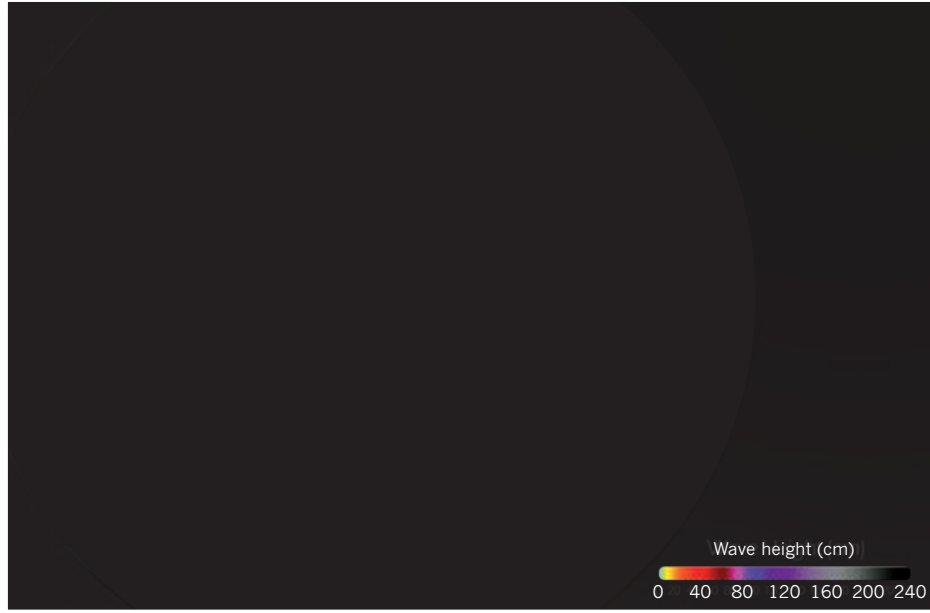


NOAA



## Quake causes waves of destruction

Most of the devastation seen after the magnitude-9.0 earthquake that struck Japan on 11 March was caused by the subsequent tsunami wave, which has left thousands dead. The tsunami was the largest ever measured in the open ocean by the US National Oceanic and Atmospheric Administration (which tracked its spread across the Pacific Ocean, pictured). According to local reports, the tsunami reached more than 10 metres in height when it hit

Japan's Sanriku coast barely 30 minutes after the quake. Along flat coasts, it spread hundreds of metres inland, with waves high enough to flow over concrete sea walls supposed to protect infrastructure. Thanks to the wave's long travelling time across the Pacific Ocean, and a sophisticated early-warning system, it caused only minor damage elsewhere around the Pacific. For details of the earthquake and concern over nuclear reactors, see page 273.

## LARGEST EARTHQUAKES SINCE 1900

**9.5** Valdivia, Chile, 22 May 1960

**9.2** Prince William Sound, Alaska, 28 March 1964

**9.1** Sumatra, Indonesia, 26 Dec 2004

**9.0** Kamchatka, former USSR, 4 Nov 1952

**9.0** Sendai, Japan, 11 March 2011

**8.8** Offshore Maule, Chile, 27 Feb 2010

SOURCE: USGS

### POLICY

#### Flu review

An independent review panel has both criticized and praised the World Health Organization (WHO) for its response to the 2009 H1N1 influenza pandemic. The 25-member panel released a preview of its findings on 10 March. The WHO gave no consistent depiction of the severity of the outbreak, and didn't dispel confusion about its definition of a pandemic, the panel found. On the other hand, the panel defended the agency against allegations by

critics that industry might have influenced WHO decisions. And it praised the WHO's leadership for its overall response. See [go.nature.com/sijsov](http://go.nature.com/sijsov) for more.

#### Stem-cell ethics

Procedures involving established human embryonic-stem-cell lines are not patentable, the Court of Justice of the European Communities ruled on 10 March. The judgement, on ethical grounds, was a preliminary opinion, but it surprised researchers,

who were expecting a less conservative stance. See page 280 for more.

#### Single EU patent

Ministers representing 25 of the 27 countries in the European Union have agreed to create a single European patent system, expected to be introduced in 2012. Currently, patents must be registered in individual countries and translated into each European language — an expensive process. Ministers exploited an 'enhanced cooperation' provision to allow progress while excluding two countries

from the agreement: Italy and Spain, who object to a transnational system that would use just English, French and German. Two days before the 10 March agreement, the European Court of Justice declared that a system of patent litigation at the European level would be unconstitutional, although this would not affect a common patent-registration system.

