

SEVEN DAYS

The news in brief

RESEARCH

Dark-energy survey

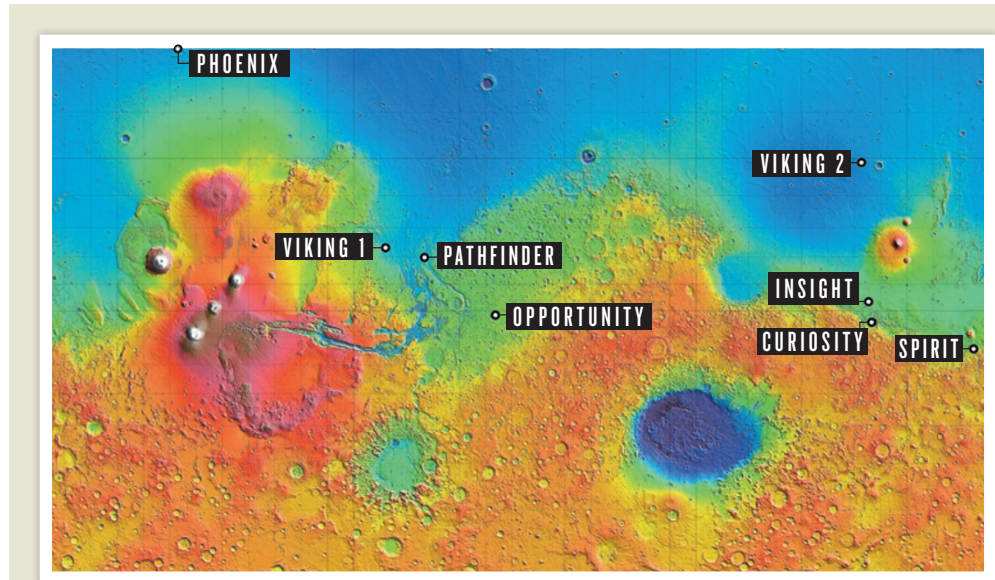
A massive sky-mapping project to study dark energy has begun, announced by Fermilab in Batavia, Illinois, on 3 September. The Dark Energy Survey at the Cerro Tololo Inter-American Observatory in Chile launched on 31 August. Over the next five years, it will map 300 million galaxies covering one-eighth of the night sky. Data from its 570-megapixel camera may lead to a better understanding of the mysterious dark energy that is thought to drive the Universe's accelerating expansion. See go.nature.com/ybcueb for more.

Baby-genome plan

Hundreds of babies in the United States will have their genomes sequenced as part of a US\$25-million programme unveiled on 4 September by the US National Institute of Child Health and Human Development and the National Human Genome Research Institute. The agencies have chosen four research teams, which will receive grants over the next five years, to test whether sequencing can provide more information than conventional tests that screen newborns for genetic and other disorders. See page 135 and go.nature.com/izz7u9 for more.

High-tech probe

Making better devices for measuring brain activity in animals is the goal of a US\$5.5-million collaboration announced on 4 September. Partners include the Howard Hughes Medical Institute in Chevy Chase, Maryland; the Allen Institute for Brain Science in Seattle, Washington; and the nanoelectronics-research company imec in Leuven, Belgium. The project, which also involves



JPL-CALTECH/NASA

NASA homes in on next Mars landing site

The next US Mars lander will touch down on one of four candidate sites announced by NASA on 4 September. The lander, dubbed Interior Exploration Using Seismic Investigations, Geodesy and Heat Transport (InSight), is set to launch in March 2016 and will study the planet's deep interior to help researchers to understand how rocky planets formed. There were 22

candidate sites; the semi-finalists were chosen for their level and smooth terrain. The sites are all on an equatorial plain in an area called Elysium Planitia, close to where other landers have set up home (pictured). InSight will drill 2–5 metres into the Martian surface, so scientists wanted sites that would not harbour large rocks or solid bedrock that could block the probe.

University College London and UK biomedical charity the Wellcome Trust, aims to pack more electrodes than ever onto brain probes that record signals between neurons. The group hopes to make the devices available for sale by the end of 2016.

POLICY

Gas phase-down

Leaders of the Group of 20 (G20), representing the world's largest economies, agreed on 6 September to regulate hydrofluorocarbons (HFCs) under the Montreal Protocol on Substances that Deplete the Ozone Layer. Primarily used as refrigerants, HFCs were developed as alternatives to ozone-depleting chemicals,

but they are powerful greenhouse gases. Parties to the protocol will debate amending the treaty to implement a global phase-down of HFCs at a meeting in October in Bangkok.

Carbon-tax repeal

The newly elected prime minister of Australia, Tony Abbott, has committed to scrapping the previous government's plans to put a price on carbon emissions. He vowed as part of his campaign to repeal the carbon tax, which outgoing Prime Minister Kevin Rudd had already promised to soften to a carbon-trading scheme. Abbott, who beat Rudd in national elections on 7 September, said that it

would be "a very early item of business". But Abbott may face a fight to push the repeal through parliament.

