SEVEN DAYS *The news in brief*

FACILITIES

UK to head SKA

The Square Kilometre Array (SKA) will be headquartered at the Jodrell Bank Observatory near Manchester, UK, the SKA organization announced on 30 April. Once completed in the 2020s, SKA will be world's largest radio observatory — a network of more than 100,000 antennas shared between Australia and South Africa that will study phenomena of the early Universe. In reaching its decision, the organization rejected the recommendation of an expert panel in March that the site for the headquarters should be Padua in Italy (see *Nature* http://doi.org/38h; 2015). A *Nature* Editorial criticized the organization's hesitation in following the panel's advice (see *Nature* **519,** 129; 2015).

Institute renamed

The premier US advisory board for medical research has voted to change its name. On 28 April, the Institute of Medicine in Washington DC announced that it is becoming the National Academy of Medicine. The change aligns the group's name with those of its sister organizations, the National Academy of Sciences and the National Academy of Engineering, and will become official on 1 July.

EVENTS

MESSENGER ends

In a spectacular mission-ending crash, NASA's MESSENGER spacecraft hit Mercury on 30 April as planned. The probe ran out of fuel and disappeared on the far side of the planet, as seen from Earth. MESSENGER began orbiting Mercury in 2011, and the mission lasted far beyond its expected lifetime of one year. The probe's discoveries include ice at Mercury's poles and puzzlingly high amounts of volatile elements such as sulfur and chlorine. The next Mercury mission, the joint European–Japanese BepiColombo, will launch in 2017. See go.nature.com/eetga2 for more.

TONY GENTILE/REUTERS

Vatican gathers leaders for climate talks

Religious leaders, scientists and policy-makers met at the Vatican on 28 April to discuss climate change. Although the Pontifical Academy of Sciences has held climate-related conferences at the Vatican before, this was the first to include the leaders of various religions. Pope Francis is preparing an 'encyclical' letter on climate change to send to bishops this summer ahead of the United Nations climate talks in Paris this December. Delegates at the meeting included UN secretary-general Ban Ki-moon, Italy's President Sergio Mattarella and President Rafael Correa of Ecuador.

Rubella eliminated

The World Health Organization (WHO) declared on 29 April that the Americas is the first of its regions to have formally eliminated rubella. The WHO's Global Vaccine Action Plan calls for elimination of the disease in two of the six WHO regions by 2015, and in five by 2020. Elimination can be fragile, however; measles was eradicated from the Americas in 2002 but has resurged in recent years, with imported cases spreading in unvaccinated populations. And with the global level of rubella vaccination coverage at just 40%, and that of several other diseases also low, the WHO last month warned that global vaccination targets are "far off track".

NASA balloon leak

NASA's latest super-pressure balloon fell to Earth on 27 April after developing a leak 32 days into its flight circling around southern latitudes from New Zealand to Australia. It was the longest flight yet in which the balloon endured day–night cycles that challenge its ability to stay aloft. The mission had aimed to beat the record for the longest super-pressure-balloon flight of 54 days. That flight, however, was in the constant daylight of the summer Antarctic. NASA is developing the balloons as a way to loft scientific payloads to the edge of space.

Supply-craft failure

An unmanned Russian spacecraft that was due to deliver supplies to the International Space Station (ISS) tumbled out of control on 28 April shortly after its launch from the Baikonur cosmodrome in Kazakhstan. Russian officials said that the failed Progress M-27M

spacecraft may stay in an uncontrollable orbit for up to two weeks before it re-enters the atmosphere. Where debris might crash to Earth cannot be predicted, but officials say that the risk of any hitting populated areas is small. The ISS crew has sufficient food and water left until the next planned delivery on 19 June.

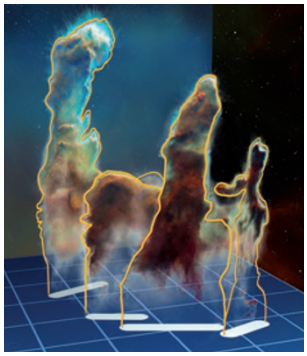
Blast off for Bezos

Blue Origin, the private rocketry company founded by Amazon.com's Jeff Bezos and based in Kent, Washington, conducted the first successful launch of its spaceship on 29 April. The *New Shepard* vehicle, named after the first American in space, Alan Shepard, flew up more than 93 kilometres from the company's launch site in Texas. One portion, the propulsion module, did not return to Earth as planned, but the company did not explain what happened. Blue Origin aims to fly tourists and research payloads to the edge of space on reusable rockets.

