Even in normal times, postdoctoral positions provide little job security (*2*, *3*). Most postdocs are employed on yearly contracts, and the availability of research funds is highly variable (*1*). Postdocs receive little institutional support in comparison to undergraduates, graduate students, and faculty. The positions often do not provide access to affordable health care or child care, career counseling or resources, paid sick leave, or employee and student benefits such as alumni network membership or union representation (*1*, *2*, *4*–*7*). Before the pandemic, an ongoing national discussion among postdocs was taking place to address the benefits of collective bargaining and unionization, as many feel the working conditions and terms of employment are substandard or outright nonexistent (*1*, *3*, *8*). For 2 to 3 years (and sometimes much longer), postdocs tolerate these subpar conditions in hopes of using their experience to propel them into full-time jobs as professors or researchers outside academia (*2*).

However, the economic crisis resulting from COVID-19 stay-at-home orders has spurred a growing list of universities to implement hiring freezes and cancel new faculty hires (*9*, *10*). This lowers the chances that postdocs can obtain coveted full-time positions. Meanwhile, experimental work has all but ground to a halt, visas are expiring with little clarity about the prospect of extensions, and continued funding has become uncertain, jeopardizing the time-sensitive research that postdocs are conducting during their short contracts.

Although many institutions have granted some form of pandemic relief to other members of the academic community, postdocs have been overlooked (*11*, *12*). To protect the future and diversity of the scientific pipeline, universities and research institutes must take immediate action to retain these vital junior scientists. Institutions should implement programs to prolong fellowship positions (*12*), similar to stop-the-clock policies available to tenure-track faculty, and vigorously advocate for federal-level extensions to visa programs. They should also offer temporary assistance to help vulnerable postdocs cope with current child care and health care challenges.

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COMPETING INTERESTS

All authors are board members of the California Institute of Technology (Caltech) Postdoctoral Association (CPA). The views expressed herein do not in any way represent the view of other members of the CPA board, postdoctoral individuals at Caltech, or Caltech.

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Sumatran rhinoceros on the brink of extinction

The Sumatran rhinoceros (*Dicerorhinus sumatrensis*), the closest living relative to the extinct woolly rhino, has been on decline for about a million years (*1*), but it is now at risk of imminent extinction. According to the International Union for Conservation of Nature Red List, the Sumatran rhino is Critically Endangered (*2*). In just 20 years, the species population has decreased from 250 to just 80 animals. Since the recent death of the last Sumatran rhino in Malaysia (*3*), all remaining individuals live in one of four subpopulations in Indonesia (*2*, *4*). The current population is not sustainable without the help of breeding programs.

The main reason for the Sumatran rhino's population collapse is poaching driven by the Asian black market of traditional medicine, where a kilo of rhino horn can sell at around US$65,000 (*5*, *6*). In addition, human activities such as deforestation fragment the rhino's habitats (*4*). If these human activities continue, the rhino population will likely go extinct by 2030 (*7*).

In addition to curtailing these harmful activities, capture, relocation, and breeding programs are now critical to prevent population collapse and avoid harmful mutations leading to diseases that reduce the reproductive capacity of the Sumatran rhinos (*8*, *9*). The breeding programs managed by the World Association of Zoos and Aquariums (*10*) may be able to provide conservation programs with new individuals to increase genetic diversity. However, these strategies must take into account that Sumatran rhinos do not thrive or breed well in captivity or outside their ecosystem (*11*). Breeding programs should urgently be established in the rhino's natural habitat and include both natural and artificial insemination as well as embryo technologies, as has been tried for the northern white rhino (*12*). We must devote time and resources to ensure that the remaining 80 Sumatran rhinos are not the last.

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TECHNICAL COMMENT ABSTRACTS

Comment on "High-surface-area corundum by mechanochemically induced phase transformation of boehmite"

Jiangong Li, Sanxu Pu, Wenbin Cao, Lu Li, Ruiyun Guo

Amrute *et al.* (Reports, 25 October 2019, p. 485) claimed that no methods were able to produce high-purity α-Al_2O_3 with surface areas greater than 100 $m^2\ g^{-1}$, even though much higher surface areas up to 253 $m^2\ g^{-1}$ have been reported. Moreover, the materials they obtained could be porous aggregates and may not be 13-nm nanoparticles, as claimed.

Full text: dx.doi.org/10.1126/science.abb0142

Response to Comment on "High-surface-area corundum by mechanochemically induced phase transformation of boehmite"

Amol P. Amrute, Zbigniew Łodziana, Hannah Schreyer, Claudia Weidenthaler, Ferdi Schüth

Li *et al.* commented that our report claims that methods reported thus far cannot enable the production of high-purity corundum with surface areas greater than 100 $m^2\ g^{-1}$, and that our obtained material could be porous aggregates rather than nanoparticles. We disagree with both of these suggestions.

Full text: dx.doi.org/10.1126/science.abb0948