Members of the Research, Veterinary and Conservation Communities Offer Recommendations to Address the Critical Shortage of Long-Tailed Macaques Required for Health Research While Also Protecting Wild Populations

A series of events, including the recent, urgent demand for nonhuman primates to help combat the COVID-19 pandemic, have resulted in a global research supply chain shortage of long-tailed macaque monkeys, a situation that poses a severe and urgent threat to future biomedical progress and the conservation status of this species. These animals play a central and irreplaceable role in health research that benefits humans and animals alike. They've assisted in creating new and improved medications, vaccines, medical devices and surgical techniques. Nonhuman primates are also frequently involved in testing required by the FDA and other international regulatory agencies to ensure new drugs are safe before we provide them to our loved ones or take them ourselves.

The factors behind the current supply shortage are numerous and complex. They include a lack of domestic breeding facilities in the United States, international transportation challenges, China's 2020 decision to abruptly halt animal exports and questions about the status of wild animal populations worldwide.

In response to these challenges, members of the research, veterinary and conservation communities are partnering to recommend actions that promote the protection of at-risk wild animal populations and ensure continued medical progress. At the same time, we maintain our commitment to the 3Rs. These are the principles of Replacement, Reduction and Refinement, which serve as a framework to conduct ethical and necessary research in animals while employing non-animal alternatives when feasible.

We encourage authorities and organizations across the U.S. to work with our international partners in implementing the following four recommendations.

Recommendation #1: Expand nonhuman primate breeding capacity within the United States.

New and expanded domestic breeding facilities are urgently needed to ensure animals required for continued medical progress remain available. The expansion will reduce impacts on wild animal populations abroad and significantly diminish or resolve existing international transportation issues. It will reduce our nation's reliance on foreign governments and suppliers and mitigate escalating costs of nonhuman primates necessary for lifesaving research. It will also help ensure that wild long-tailed macaques are not being illegally captured.

A newly released report by the National Academies of Sciences, Engineering, and Medicine also urges an expansion of domestic breeding. That report states the ongoing shortage of certain nonhuman primate species is "undermining the U.S. biomedical research enterprise and national health emergency readiness."

Recommendation #2: Initiate comprehensive long-tailed macaque population studies throughout South and Southeast Asia, Mauritius and other countries where wild populations exist.

Serious questions have recently emerged about the conservation status of long-tailed macaques. The species was reassessed by the International Union for Conservation of Nature in 2022 as endangered with some populations at high risk. However, evaluations representative of current conditions backed by concrete, actionable data are still urgently needed. We recommend collecting data through comprehensive long-tailed macaque population studies and occupancy models in regions where wild populations exist to more clearly define the current status of these animals and inform future strategies for protecting them. We encourage the biomedical and conservation communities to explore sources of funding such a study, with a completion date not to exceed 3-4 years.

Recommendation #3: Increase and expand international partnerships to initiate region-specific animal protection or mitigation strategies.

Given that the status of wild long-tailed macaque populations varies significantly from region to region, it is imperative to establish local, region-specific solutions. For instance, according to the Global Invasive Species Database, long-tailed macaques are considered an invasive species in Mauritius, Palau, Hong Kong and in parts of Indonesia. In some regions, these animals are viewed as crop-eating pests by local residents, resulting in human-animal conflict and their unfortunate killing. In other locations, wild monkeys are captured and castrated to prevent future population growth. Furthermore, in certain regions, animals are trapped and sold for profit. These examples illustrate the widely varying, complex nature of this global issue and the need for cross-disciplinary, international partnerships to inform evidence-based solutions.

Recommendation #4: Increase collaboration between the biomedical research community and international authorities that monitor and regulate animal use.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) serves as the international authority on the status of wild species. In the United States, the U.S. Fish and Wildlife Service (USFWS) regulates the importation of wild animals. To address the current nonhuman primate supply shortage in a manner that is balanced and evidence-based, we urge CITES and USFWS to work closely with the biomedical research, veterinary and conservation communities to develop both short-term and long-term solutions. A concerted and collaborative approach - through data collection efforts, public comment periods, listening sessions, etc. - will ensure wild animals are protected while avoiding actions that inadvertently impede life-saving biomedical research.

The above information and recommendations are provided by a coalition of research, veterinary and conservation organizations. They are:

American Association for Laboratory Animal Science
American Association of Veterinary Medical Colleges
American College of Laboratory Animal Medicine
American College of Neuropsychopharmacology
American Physiological Society
American Society for Pharmacology and Experimental Therapeutics
American Society of Laboratory Animal Practitioners
American Society of Primatologists
Americans for Medical Progress
Association of Primate Veterinarians
California Biomedical Research Association
California National Primate Research Center
Charles River Laboratories
COGR – Council on Governmental Relations
Emory National Primate Research Center
EU-Simia
European Animal Research Association
European Primate Veterinarians
Federation of American Societies for Experimental Biology
Foundation for Biomedical Research
Inotiv
Institutional Officials Consortium
International Association of Colleges of Laboratory Animal Medicine
Massachusetts Society for Medical Research
National Association for Biomedical Research
New Jersey Association for Biomedical Research
North Carolina Association for Biomedical Research
Northwest Association for Biomedical Research
Oregon National Primate Research Center
Pennsylvania Society for Biomedical Research
Society for Neuroscience
States United for Biomedical Research
Texas Biomedical Research Institute/Southwest National Primate Research Center
Texas Society for Biomedical Research
Tulane National Primate Research Center
Understanding Animal Research
Veterinary Consortium for Research Animal Care and Welfare
Washington National Primate Research Center
Wisconsin National Primate Research Center