FACILITIES

Spanish clash

Plans to build a particle accelerator and neutron source in Bilbao, Spain, have come to an abrupt halt. The governing board of the €180-million (US\$238-million) European Spallation Source-Bilbao (ESS-Bilbao) announced on 29 August that the project's scientific director had been removed, and that the executive director's contract would not be renewed. The board cited a need to analyse and refocus the initiative. ESS-Bilbao, which has encountered budget

shortfalls, was launched in 2009 as a test-bed for a larger facility planned for Lund, Sweden.

PEOPLE

Libel suit tossed

On 4 September, the Taipei District Court in Taiwan dismissed a criminal libel suit against environmental engineer Ben-Jei Tsuang of National Chung Hsing University in Taichung. The petrochemical company Formosa Plastics Group (FPG) in Taipei had sued Tsuang for US\$1.3 million in damages for suggesting that its emissions were linked to an increased risk of cancer. Tsuang presented his results at a scientific meeting in 2010 and a press conference in 2011, and has since submitted a paper on the topic. A civil lawsuit against Tsuang by FPG is still pending. See go.nature.com/ukmxye for more.

AWARDS

Balzan prizes

Pascale Cossart (pictured), a microbiologist at the Pasteur Institute in Paris, has been awarded one of four 750,000-Swiss-franc (US\$800,000) Balzan prizes for her work on the molecular biology of pathogenic bacteria and their interaction with host cells. Physicist Alain Aspect of the École Polytechnique in Palaiseau, France, won



another of the prizes for his contributions to quantum information processing.

Lasker award

Richard Scheller of Genentech in South San Francisco, California, and Thomas Südhof of Stanford University in California have won this year's US\$250,000 Lasker Award for Basic Medical Research for their work on the molecular mechanisms that underlie the rapid release of neurotransmitters in the brain. Winners of the award, which this year was announced on 9 September, often go on to get a Nobel prize. See go.nature.com/ubuzgy for more.

Ocean contest

The X Prize Foundation is offering US\$2 million in a competition, sponsored by US philanthropist Wendy Schmidt, to improve ocean pH monitors, it announced on 9 September. Researchers can compete for one or both of

two \$1-million prize pots — one for the most accurate and another for the most cost-effective sensor. Subtle changes in ocean acidity can have marked effects on marine life, but existing sensors do not work well at depth or over long periods of time, and are too expensive to deploy widely. See go.nature.com/ttlysw for more.

EVENTS

Lunar orbiter up

On 6 September, NASA launched the Lunar Atmosphere and Dust Environment Explorer (LADEE) from Wallops Flight Facility in Virginia. The orbiter should arrive at the Moon in about 30 days, and will fly 20–50 kilometres above the surface. LADEE will collect dust and gas molecules in the lunar atmosphere, searching for silicon, magnesium and other elements ejected from Moon rocks. Researchers hope that data from LADEE could help to explain the twilight glow above the Moon's horizon seen by missions in the 1960s. See go.nature.com/j2tzm for more.

Labour row ends

The Atacama Large Millimeter/submillimeter Array (ALMA) observatory restarted operations in Chile on 9 September, after a labour strike shut down the

COMING UP

16–21 SEPTEMBER

The Seventh International Congress on Advanced Electromagnetic Materials in Microwaves and Optics takes place in Bordeaux, France, where scientists will share the latest results in metamaterials research. Topics will include advances in cloaking, and medical applications of metamaterials.

See go.nature.com/yqqli6

centre for 17 days. Contract negotiations had broken down between the union that represents most of ALMA's Chilean staff and Associated Universities Incorporated, based in Washington DC, which employs the workers (see go.nature.com/vhxfrv). The two-year contract signed on 7 September includes shorter working shifts, a 4% pay rise for union workers at the low end of the wage scale, and a bonus for workers at the highest-elevation ALMA site.

BUSINESS

Drug resurrected

On 4 September, AstraZeneca launched clinical studies of a previously abandoned experimental ovarian-cancer drug. Researchers had hoped that olaparib would herald a new class of drug targeting a DNA-repair protein called PARP, but the London-based pharmaceutical firm halted the drug's development in 2011 after a failed clinical trial (see *Nature* **483**, 519; 2012). Further analysis suggested that olaparib may work best against cancers bearing mutations that affect other DNA-repair proteins, leading the company to launch the latest trial in patients with BRCA-mutant cancers.

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SOURCE: NRDC/US DEPT STATE

TREND WATCH

With existing oil pipelines at near full capacity, increased production in the oil sands of Alberta, Canada, will depend on new projects such as the controversial Keystone XL, says a report from the Sierra Club in San Francisco, California. The environmental group argues that halting Keystone — expected to carry about 730,000 barrels of oil per day from 2015 — would prevent an increase in greenhouse-gas emissions by impeding further development of carbon-rich oil in the region.

OIL SAND EXPORTS

Companies need new pipelines to sustain production from Canadian oil sands.