RESEARCH

Space icon goes 3D

The 3D structure of the star-forming clouds known as the Pillars of Creation (**pictured**) was revealed on 30 April — along with news that the iconic object's days are numbered. The columns, imaged by the



ESO/M. KORNMESSER

Hubble Space Telescope in 1995, lie within the Eagle Nebula some 2,100 parsecs (7,000 light years) away. Astronomers created the 3D images using the MUSE instrument on the European Southern Observatory's Very Large Telescope in Chile. The structures are pummelled by intense ultraviolet radiation and stellar winds from the nearby star cluster NGC 6611, which in spite of forming the pillars, will also eventually erode them completely in just 3 million years.

Brain-scan analysis

The Human Connectome Project (HCP), a US$40-million effort to map connections in the human brain, has released findings that show how behavioural and demographic factors correlate with brain activity. The HCP, which is funded by the US National Institutes of Health, revealed 'MegaTrawl' on 29 April. This database links brain scans from roughly 460 people with 187 variables, such as age, sex, socio-economic status and smoking habits. HCP co-chair Stephen Smith at the University of Oxford, UK, says that the data will serve as a tool for researchers to find meaningful differences in brain connections between demographic groups.

POLICY

Climate pledge

California has committed to reducing its greenhouse-gas emissions to 40% below 1990 levels by 2030, matching the European Union's pledge as officials prepare for the climate summit in Paris this December. Governor Edmund Brown Jr signed an executive order on 29 April that extends the state's current commitment — enacted in 2006 — to reduce emissions to 1990 levels by 2020. California's long-term goal is to reach 80% below 1990 levels by 2050.

Biofuels cap

Europe has agreed to put a brake on biofuels made from food crops. By 2020, such fuels should provide no more than 7% of transport fuel, the European Parliament voted on 28 April — concluding years of wrangling. In 2012, the European Commission proposed a limit of 5%, but lobbying from the biodiesel industry and some member states prompted the commission to loosen the reins (see *Nature* **499,** 13–14; 2013). Scientists have long warned that fuels such as biodiesel made from palm oil can produce more carbon emissions than the fossil fuels they replace.

COMING UP

8–12 MAY
The American Association of Immunologists holds its annual meeting in New Orleans, Louisiana. Topics include cancer immunotherapy and the role of the microbiome in immunity.
go.nature.com/6bodsw

11–15 MAY
International experts on underwater acoustics will gather in Barcelona, Spain, to discuss issues around ocean noise.
oceanoise2015.com

BUSINESS

Tesla charges on

Electric-car maker Tesla Motors in Palo Alto, California, unveiled batteries for residential, commercial and utility-company use on 30 April. Based on tried-and-tested lithium-ion cells, the batteries are designed to smooth out the use of solar energy and will be available to consumers this summer. Experts say that energy-storage facilities will help to ease the transition to the low-carbon electricity required to combat climate change, but warn that battery technology is still too expensive for storing large amounts of solar power. See go.nature.com/umykel for more.

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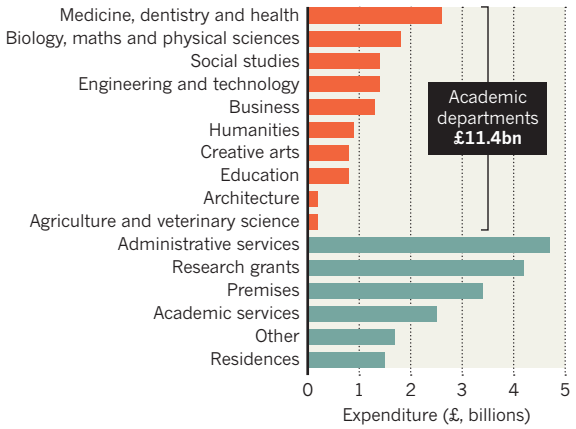
TREND WATCH

UK universities spent £29.4 billion (US$44.5 billion) in 2013–14, according to data released by the Higher Education Statistics Agency on 29 April. Teaching costs accounted for almost 39% of the total, with medicine, dentistry and health departments drawing the highest amount (9%). Research grants cost 14.3%. Administrative services took 16%, including management salaries, public relations and student services. Academic services such as libraries and computing added another £2.5 billion (8.4%).

FOLLOW THE MONEY

How UK universities spent their cash in 2013–14.



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