

SEVEN DAYS

The news in brief

POLICY

US security

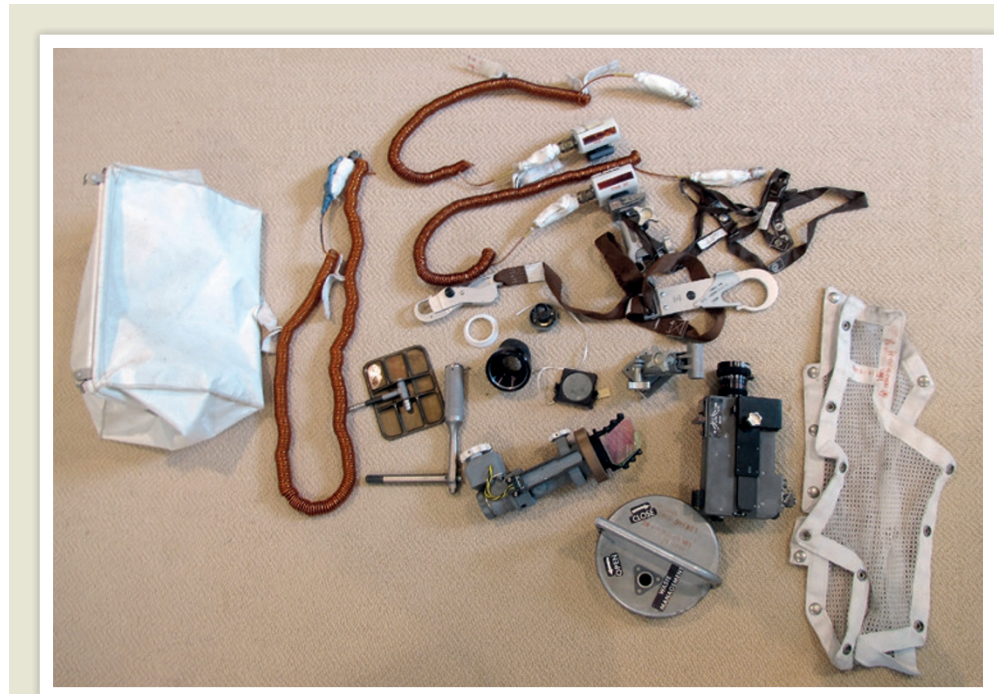
US President Barack Obama has incorporated the dangers posed by global warming and poverty into a new national-security strategy. Released on 6 February, the document says that both economic and environmental threats can hamper growth, foster extremism and ultimately lead to military interventions. The document also highlights the role of scientific and technological innovation in promoting cleaner domestic energy, stating that the United States “can and will lead the global economy while reducing our emissions”. The White House’s previous national-security strategy was outlined in 2010.

Three-person IVF

The UK House of Commons voted on 3 February to legalize a gene-therapy technique that could help women to avoid passing genetic defects on to their children through mutations in their mitochondria — the cell’s energy-producing structures. The technique, known as mitochondrial replacement, uses healthy donated eggs instead of the mother’s diseased eggs to create ‘three-person embryos’ for *in vitro* fertilization (IVF). The UK House of Lords must also approve the measure, which would authorize the country’s fertility regulator to allow mitochondrial replacement in the future. See page 145 for more.

Bee petition

A coalition of 11 US environmental groups has urged President Barack Obama to significantly toughen rules governing the use of neonicotinoid pesticides, which have been linked to



NATIONAL AIR AND SPACE MUSEUM

Neil Armstrong’s Moon bag revealed

A white bag used by Neil Armstrong during his 1969 Moon landing was made public last week. It was found in a cupboard by Armstrong’s widow, Carol, after his death in 2012. The contents (pictured), including a camera and waist tether, were analysed by curators at the Smithsonian National Air and Space Museum

in Washington DC, who concluded that the items were from the *Eagle* lunar module (LM). Transcripts of Armstrong speaking to astronaut Michael Collins helped to confirm the bag’s authenticity: “That one’s just a bunch of trash that we want to take back — LM parts, odds and ends, and it won’t stay closed by itself.”

declines in bee numbers. In a letter to the White House, groups including the National Audubon Society, the Sierra Club and Friends of the Earth called for more research on the impact of these chemicals on pollinators. They also propose a ban on treating seeds with neonicotinoids because this affects the entire plant. A federal strategy for dealing with bee health is expected in the coming months.

RESEARCH

Clean-coal cut

The US Department of Energy has pulled out of its flagship clean-coal project, dubbed

FutureGen, more than a decade after it was proposed. The US\$1.7-billion demonstration project, modified in 2010, was intended to provide climate-friendly power by retrofitting a coal-fired power plant in Illinois to capture carbon dioxide and pipe it into a saline aquifer some 1,200 metres below ground. The department had committed \$1 billion to the project, but pulled out owing to ongoing questions about private investments. By law, the federal money had to be spent by September this year. See go.nature.com/2pymmo for more.

