

PEOPLE

Scientist detained

A British–Iranian professor is being detained in Iran following his arrest during a trip to attend an academic workshop in Tehran, according to Iranian media reports. Abbas Edalat, a computer scientist and mathematician at Imperial College London, was detained by Iran's Revolutionary Guards in April for his alleged role in spying activities. Reports suggest that the authorities confiscated his computer, notebooks and CDs. Edalat founded a pro-peace organization, the Campaign Against Sanctions and Military Intervention in Iran. Imperial College says it is “concerned for his welfare”, and is urgently seeking further information about the incident.

PNAS resignation

On 1 May, Inder Verma, a cancer researcher at the Salk Institute for Biological Sciences in La Jolla, California, resigned as editor-in-chief of the journal *Proceedings of the National Academy of Sciences*. The move comes after the publication of an investigation by *Science*, in which several female researchers who were either at the institute or had ties to it between 1976 and 2016 allege that Verma harassed them. Verma, who served on powerful committees at the institute, vehemently denied the allegations in a statement to *Nature*. The Salk Institute suspended him on 21 April while it investigates the claims.

Biologist sacked

The University of Tokyo announced on 27 April that it has dismissed cell biologist Yoshinori Watanabe. The decision followed a university investigation that found manipulated images in five of



HINDUSTAN TIMES/GETTY

Deadly dust storms hit India

Severe dust storms occurring in the lead up to the monsoon season have killed more than 100 people in the Indian states of Uttar Pradesh and Rajasthan in the past week. Most deaths occurred when buildings collapsed in unusually intense winds that approached speeds of 130 kilometres an hour. On 3 May, India's Meteorological

Department said that the storms followed ‘intense heating’ over the plains of northwestern India, with temperatures in the region reportedly reaching 45–50°C. Meteorologists say that high temperatures might have intensified the storms. The high fatality rate was probably due to the storms striking while people slept.

Watanabe's papers, which the institution said amounted to scientific misconduct. One paper has been retracted, and two others have been corrected. During his career, Watanabe made substantial contributions to scientists' understanding of how cells divide. Watanabe says that the problems that were identified in the five papers did not affect the studies' conclusions. He says that he had no intention of misleading others, and believes he did not commit misconduct. Watanabe told *Nature* that he resigned on 28 February, before his official dismissal. He will now spend a year retraining in data acquisition and presentation at the laboratory of Nobel prizewinner Paul Nurse, at the Francis Crick Institute in London.

EVENTS

Apology for ritual

The Chinese Academy of Sciences has apologized for a Taoist ceremony organized by construction workers that included the slaughter of a lamb to inaugurate the construction of a nuclear test reactor. Images showing a monk chanting while the lamb was killed sparked online controversy in China. The April ceremony marked the start of construction of a thorium molten salt reactor in north-central China, part of a 22-billion yuan (US\$3.5-billion) project to be operated by the academy's Shanghai Institute of Applied Physics. In a statement posted on its homepage on 30 April, the academy said it apologized because the ritual was “against

the spirit of science” and that institute staff did not know the ritual was planned.

US biobank begins

An ambitious project to track the health of one million people in the United States for at least ten years will start enrolling participants on 6 May. The US National Institutes of Health initiative — announced by former president Barack Obama during his 2015 State of the Union address — aims to recruit volunteers who range in geographical locale, ethnic background, health conditions and age. The biological information that researchers will collect from participants include blood samples, biometric data from devices such as Fitbits, and medical records. The project will

accept only people over age 18 initially, but plans to include children in the future.

Day Zero delayed

Cape Town, South Africa, has averted Day Zero — the date officials predicted the city's reservoirs would run too low to deliver potable water to the metropolis. Citizens have saved the city — for now — by reducing their water usage from 1.2 billion litres a day in late 2016 to 450 million litres a day this year, said Helen Zille, Cape Town's former mayor, on 3 May. She cautioned that the threat could return next year, and that its timing would depend on how much rain the region receives in August.

