

News in brief

ENVIRONMENT AGENCY PUSHES TO RESTRICT DATA USE

Scientists are alarmed about the expansion of a proposed rule that would limit which studies the US Environmental Protection Agency (EPA) can use to develop health and environmental regulations.

The supplemental rule builds on a controversial proposal released last year that would prevent the EPA from considering research unless the underlying data are publicly available, according to a leaked draft reported by *The New York Times* on 11 November. Critics of the original proposal feared that it would prevent consideration of research, such as epidemiological studies, based on confidential health data.

That proposal would have applied to a restricted number of studies. But scientists say the leaked supplement is worse because it would expand the rule to cover almost any kind of research. The text also suggests that the rule could apply to data regardless of when they were generated, potentially affecting the agency's consideration of previously published studies.

If the final rule looks like the leaked proposal, "it will fundamentally change the way EPA uses science to make public-health decisions – to the detriment of public health", says Veena Singla, a public-policy and health researcher at the University of California, San Francisco.

EPA officials stressed that the final proposal under review at the White House is different from the leaked draft. The agency must publish the final text and accept public comments before it can finalize the supplemental rule.



VIOLENCE IN HONG KONG DISRUPTS RESEARCH

Three universities in Hong Kong have cancelled classes on campus for the rest of the term after violent clashes between police and protesters erupted in the grounds. Another four universities have also cancelled classes – in some cases for the rest of the year – over safety concerns. And staff at most of the institutions have been told to stay away for several days.

Images show some protesters carrying bows and arrows – one police officer was reportedly hit in the leg with an arrow.

The clashes are the latest flare up in Hong Kong, and follow six months of street protests. These started in June against an extradition bill that would have allowed people to be sent from the territory to mainland China to stand trial or serve criminal sentences.

The protests on campuses are also disrupting research, and some scientists fear that this could dissuade academics from coming to Hong Kong.

Michael Chan, a chemist at the Chinese University of Hong Kong, says he has been unable to access his lab to check on mouse experiments.

Jianhua Zhang, the dean of science at Hong Kong Baptist University, worries that the ongoing protests will have a wider effect on academia. "I anticipate that people will be reluctant to take offers to work with us," he says.

BYE BYE, RYUGU! CRAFT LEAVES ASTEROID

The Hayabusa2 spacecraft is heading home after performing a series of risky and unprecedented manoeuvres on its six-year mission to asteroid Ryugu (pictured).

The Japan Aerospace Exploration Agency's (JAXA's) probe gently fired its thrusters at 10:05 a.m. Japan Standard Time on 13 November, moving away from the asteroid at a speed of less than 10 centimetres per second. From 10 December, the probe will start to use its ion engines to propel its journey back to Earth, where it is due to arrive at the end of 2020. A re-entry capsule will deliver its samples to the surface.

Hayabusa2 was launched in late 2014, and arrived at Ryugu in June 2018. It is the first mission to release landers onto the surface of an asteroid; the first to collect a sample from a 'dark' asteroid's surface; and, after bombarding the surface to create a crater, the first to collect a sample of an asteroid's subsurface material.

Just one kilometre wide and shaped like a spinning top, Ryugu is an unusually dark body, probably the result of having a high concentration of carbon. Initial studies based on Hayabusa2's data suggest that Ryugu formed from the debris of an impact between two larger Solar System bodies.



Image
story



Bush fires wreak havoc in eastern Australia



Firefighters near the town of Nabcac in eastern Australia have been confronting a huge wildfire that has burnt more than 30,000 hectares over the past 10 days. Several hundred conflagrations have burnt more than one million hectares, destroyed more than 450 homes and killed 4 people across the state of New South Wales since 8 November. More than 50 fires were still burning as *Nature* went to press.

Scientists have forecast particularly severe conditions for bush fires this season because large parts of the country are in drought. Climate change is also making fire conditions more frequent and severe.

On 12 November, hot, dry and windy conditions prompted a 'catastrophic' fire warning for vast areas of New South Wales, including Sydney and its surrounding areas; blazes that ignite during these conditions are likely to spread out of control quickly and houses are unlikely to survive. It is the first time that the catastrophic fire rating has been issued for Sydney since new ratings were introduced in 2009.

FEARS OF FOREIGN INTERFERENCE PROMPT UNIVERSITY GUIDELINES

New guidelines will help Australian universities to protect themselves against foreign interference, says the country's government. The advice follows concerns that foreign groups or authorities, such as the government of China, might be seeking to instigate campus activities that are against Australia's interests.

The guidelines, released on 14 November, were developed by the University Foreign Interference Taskforce, which includes representatives from universities, national security agencies and the education department.

Education minister Dan Tehan, who set up the task force in August, said foreign-interference threats against Australia, including its universities, had reached "unprecedented levels", but gave no details at a press briefing.

The guidelines advise universities to undertake due diligence before entering into research or other collaborations with international partners, and to implement robust cybersecurity strategies.

In late 2018 and early 2019, the Australian National University in Canberra experienced significant data breaches, in which hackers accessed 19 years' worth of personal data from the university's network. Media reports have suggested that the hack was perpetrated from China, but the Australian government says the attack has not been attributed to any one country.

Politicians and academics have also raised concerns about some artificial-intelligence projects involving Chinese universities and Australian researchers.



GOOGLE HEALTH-DATA SCANDAL SPOOKS RESEARCHERS

Google and one of the largest health-care networks in the United States are embroiled in a data-privacy controversy that researchers fear could jeopardize public trust in data-sharing practices and, potentially, academic studies.

At issue is an agreement, dubbed Project Nightingale, that gives Google access to the health-care information, including names and other identifiable data, of tens of millions of people without their knowledge. The people were treated at facilities run by the health network Ascension.

Google says that the project, first reported in *The Wall Street Journal* on 11 November, is meant to develop technology that would enable Ascension to deliver improved health care.

Both companies say that they abided by US laws to protect health-care information. But the US Department of Health and Human Services says it is now looking into "this mass collection of individuals' medical records with respect to the implications for patient privacy". Researchers worry that the revelations will undermine trust in studies more broadly. "With these incidents, we undermine public trust to this whole enterprise," warns Effy Vayena, a bioethicist at the Swiss Federal Institute of Technology in Zurich. "At some point, all of the research will get a bad name."