

# SEVEN DAYS

The news in brief

## POLICY

### Dengue control

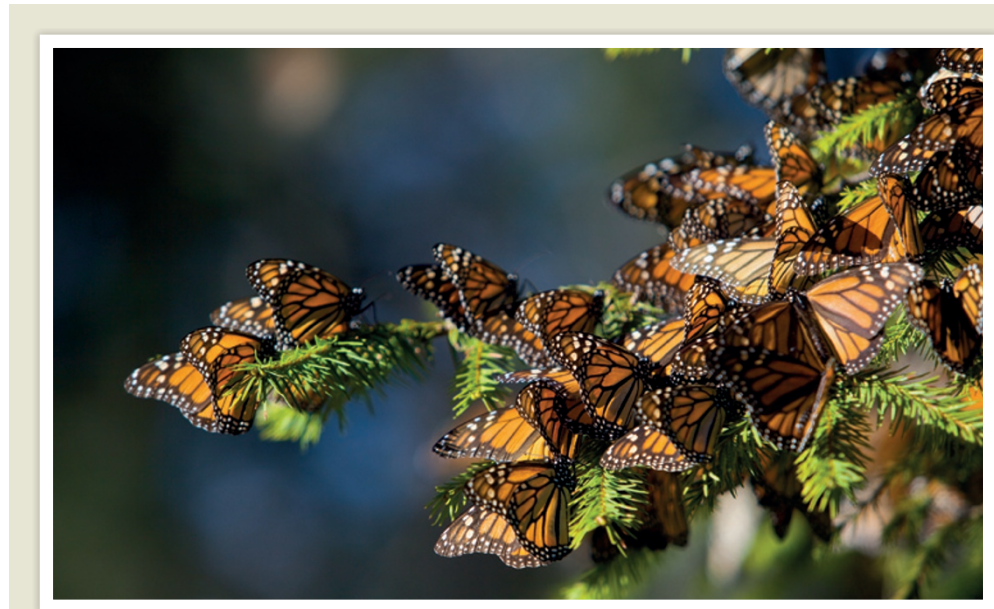
Panama has joined a handful of nations trying to combat dengue fever using genetically modified mosquitoes developed by Oxitec, a biotechnology firm in Oxford, UK (see [go.nature.com/tht55x](http://go.nature.com/tht55x)). The company announced on 28 January that the Panamanian government had approved open-field trials of the insects, engineered to be sterile, as a means of suppressing wild populations of the dengue-carrying mosquito (*Aedes aegypti*). At the end of 2013, Panama's health minister declared that the country was experiencing a dengue epidemic.

### Oil pipeline

On 31 January, the US Department of State released its final environmental assessment of the proposed Keystone XL pipeline — a controversial project that would link oil sands in Alberta, Canada, to refineries along the Gulf of Mexico. Environmentalists have argued that the pipeline would increase carbon emissions by facilitating fuel production. But the agency concluded that approval or denial of the pipeline is “unlikely to significantly impact” production or consumption of the oil, which could travel by alternative routes. The White House must now decide whether to proceed with the project.

### Food foundation

The sweeping US\$956-billion ‘Farm Bill’, passed by the US House of Representatives on 29 January, includes some research support among its wider measures regulating food-stamp payments and farmer subsidies. The bill, formally known as the



RICHARD ELLIS/GETTY

## Butterfly migration hits historic low

Fewer monarch butterflies migrated across North America in 2013 than in any previously recorded year, according to a report released on 29 January by conservation group the WWF. Surveys of forested regions in Mexico, where monarch butterflies (*Danaus plexippus*) hibernate from November to March, found the creatures occupying only 0.67 hectares of land — a 44% drop from the previous year, and the

smallest area since surveys began in 1993. Area occupied is used as an indicator of population size. Changes in land use and extreme climate conditions along the roughly 4,000-kilometre migration route from Canada to Mexico have contributed to the decline, as has deforestation of hibernation sites, says the WWF. Use of agricultural herbicides has reduced the availability of milkweed, a key food source.

Agricultural Act of 2014, authorizes the creation of a non-profit corporation called the Foundation for Food and Agriculture Research. It calls for an initial \$200 million for the foundation to support research in areas such as plant and animal health, nutrition and renewable energy. The Senate is expected to pass the bill this week.

### Reef waste dump

The authority in charge of Australia's Great Barrier Reef has approved a controversial dumping of dredging waste in the marine park around the immense coral edifice. The Great Barrier Reef Marine Park Authority says

that “strict environmental conditions” will be in place for the dumping of up to 3 million cubic metres of spoil originating from the expansion of the Abbot Point coal port. But environmental groups say that the move will endanger the ecosystem and threatens the reef's status as a UNESCO World Heritage Site.

