

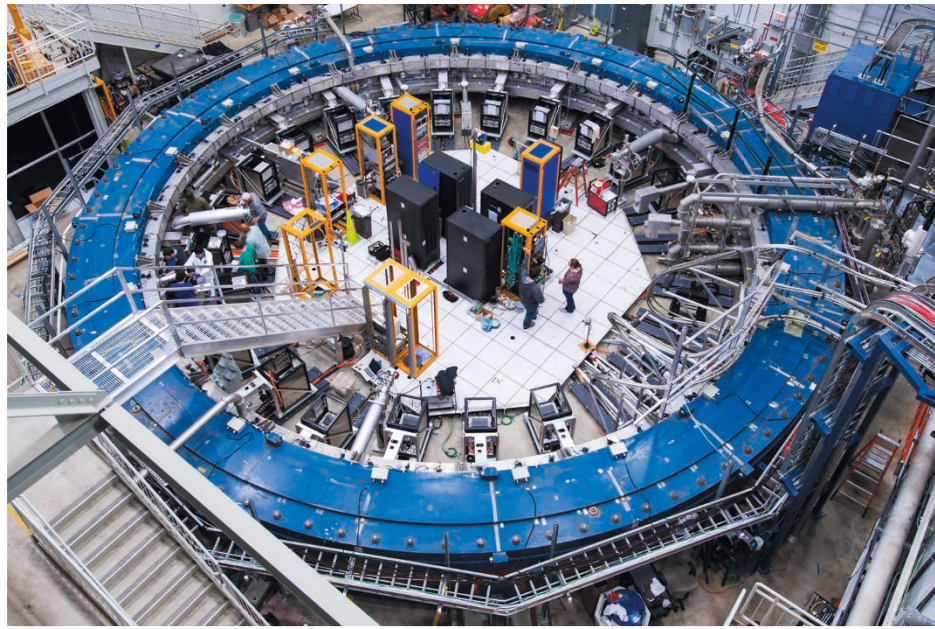
EVENTS

Goodbye Paris

US President Donald Trump announced on 1 June that he has decided to withdraw the United States from the 2015 Paris climate accord. More than 190 nations agreed to the pact in December 2015, pledging to hold average global temperatures to 1.5–2 °C above pre-industrial levels. Trump added that the United States would immediately stop implementing its Paris pledges, including contributions to the Green Climate Fund, which helps developing countries to deal with the effects of climate change. Negotiations to re-enter the Paris accord, or make a new agreement, on terms that are fairer to US businesses and taxpayers, are a possibility, Trump said. In response, Bloomberg Philanthropies said that it would donate US\$15 million to the United Nations Framework Convention on Climate Change to help make up for the monetary shortfall resulting from Trump's decision. See page 198 for more.

Ebola vaccine

Regulatory and ethics-review boards in the Democratic Republic of the Congo have approved the use of an experimental vaccine to combat an outbreak of Ebola, officials announced on 29 May. If they decide to deploy the vaccine, called rVSV-ZEBOV, health-care workers will offer it to those at highest risk of contracting the disease. Officials in the country have confirmed two cases since they started getting reports of people with Ebola-like symptoms in late April. Three additional people have tested positive for antibodies against Ebola, and eight suspected cases await diagnosis, the World Health Organization said on 1 June.



FERMILAB

Muon experiment seeks new physics

A US experiment hunting for new physics in the behaviour of muons, heavy cousins of electrons, circulated its first beam of particles on 31 May. Physicists working on Muon $g-2$ at the Fermi National Accelerator Laboratory in Batavia, Illinois, will spend the next three years measuring how the particles wobble around their axes as they circulate in a precise magnetic field. The experiment should confirm

or refute an anomaly in the muon's magnetic moment — a fundamental property that relates to the particle's inherent magnetism — which emerged in data from the Brookhaven National Laboratory in New York in the early 2000s. Physicists hope to discover whether the larger than expected magnetic moment is merely the result of random noise or is a discrepancy caused by interactions with unknown particles.

POLICY

US travel ban

The US government has asked the country's highest court to allow a proposed ban on new visas for travellers from six Muslim-majority countries. The proposed ban, which lower courts have ruled unconstitutional, is the second attempt by President Donald Trump's administration to limit travel from those countries. On 1 June, the government filed an appeal to the US Supreme Court; if the court accepts the case, it is unlikely to hear arguments until the autumn. Fears of a travel ban have led

some US scientists to cancel planned trips in case they are not allowed to re-enter the country.

Pharma warning

UK-based drug companies will have to move many of their activities — including some functions related to drug safety and licences — to remaining European Union member countries after Brexit, the bloc's drug regulator said on 31 May. The warning was part of the European Medicines Agency's first formal guidance to pharmaceutical companies on the consequences of Brexit. It also said that drugs made in

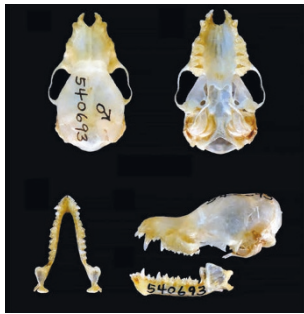
Britain would be considered imports. Industry groups expressed concern over the document: the Association of the British Pharmaceutical Industry and the BioIndustry Association said it was "premature" to assume that the United Kingdom would be cut off from the EU's system of drug regulation.