#### African lab quality

A meeting in Addis Ababa this week marked the official launch of the African Society for Laboratory Medicine, an

organization that hopes to strengthen Africa's laboratory standards and research capacity. The US President's Emergency Plan for AIDS Relief (PEPFAR) contributed US\$4.2 million to create the society, which will be based in Ethiopia. Its formation follows years of related projects with international partners such as the World Health Organization, which in 2009 launched a laboratory accreditation system to raise standards of disease diagnosis in the continent. See [go.nature.com/vuehq5](http://go.nature.com/vuehq5) for more.

## PEOPLE

**Vaccine move**

The Global Alliance for Vaccines and Immunization (GAVI) announced on 8 March that Seth Berkley is to be its next chief executive, replacing Julian Lob-Levyt, who stepped down last October. Berkley, an epidemiologist, is giving up his role as president of the International AIDS Vaccine Initiative in New York, which he launched in 1996. He will take up the post at GAVI, which is based in Geneva, Switzerland, in August.

**New JAMA head**

Howard Bauchner (pictured) is to become the 16th editor-in-chief of the *Journal of the American Medical Association*



(*JAMA*), the association said on 10 March. Bauchner, a paediatrics researcher and physician currently based at the Boston University School of Medicine in Massachusetts, replaces Catherine DeAngelis, who announced last year that she would step down at the end of June 2011 after ten years in charge (see *Nature* 467, 137; 2010).

**Astrobiology loss**

A well-known research centre for astrobiology has lost its connection to its UK university, and will be run as a private company. Chandra Wickramasinghe, who has headed the Cardiff Centre for Astrobiology since it was founded in 2000, last week lost his appeal against Cardiff University's 2010 decision to close its astrobiology department for financial reasons (see

[go.nature.com/5rbb5g](http://go.nature.com/5rbb5g)). Wickramasinghe — whose work with astronomer Fred Hoyle pioneered the theory of panspermia, that life on Earth was seeded from outer space — says that the centre will now be privately funded, and will continue ongoing projects with other partners, such as the Russian space agency.

**Launch-pad death**

An investigation is under way into the death of a space-shuttle engineer at NASA's Kennedy Space Center in Cape Canaveral, Florida, on 14 March. James Vanover, who worked for the contractor United Space Alliance, fell from launch pad 39A, where the shuttle *Endeavour* is being prepared for its final flight in April. Officials at the space centre said that the incident was the first fatality at the launch pad since 1981, the year of the first shuttle flight.

**Energy-agency chief**

Dutch politician Maria van der Hoeven will be the next executive director of the International Energy Agency, succeeding Nobuo Tanaka of Japan, who steps down at the end of August after a four-year term. The agency announced van der Hoeven's appointment on 11 March. In the Netherlands, she has been a minister of economic affairs, and of science and education.

## COMING UP

**18 MARCH**

NASA's MESSENGER spacecraft is due to enter orbit around Mercury. [go.nature.com/om4yso](http://go.nature.com/om4yso)

**21–25 MARCH**

The American Physical Society meets in Dallas, Texas. [go.nature.com/ykcfz1](http://go.nature.com/ykcfz1)

## RESEARCH

**California bounty**

The University of Southern California in Los Angeles has received a US\$200-million gift, with no restrictions, to support its science, social science and humanities teaching and research, it announced on 9 March. The donation, the largest in the institution's history, was made by David Dornsife, chairman of steel-fabricating company Herrick Corporation in Stockton, California, and his wife Dana, founder of the Lazarex Cancer Foundation in Danville, California. The couple have previously funded a neuroscience imaging centre at the university.

**Three parents**

The Human Fertilisation and Embryology Authority in London is to review the safety and efficacy of assisted-conception methods used to avoid inheriting diseases caused by mutations in mitochondrial DNA, such as Leigh's disease. This potential fertility treatment, not yet allowed in the United Kingdom, transfers genetic material to create an embryo with DNA from three sources — the mother, father and a donor of mitochondrial DNA. The review's findings will be submitted to the Department of Health by mid-April.

**NATURE.COM**

For daily news updates see: [www.nature.com/news](http://www.nature.com/news)

## TREND WATCH

A therapeutic antibody is the first drug in 50 years to be approved to tackle the autoimmune disease systemic lupus erythematosus. On 9 March, the US Food and Drug Administration approved Belimumab (belimumab), developed by Human Genome Sciences in Rockville, Maryland, working with GlaxoSmithKline. Other lupus therapies are hot on the trail. Some target the same protein as belimumab, hoping to reduce the body's ability to attack its own tissues. See [go.nature.com/29addm](http://go.nature.com/29addm) for more.

**A RACE TO TREAT LUPUS**

Drugs that target proteins in the immune system hope to grab a share of a multibillion-dollar market to treat lupus.

