeffrey Bluestone of the University of California, San Francisco will manage any intellectual property that emerges from the collaboration.

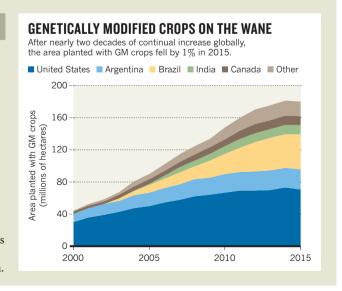
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# TREND WATCH

The area planted globally with genetically modified (GM) crops declined in 2015. The 1% decline — the first in the technology's 20-year global commercial history — was primarily due to a decrease in both GM and non-GM crops caused by low prices, says the body that tracks such crops. But the International Service for the Acquisition of Agri-Biotech Applications also said in its 13 April report that major growers of GM crops, such as the United States, are approaching saturation.



SOURCE: ISAAA