Correspondence

Nicaragua: renewed call to defend human rights

As scientists and leaders of the International Human Rights Network of Academies and Scholarly Societies (www.internationalhrnetwork.org) — an alliance to support at-risk colleagues — we are gravely concerned about ongoing governmental repression in Nicaragua. This alarming situation has important implications for science and health in the country.

In July, the government forcibly closed 24 non-governmental organizations, including medical associations concerned about its coronavirus-related policies (see, for example, go.nature.com/2wqvg3c and go.nature.com/2wqoknc). Health experts who provided guidance on the pandemic for the general public have been interrogated by the Ministry of Health and threatened with criminal charges. Physicians have been warned that their medical licences could be suspended.

These incidents are part of a wider pattern of targeted and continued attacks in the country, including the arbitrary arrest and detention of opposition leaders, many of whom are prominent academics. The global scientific community must strongly condemn this assault on internationally protected rights.

Martin Chalfie Columbia University, New York, New York, USA.
chr@nas.edu

Edouard Brézin École Normale Supérieure, Paris, France.

Belita Koiller Universidade Federal do Rio de Janeiro, Brazil.

COVID-19: release approved vaccines for trials of new ones

Scientists must develop the next generation of COVID-19 vaccines now, if the world is to meet the challenge of SARS-CoV-2 variants and reduce vaccine inequity by increasing global supply. This can be done only if comparator COVID-19 vaccines — those that have already been approved — are available to support clinical trials. Such comparator vaccines are almost impossible to secure; governments, developers and manufacturers must find a solution to unlock supplies.

So far, COVID-19 vaccines have received approval on the basis of data from unvaccinated participants in placebo-controlled efficacy trials. These trials become increasingly difficult to carry out as the number of people who are immunized rises. Comparator vaccines, essentially replacing placebos, are therefore needed for trials that assess whether new candidate vaccines provide comparable levels of protection, including against emerging variants.

The number of comparator-vaccine doses needed to support clinical trials is small. However, contracts between manufacturers and governments for approved vaccines restrict their use to improving public health. This must change if vital COVID-19 vaccine research and development are to progress.

Melanie Saville Coalition for Epidemic Preparedness Innovations, London, UK.
melanie.saville@cepi.net

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Spacefarers, protect our planet from falling debris

World cooperation can prevent collisions and the generation of debris in space (*Nature* **596**, 163; 2021). In our view, international forums are also needed to monitor and deal with the uncontrolled fall of rockets and other debris from space. Such oversight would counter spacefaring nations' current negligence in protecting Earth's environment and ecology.

So far, about 24,400 catalogued orbiting objects, with a combined mass of 30,000 tonnes, have re-entered Earth's atmosphere. From 2008 to 2017, 450 large objects — amounting to 900 tonnes of material — made uncontrolled landings (C. Pardini and L. Anselmo *J. Space Safety Eng.* **6**, 30–47; 2019). And in May this year, a 21-tonne Chinese rocket plunged into the Indian Ocean, near the Maldives. Several international experts and space agencies have accused China of irresponsibility, not meeting standards and a lack of transparency (see, for example, go.nature.com/3zyxh1j).

US Space Command, part of the US Department of Defense, questioned the potential impact of such debris on Earth and its oceans (see go.nature.com/38uesr2). More research is urgently needed into the possible damage to wildlife, microorganisms and ecosystems caused by the impact and by pollution arising from fallen space debris (see T. V. Koroleva *et al. Environ. Pollut.* **268**, 115711; 2021).

Dipshikha Chakravortty, **Saptarshi Basu**, **K. S. Nandakumar** Indian Institute of Science, Bengaluru, India.
dipa@iisc.ac.in

Waive CRISPR patents to meet food needs in low-income countries

Wageningen University & Research announced this week that it will provide non-profit organizations with free licences to use its CRISPR–Cas gene-editing technology for non-commercial applications. CRISPR tools can then be used, for instance, to help make food production sustainable, nutritious and safe. The university hopes that the move will inspire a worldwide change in CRISPR–Cas intellectual-property policy.

CRISPR–Cas offers an advantage over conventional plant breeding in that it can rapidly and efficiently modify plant traits — for example, to offset the impacts of climate change and pathogens. There have been thousands of CRISPR-related patent applications over the past decade, including by Wageningen University & Research and the Dutch Research Council.

Charging licence fees to protect intellectual property makes good business sense, but it can put technologies beyond the reach of non-profit organizations in low-income countries. These organizations are crucial to improving crops for local farmers and poor consumers. As the United Nations Food Systems Summit approaches, the importance of free access to CRISPR–Cas technologies in low-income nations must be recognized.

John van der Oost, **Louise O. Fresco** Wageningen University & Research, Wageningen, the Netherlands.
louise.fresco@wur.nl

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