PUBLISHING

Nature's new editor

Geneticist Magdalena Skipper will be the next editor-in-chief of *Nature*, the journal announced on 2 May. Skipper (pictured), who is currently editor of the open-access journal *Nature Communications*, will be the first woman to head the 149-year-old title. She will take over from Philip Campbell, who has led *Nature* since 1995, on 1 July. Skipper says that during her tenure, she wants to continue the journal's work to ensure that scientific findings are reproducible and robust, particularly in the age of big data. She would also like *Nature*



to focus more on early-career researchers. See go.nature.com/2hx8woa for more.

ENVIRONMENT

Pollution report

Air pollution is decreasing in Chinese cities, but increasing in cities in Pakistan, Bangladesh and India. According to the latest global air-quality report by the World Health Organization (WHO), released on 2 May, cities in those three countries have experienced the steepest rises in air pollution since 2010. In China, the average annual levels of small, dangerous particles known as PM_{2.5} (those with a diameter of 2.5 micrometres or less) have dropped by 17% since the 2017 report. This reduction was achieved by the government enforcing strict limits on industrial emissions, increasing renewable power and increasing access to cleaner fuels for indoor heating

and cooking. But dozens of Chinese cities still rank among the 100 most polluted, and an estimated 2 million people die in China every year because of air pollution. The WHO survey reviewed air-quality statistics in 4,300 major cities for 2016. It found that more than 90% of the world's population breathes unsafe air.

CLIMATE

Carbon hits high

The average concentration of atmospheric carbon dioxide, a key greenhouse gas, for the month of April exceeded 410 parts per million, researchers announced on 2 May. This is the first time in recorded history that the monthly CO₂ average has breached this threshold. Climate scientists took the measurements at the Mauna Loa Observatory in Hawaii, where they have been monitoring atmospheric CO₂ levels since 1958. Average global temperature has already increased by 1 °C from the pre-industrial era. Continued CO₂ accumulation in the atmosphere puts Earth on a path to reaching 2 °C of warming later this century.

SPACE

Mission launch

NASA launched its Mars InSight spacecraft from Vandenberg Air Force Base in California on 5 May. The

probe will record seismic activity on the red planet, including tremors known as marsquakes. Researchers hope to use the information to gauge the size of Mars's core, which could teach scientists about its density and composition, and the boundaries between the planet's core, crust and mantle. InSight will land in Elysium Planitia, a flat area near the Martian equator, on 26 November 2018. The international effort includes a seismometer built by a French team, and a heat-flow probe built by a German group.

FUNDING

Climate grants

Twenty-seven climate scientists from around the world are heading to work in France and Germany, as part of the second round of French President Emmanuel Macron's Make Our Planet Great initiative. Macron launched the €60-million (US\$70-million) grant scheme last June in response to US President Donald Trump deciding to pull out of the Paris climate accord. Germany joined the grant scheme last September and added €15 million in government funding, which was matched by participating research organizations. The joint programme offers 4-year grants of up to €1.5 million for senior scientists and up to €1 million for early-career researchers. The second-round winners were announced on 2 May; 14 will work in France and 13 in Germany. Thirteen of the scientists currently work in the United States.

European science

The European Commission has proposed a budget of €100 billion (US\$120 billion) for its next major research-funding programme. Named Horizon Europe, it will last from 2021 to 2027, and follows the current programme, Horizon 2020. See page 150 for more.

➔ NATURE.COM

For daily news updates see:

www.nature.com/news

TREND WATCH

Diseases spread by mosquitoes, ticks and fleas are rising in the United States, according to the US Centers for Disease Control and Prevention. Between 2004 and 2016, total yearly cases of a combination of 16 diseases tripled. Tickborne illnesses — Lyme disease, in particular — made up more than 75% of the nearly 643,000 cases during the whole period. Mosquito-borne infections, such as Zika and chikungunya, tend to spike with outbreaks, whereas the incidence of Lyme disease has risen gradually.

INSECT-BORNE DISEASES ON THE RISE

The number of infections from ticks, fleas and mosquitoes tripled in the United States between 2004 and 2016.

