export crops (including biofuels) and for building new roads, dams, and mines (*1*, *2*). On 6 February, Bolsonaro submitted a bill to Brazil's National Congress that would open Indigenous lands for mining, extraction of oil and gas, and construction of hydroelectric dams, cattle ranches, and mechanized monocultures such as soy (*3*). Indigenous leaders would be allowed to rent tribal land to non-Indigenous agribusiness entrepreneurs (*3*). The bill would allow mining in Indigenous lands without authorization from their Indigenous inhabitants (*3*). This bill, if passed, would violate the rights of Indigenous peoples and threaten the environment.

The Brazilian Society for the Progress of Science (SBPC) organized a public seminar at the National Institute of Amazonian Research (INPA) to discuss the risks the bill poses to Amazonia (*4*), and the organizers drafted an open letter alerting civil society and decision makers to the bill's violation of Brazilian legislation and ILO Convention 169, which require free, prior, and informed consultation of Indigenous peoples affected by actions such as this (*5*). The right to consultation has been routinely ignored by large enterprises in the Amazon, putting many traditional peoples at risk (*6*).

Bolsonaro's desire to open Indigenous lands to agribusiness and mining has often been expressed in his extemporaneous remarks and social media posts. Early in his term of office, a visit by his ministers of agriculture and environment to an illegal soy plantation in an Indigenous land signaled impunity for violations of current legal restrictions (*1*). The proposed law now makes the threat imminent. The administration's discourse is credited with invasions of Indigenous lands and killings of Indigenous leaders reaching record levels in 2019 (*7*). The impact of illegal gold miners (garimpeiros)—a constant threat to Indigenous lands—will now be even greater thanks to the proposed law and to the risk of spreading coronavirus disease 2019 (COVID-19). Bolsonaro has repeatedly expressed support for these invaders (*1*). On 14 April, his environment minister dismissed one of the directors of the environmental agency as punishment for having ordered the removal of garimpeiros from an Indigenous land (*8*).

Demarcated Indigenous lands represent 24% of Brazil's Amazon biome, thus protecting more than the 14% that is in federal "conservation units" (protected areas for biodiversity) (*9*). Indigenous lands act as shields protecting traditional peoples, biodiversity, carbon stocks, and ecosystem services. Destruction of these forested areas poses a risk to the entire planet, as it affects one of the world's largest carbon stocks (*10*). We urge the president of Brazil's Chamber of Deputies not to put this bill to a vote, and we encourage Brazil's Supreme Court to act quickly to protect the country's Indigenous peoples.

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10.1126/science.abb6327

Call for transparency of COVID-19 models

A hallmark of science is the open exchange of knowledge. At this time of crisis, it is more important than ever for scientists around the world to openly share their knowledge, expertise, tools, and technology. Scientific models are critical tools for anticipating, predicting, and responding to complex biological, social, and environmental crises, including pandemics. They are essential for guiding regional and national governments in designing health, social, and economic policies to manage the spread of disease and lessen its impacts. However, presenting modeling results alone is not enough. Scientists must also openly share their model code so that the results can be replicated and evaluated.

Given the necessity for rapid response to the coronavirus pandemic, we need many eyes to review and collectively vet model assumptions, parameterizations, and algorithms to ensure the most accurate modeling possible. Transparency engenders public trust and is the best defense against misunderstanding, misuse, and deliberate misinformation about models and their results. We need to engage as many experts as possible for improving the ability of models to represent epidemiological, social, and economic dynamics so that we can best respond to the crisis and plan effectively to mitigate its wider impacts.

We strongly urge all scientists modeling the coronavirus disease 2019 (COVID-19) pandemic and its consequences for health and society to rapidly and openly publish their code (along with specifying the type of data required, model parameterizations, and any available documentation) so that it is accessible to all scientists around the world. We offer sincere thanks to the many teams that are already sharing their models openly. Proprietary black boxes and code withheld for competitive

motivations have no place in the global crisis we face today. As soon as possible, please place your code in a trusted digital repository (*1*) so that it is findable, accessible, interoperable, and reusable (*2*).

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COMPETING INTERESTS

All authors have signed on behalf of the listed organizations only. J.-A.A. is the head of the Systems Modeling and Simulation, Brain and Mind Centre at the University of Sydney in Australia but does not represent that institution here. B.F. is affiliated with the Advanced Systems Analysis Program at the International Institute for Applied Systems Analysis in Austria but does not represent that organization.

10.1126/science.abb8637

ERRATA

Erratum for the Report "Design of an in vitro biocatalytic cascade for the manufacture of islatravir" by M. A. Huffman *et al.*, *Science* **368**, eabc1954 (2020). Published online 17 April 2020; 10.1126/science.abc1954

Erratum for the Report "Mutual control of coherent spin waves and magnetic domain walls in a magnonic device" by J. Han *et al.*, *Science* **368**, eabc1767 (2020). Published online 17 April 2020; 10.1126/science.abc1767

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Science **368** (6490), 482-483.
DOI: 10.1126/science.abb8637