

SEVEN DAYS

The news in brief

EVENTS

AlphaGo victorious

The world's leading Go player, South Korea's Lee Sedol, lost his final match in Seoul against Google DeepMind's AlphaGo machine on 15 March. The tightly fought game brought the best-of-five competition to an end with four wins for the computer versus one for the human player. Sedol came back from three consecutive losses to beat the artificial-intelligence system in the fourth match, but ultimately missed out on the US\$1-million prize. Go originated more than 2,500 years ago in China and involves placing black and white counters on a board. See page 284 for more.

Brexit warning

Physicist Stephen Hawking is one of more than 150 scientists, mathematicians, economists and engineers at the University of Cambridge, UK, who warn of a disaster for the nation's science if Britain exits the European Union (known as Brexit). A referendum to be held on 23 June will ask whether the country should leave the EU. In a 10 March letter

NUMBER CRUNCH

10

Consecutive months in which the global monthly temperature record has been broken. February's temperature was 1.35°C above average for the month. A strong El Niño weather system has contributed to the record-breaking run.

Source: NOAA



Famous killer whale nears end of life

Tilikum, a killer whale (*Orcinus orca*) at SeaWorld in Orlando, Florida, has an incurable lung infection, the theme park's veterinary team has announced. In February 2010, Tilikum dragged his trainer Dawn Brancheau into the pool and killed her. The whale was also involved

in two deaths in the 1990s, and the story of his life in captivity was told in the controversial 2013 documentary film *Blackfish*. SeaWorld bought Tilikum in 1983; he is thought to be 35 years old. The species' life expectancy in captivity versus that in the wild is still debated by scientists.

to *The Times*, organized by protein scientist Alan Fersht, the group argues that the free movement of workers between EU countries helps in the recruitment of high-quality researchers to the United Kingdom. The letter's signatories are all fellows of the Royal Society in London.

Zika meeting

With the Zika virus still spreading rapidly across the Americas, the World Health Organization (WHO) in Geneva held an emergency meeting on mosquito control on 14–15 March. The WHO's Vector Control Advisory Group intends to review evidence to support new and innovative techniques for combating the *Aedes aegypti* mosquitoes

that transmit Zika virus, along with dengue and Chikungunya viruses. These techniques include deploying mosquitoes that have been made infertile through genetic modification or irradiation.

PRIZES

Fermat proof prize

Andrew Wiles has received the 2016 Abel Prize for mathematics for his solution to Fermat's last theorem, the Norwegian Academy of Science and Letters announced on 15 March. The problem had stumped some of the world's greatest minds for three and a half centuries. Wiles, a number theorist now at the University of Oxford, UK, will receive 6 million

kroner (US\$700,000) for his 1994 proof showing that there cannot be any positive whole numbers x , y and z such that $x^n + y^n = z^n$, if n is greater than 2. See go.nature.com/yf1nxj for more.

FACILITIES

Infrastructure map

The European Commission has published its latest wish list of the research-infrastructure projects that it considers most deserving of continent-wide support. The European Strategy Forum on Research Infrastructures road map, released on 10 March, details 21 facilities across all scientific areas to help national governments to prioritize how they spend infrastructure money, and

WIN MCNAMEE/GETTY

to encourage them to share costs and responsibilities. New facilities listed in the 2016 road map include two in environmental sciences and one in health and food sciences, as well as solar and neutrino telescopes and an infrastructure for scientific research into cultural heritage.

POLICY

Call to save bees

The US Government Accountability Office (GAO) says that US regulatory bodies need to do more to protect bee populations. In a report made public on 11 March, the GAO called on the US Department of Agriculture (USDA) to work more closely with other agencies to protect bee health. The report says that although the USDA has upped efforts to monitor honeybee colonies managed by beekeepers, it does not coordinate the monitoring of wild, native bees. The report also recommends that the Environmental Protection Agency identifies the mixtures of pesticides most commonly used by farmers.

PEOPLE

Minister keeps title

German defence minister Ursula von der Leyen (pictured), who was accused in September 2015 of



plagiarism in her medical dissertation in obstetrics, will not lose the title of doctor or her job. The senate of Hanover Medical School, which awarded the title in 1990, announced on 9 March that its formal investigation revealed that some passages in von der Leyen's dissertation were copied from original sources. But these were mostly in the introduction, it said, and the main body of research was original and valid. Since 2011, two German federal ministers have lost their titles and government posts to plagiarism charges.

BUSINESS

Gene data shared

Researchers and the public can now access a database of anonymized genetic information from 10,000 people with

hereditary breast or ovarian cancer. The database, called AmbryShare, was launched on 8 March by Ambry Genetics, a genetic-testing company in Aliso Viejo, California — making Ambry the first private company to release its customers' information for free. The Broad Institute of MIT and Harvard in Cambridge, Massachusetts, has an open-access database of more than 60,000 genomes collected from the public, but AmbryShare's data currently focus on specific diseases. Ambry hopes to release up to 200,000 aggregated genomes per year from people with various conditions.

India vaccine fight

The medical charity Médecins Sans Frontières (MSF) is challenging pharmaceutical company Pfizer's application for a patent in India on pneumonia vaccine PCV13, marketed as Prevenar 13 in India. MSF says that it wants to allow other manufacturers to make the vaccine, and lower its cost. The 11 March challenge asserts that the method that Pfizer is trying to patent is too obvious to deserve a patent under Indian law. Pfizer is reported as saying that the complexity of the vaccine justifies the price. In partnership with the vaccine

COMING UP

17–18 MARCH

Commercializing 3D printing for biological applications is discussed at the second Tissue Engineering, Biofabrication & 3D-Bioprinting in Life Sciences conference in Boston, Massachusetts. go.nature.com/rggrat

21–23 MARCH

NASA holds a meeting in Washington DC to develop its technology road maps. go.nature.com/dhmq2e

21–25 MARCH

The annual Lunar and Planetary Science Conference convenes in The Woodlands, Texas. go.nature.com/qpnnox

alliance GAVI, Pfizer has reduced the price of Prevenar since 2013.

Mosquito trial

A proposed field trial of genetically modified mosquitoes in the Florida Keys poses no threat to human health or the environment, the US Food and Drug Administration has determined. Members of the public have 30 days to submit comments on the draft assessment, which was released on 11 March. The *Aedes aegypti* mosquitoes developed by Oxitec of Oxford, UK, are engineered to produce short-lived young to temporarily reduce mosquito populations and combat diseases that they carry. The project has received increased attention from the media and politicians amid concerns about the spread of Zika virus.

➔ NATURE.COM

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

SOURCE: NOAA

TREND WATCH

The level of atmospheric carbon dioxide at the Mauna Loa Observatory in Hawaii rose by 3.05 parts per million (p.p.m.) in 2015 — the largest annual increase since records began 56 years ago, says the US National Oceanic and Atmospheric Administration. After correcting for seasonal swings from plant-growth cycles in the Northern Hemisphere, the average CO₂ concentration in 2015 was 400.83 p.p.m. — a 43% rise compared to the CO₂ level of around 280 p.p.m. that existed during the pre-industrial era.

CARBON DIOXIDE LEVELS BREAK RECORDS

The Mauna Loa Observatory in Hawaii recorded the biggest ever increase in the growth rate of CO₂ concentrations in 2015.