EPA staffing cuts

The US Environmental Protection Agency (EPA) will begin offering employees early retirement and other incentives to leave the agency, according to an internal memo sent to staff on 1 June. The

effort to reduce the number of employees is the result of a May directive from the White House to decrease the EPA workforce, to meet funding goals set by President Donald Trump and to comply with a March executive order asking federal agencies to restructure their staffing. Trump has proposed to cut EPA funding by more than 30% and would remove roughly 20% of the agency's employees. The internal memo was sent while Trump was announcing his decision to withdraw the United States from the Paris climate accord.

R. MORATELLI ET AL. J. MAMMAL. HTTP://DOI.ORG/B78H (2017)



wildlife biologists. The findings were published on 7 June (R. Moratelli *et al. J. Mammal.* <http://doi.org/b78j>; 2017).

New Jupiter moons

Astronomers have spotted two more moons orbiting Jupiter, the first such discovery reported for a major planet in five years. The moons are about 1–2 kilometres across. Their tilted, elliptical orbits extend as far as 30 million km from Jupiter, suggesting that they formed in the distant realms of the Solar System and were later captured by the planet's gravity. Astronomers reported the moons on 2 June and 5 June in notices from the International Astronomical Union's Minor Planet Center. The discoveries bring the moon count around the giant planet to 69.

Lead levels

An ice core from a glacier in the Swiss–Italian Alps reveals that atmospheric lead plummeted to undetectable

levels during the Black Death in the fourteenth century. Researchers describe a high-resolution analysis of the core's record of the past 2,000 years in a study published on 31 May (A. F. More *et al. GeoHealth* <http://doi.org/b72t>; 2017). As the pandemic swept across Europe, industrial activities including lead mining and smelting ceased. This probably explains the drop in lead levels, suggest the authors. People have been putting lead into the atmosphere for at least two millennia, and natural background levels are likely to be lower than government and industry currently assume, the authors say.

Black-hole collision

The Laser Interferometer Gravitational-Wave Observatory (LIGO) has for the third time detected ripples in the fabric of space-time produced as two black holes merged. The merging orbs were not quite as big as the ones in LIGO's first historic detection in September 2015, but they were twice as massive as those that it saw colliding the following December. The event was, however, the most distant, taking place some 2.8 billion light years (nearly one gigaparsec) away. The LIGO team says that it is analysing data from six other 'candidate events' collected in its current science run.

Observations resumed at the end of November 2016, after sensitivity upgrades to LIGO's twin detectors in Louisiana and Washington state, and are scheduled to continue until the end of August.

PUBLISHING

Peer-review deal

The owner of the database Web of Science, Clarivate Analytics, has bought up the peer-review platform Publons. The 1 June deal — financial details of which were not disclosed — might lead to new services for finding, screening and contacting peer reviewers, said a spokesperson for Clarivate, which is headquartered in Philadelphia, Pennsylvania. It could also help to prevent reviewer fraud. Publons, a New Zealand-based start-up firm, encourages scientists to share their peer-review history online, and has gathered details of some 800,000 reviews from more than 150,000 researchers. See go.nature.com/2rsyzo2 for more.

AWARDS

€4-million prize

Neuroscientist and psychiatrist Karl Deisseroth has won science's most generous award: the €4-million (US\$4.5-million) Fresenius Research Prize, which includes €500,000 for personal use. Deisseroth and his lab at Stanford University, California, were awarded the quadrennial prize on 31 May by the Else Kröner Fresenius Foundation in Bad Homburg, Germany, for their work on optogenetics, a method for controlling neurons with light pulses, and for their development of microscopy methods to examine entire organs, such as the brain. Both techniques have helped Deisseroth and others to uncover neural circuitry that is linked to psychiatric conditions.

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RESEARCH

Singular bat

Zoologists have named a newly discovered species of bat after the veteran British naturalist and broadcaster David Attenborough. Scientists analysed museum records of specimens of 377 Caribbean bats, and found that a species apparently endemic to the island of Tobago is morphologically and genetically different from the mainland species (*Myotis nigricans*) to which it had been assigned taxonomically for almost a century. Taxonomist Ricardo Morelli and his team named the bat (pictured) *Myotis attenboroughi* in honour of the naturalist, who has inspired generations of

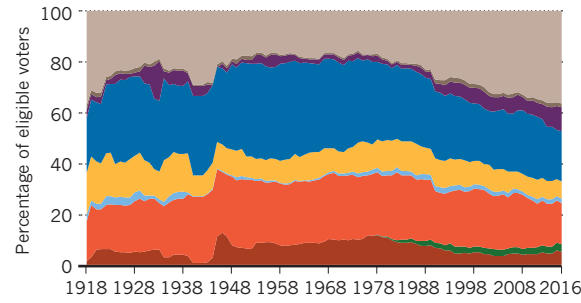
TREND WATCH

Voter turnout in Europe is at its lowest since the Second World War, suggests an analysis led by Simon Hix at the London School of Economics and Political Science. He and a colleague collated national-election data from 31 countries, dating back to 1918. From the Second World War to the early 1980s, 80–85% of the electorate turned out to vote, they found. But that has now fallen to just below 65%. Voting rates have dropped in young people, the pair say, but remain high in those born just after the Second World War.

THE RISE OF EUROPE'S NON-VOTERS

Turnout in national elections across Europe has fallen steadily since the 1980s, from about 80% to just under 65% today.

- Non-voters
- Conservative or Christian democrat
- Social democrat
- Other parties
- Liberal or centrist
- Green
- Radical right
- Regionalist or nationalist
- Radical left



SOURCE: SIMON HIX/LSE