## FUNDING

### Stem-cell genomics

Researchers from seven Californian institutions have bagged a US\$40-million grant to establish a centre that will apply large-scale genetics studies to stem-cell research. The award from the California

Institute for Regenerative Medicine in San Francisco, announced on 29 January, will support a Center of Excellence in Stem Cell Genomics led jointly by Stanford University in Palo Alto and the Salk Institute for Biological Studies in San Diego. The selection process raised protests from other applicants, who questioned departures from review procedures used in previous grant cycles.

## RESEARCH

### Cancer genetics

The US National Cancer Institute in Bethesda, Maryland, has launched one of the first trials to assess whether

KELLY JAMES  
cancer treatments that are tailored to individual genetic profiles are more beneficial for patients than non-targeted treatments. The Molecular Profiling based Assignment of Cancer Therapeutics (M-PACT) study, announced on 30 January, will screen tumours from 180 patients for mutations in 20 genes that are known to affect treatment. Half of the patients will then receive therapy that is customized for their specific mutations, and half will receive non-customized therapy. The findings are expected to be reported in 2017.

## Lab-animal reforms

Responding to criticisms, Imperial College London on 31 January unveiled a plan for “wholesale reform” of the ethical review and governance of its animal research. Last year, the university underwent an independent review after an undercover investigation by anti-vivisectionists produced allegations of malpractice (see *Nature* <http://doi.org/rbd>; 2013). See [go.nature.com/7vqf2t](http://go.nature.com/7vqf2t) for more.

## PEOPLE

### Science leader

Chemist Geraldine Richmond (pictured) has been chosen as the next president-elect of the American Association for the Advancement of Science



(AAAS) in Washington DC. Richmond, who is a professor at the University of Oregon in Eugene, studies the chemistry of surfaces and interfaces. She is a member of the US National Academy of Sciences and the founder and chair of the Committee on the Advancement of Women Chemists, an organization that supports female scientists and engineers. She will take over as AAAS president in February 2015.

## BUSINESS

### Neglected diseases

Global health advocates expressed dismay last week over news that pharmaceutical giant AstraZeneca is ending research on treatments for tuberculosis, malaria and neglected tropical diseases. In 2012 the company, which has its headquarters in London, joined a coalition to eradicate neglected tropical diseases,

which affect 1.4 billion people worldwide. Geneva-based advocacy group Médecins Sans Frontières called the latest move “discouraging” and highlighted the need to combat neglected diseases that afflict the world’s poorest people (see *Nature* 505, 142; 2014).

### Data partners

Pharmaceutical giant Johnson & Johnson announced on 30 January a new partnership with Yale University in New Haven, Connecticut, to share data from the company’s clinical trials. The Yale University Open Data Access project will serve as an independent body to review and manage requests from researchers seeking anonymized clinical-trial data from the company, of New Brunswick, New Jersey. The move follows initiatives to promote clinical data sharing and transparency in the United States and in Europe (see *Nature* 505, 131; 2014).

### School suspension

Educational company Coursera has blocked access to services for students from Cuba, Iran and Sudan. The firm, which is based in Mountain View, California, specializes in massive open online courses (see *Nature* 495, 160–163; 2013). Citing US export regulations that

## COMING UP

### 6–9 FEBRUARY

The Molecules and Materials for Artificial Photosynthesis conference in Cancún, Mexico, highlights the latest research in molecular catalysts, solar cells and nanomaterials for energy conversion and storage.

[go.nature.com/asfpi5](http://go.nature.com/asfpi5)

### 12–15 FEBRUARY

Researchers gather in Marco Island, Florida, for the annual Advances in Genome Biology and Technology meeting. Topics include prospects for next-generation sequencing in cancer treatment, and the use of genomic tools to study neural circuits.

[go.nature.com/dmkkmp](http://go.nature.com/dmkkmp)

restrict services to sanctioned nations, Coursera said on 28 January that it had begun blocking users from logging on to its website from IP addresses in affected countries. Access for students from Syria was initially revoked, but was reinstated after the company learned of a regulatory exception.

### Drilling deferred

Oil company Royal Dutch Shell has shelved its 2014 drilling programme off the coast of Alaska. Speaking to investors on 30 January, chief executive Ben van Beurden cited a 22 January court ruling that the US government did not properly assess the potential environmental impacts of offshore drilling in the Chukchi Sea (see *Nature* 505, 590; 2014). “The lack of a clear path forward means that I am not prepared to commit further resources for drilling in Alaska in 2014,” he said.

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## TREND WATCH

By 2025, there will be more than 20 million new cancer cases per year, compared with 14.1 million in 2012, according to the *World Cancer Report 2014*, released on 3 February by the World Health Organization’s International Agency for Research on Cancer. Demographic changes and increased life expectancy are responsible, the report says. The greatest impact will be on low- and middle-income countries, noted Margaret Chan, director-general of the World Health Organization.

### THE BURDEN OF CANCER

Asia experienced around 46% of global new cancer cases in 2012, but 53% of cancer mortalities.