Japan Venus probe

Japan’s errant Akatsuki probe is to get another chance at studying the meteorology of Venus after a failed attempt in 2010. The Japan Aerospace Exploration Agency announced on 6 February that it will try to insert the ¥25-billion (US\$211-million) craft into Venus’s orbit this December. If this is successful, Akatsuki will use remote sensing to observe the planet’s clouds, atmosphere, lightning and surface conditions, allowing a comparison with similar mechanisms on Earth. The probe has been orbiting the Sun since December 2010, after a malfunctioning

thruster stopped it decelerating enough to drop into the planet's orbit.

Aquarium census

The Shedd Aquarium in Chicago, Illinois, will take the first census of microbes that live in aquariums. As part of the Aquarium Microbiome Project, which launched on 3 February, researchers from Shedd and partner institutions will analyse how the microbes living in the aquarium's tanks and on resident sea animals differ from those in natural aquatic environments. The project will also assess the impact of pollutants on microbial ecosystems, and plans to release its first data later this year.

PEOPLE

FDA chief quits

The commissioner of the US Food and Drug Administration (FDA) announced her resignation on 5 February. Margaret Hamburg (pictured) has led the regulatory agency for nearly six years, during which time it established programmes to speed up drug approvals, laid the groundwork to regulate electronic cigarettes, and proposed guidelines for regulating medical-diagnostic tests. Hamburg will continue in the post until the end of March. The FDA's chief scientist,



Stephen Ostroff, will serve as acting commissioner, but the agency is yet to announce a permanent replacement.

Physicist dies

Val Fitch, the physicist who, with James Cronin, discovered a fundamental asymmetry between matter and antimatter, died on 5 February, aged 91. In 1964, while both were at Princeton University in New Jersey, Fitch and Cronin showed that particles of antimatter do not simply behave as mirror-symmetry counterparts of matter particles. This violation of a law known as charge-parity symmetry is believed to be the reason that the Big Bang did not produce a Universe that is equal parts matter and antimatter. The two physicists were awarded the 1980 Nobel Prize in Physics for their discovery.

Climate libel

A Canadian climate scientist has been awarded Can\$50,000 (US\$40,200) in a libel lawsuit

against the *National Post* newspaper. Andrew Weaver, now also a politician for his province, challenged four *Post* articles published in 2009–10 in the wake of the 'Climategate' scandal, when hacked e-mails from UK climate scientists were made public. The articles called Weaver a "climate alarmist", and he said that they implied he was untrustworthy and unscientific. The 5 February ruling by the British Columbia Supreme Court says the *Post* should take down the articles and that they "adversely impact on Dr. Weaver's reputation and integrity as a scientist".

FUNDING

Disease initiative

The Global Health Innovative Technology Fund in Tokyo launched a programme on 5 February to spur the development of drugs, vaccines and diagnostic tools for infectious diseases prevalent in developing countries. The Grand Challenges initiative will invest ¥234 million (US\$2 million) per year in research into diseases such as malaria, tuberculosis and Chagas disease. The first grant-winners are expected to be announced in August. The fund was founded in April 2013 with money from the Bill & Melinda Gates Foundation

COMING UP

12–16 FEBRUARY

The American Association for the Advancement of Science's annual meeting takes place in San Jose, California. It will focus on how information and imaging technologies are transforming science. go.nature.com/kprsx8

14 FEBRUARY

The Rosetta craft is due for its closest encounter yet with comet 67P/Churyumov-Gerasimenko. The probe will swoop just 6 kilometres from the surface, and with the Sun at its back should get the first shadow-free images of the comet. But it will not be specifically searching for its lost partner — the lander Philae.

in Seattle, Washington, the Japanese government and six Japanese pharmaceutical companies.

UK science funding

The United Kingdom's science academies are calling for a huge hike in research spending from whichever political party wins the country's election in May. Representatives of the British Academy, the Royal Academy of Engineering, the Royal Society and the Academy of Medical Sciences said on 10 February that the next government should aim to spend 3% of gross domestic product (GDP) on research and development by 2020, with 1% of this coming from the public purse. The current UK research spend is 1.73% of GDP, of which 0.5% is from the public sector. Government science spending has declined in real terms since 2010.

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TREND WATCH

Manuscripts posted to the preprint server arXiv show how cosmologists rapidly embraced, then began to doubt and lose interest in, one of 2014's most sensational announcements: the discovery of gravitational waves from the birth of the Universe. Soon after the March announcement, papers questioning the result started to emerge. The final nail in the coffin came last month, when researchers conceded that dust in the Milky Way accounted for the signal seen by the telescope BICEP2.

THE TRAIL OF DUST

Interest waned in the BICEP2 experiment as it became clearer that dust had been mistaken for a signal of gravitational waves.

