6th February 2025

For the attention of: Dr the Hon Navinchandra Ramgoolam, GCSK, FRCP
Prime Minister

Dear Prime Minister,

We appeal to the Government of Mauritius to abandon plans to sign a memorandum of understanding (MOU) with Charles River Laboratories, that will enable the company to carry out pre-clinical testing in the country using long-tailed macaques. In particular, we draw attention to the ethical and welfare concerns that surround the use of non-human primates in laboratories, and the accepted scientific arguments against their use. Pre-clinical testing involves substantial suffering and death. Allowing Charles River, one of the world's largest users of long-tailed macaques, to set up a testing facility in Mauritius, will lead to an increase in the number of long-tailed macaques captured and bred in the country, as well as an increase in their suffering and death.

The image of Mauritius as a popular holiday destination is at risk of being tarnished if such a MOU is agreed. The world's awareness of ecological and ethical issues such as conservation, climate change, human rights and animal welfare, has been growing rapidly over the past few years. Segments of the tourism industry are now responding to ethical concerns raised by customers about the treatment of animals in certain countries.

Furthermore, the development of alternative methods to using animals is a growing and pioneering field. There is now a wide range of more human-relevant and humane approaches, and animal tests are being replaced in areas such as toxicity testing, neuroscience and drug development. We urge Mauritius to lead the way in the promotion and use of humane and cutting-edge technologies rather than encouraging the outdated and cruel practice of animal research to continue.

Legislation:

The Mauritius Animal Welfare (Experiment on Animals) Regulations 2017, which comes within the Animal Welfare Act 2013, contains gaps which raise serious concerns about animal protection, in particular lack of enforcement, accountability and transparency. For example, there is no provision for governmental inspections of laboratories. Nor are there any rules in the regulations about the housing, environment and enrichment to be provided to animals. There is a requirement for researchers to submit records to the Government, although there is no provision for the Government to subsequently put such information into the public domain where it can receive impartial scrutiny.

With large gaps in animal testing regulations compared with other countries, Mauritius risks attracting researchers trying to avoid stricter restrictions in their own countries, as well as the growing public criticism and scrutiny of animal experiments.

Information on Charles River Laboratories:

In 2023, Charles River became the subject of U.S. federal criminal and civil investigations for possible violations of the law involving the importation of long-tailed macaques from Cambodia. The U.S. Fish and Wildlife Service's five-year undercover "Operation Long-Tail Liberation", conducted between 2018 and 2022 (1), provided evidence that an estimated 30,000 wild-caught macaques of Cambodian origin had been falsely labelled as captive bred on CITES permits and imported into the U.S. Charles River imported more than 1,000 monkeys into the U.S. from Cambodia, and as these monkeys may have been imported illegally, they are in limbo after the Fish and Wildlife Service stopped their sale to laboratories (2).

In February 2023, Charles River announced it was suspending imports from Cambodia into the U.S. (3) until it could ensure monkeys were not illegally captured—but then began importing these monkeys into Canada instead. As a result, the company is now also under investigation in Canada. The company has a long history of violating laws and regulations, including failing to provide suffering animals with pain relief or appropriate medical care, failing to conduct proper veterinary inspections before transporting monkeys, and baking monkeys alive when no one noticed a thermostat malfunction (4).

Further, according to financial analysts, contract research organisations, such as Charles River Laboratories, are experiencing a slow-down in Research & Development spending by large pharmaceutical companies (5). Charles River Laboratories' net income was down over 20% and its net profit margin down nearly 19% over the last year (2024). Charles River Laboratories expects its revenue to decline in 2025, and is laying off staff, closing facilities and cutting back.

Mistreatment of monkeys in Mauritius:

Over the years, various investigations have raised serious concerns about practices at facilities in Mauritius involved in capturing and breeding long-tailed macaques. Most recently, at one facility – Noveprim – highly stressed monkeys, including those captured from the wild, were filmed being roughly handled by indifferent staff (6).

In 2023, the discovery of a macaque farm operating illegally, with hundreds of monkeys found in deplorable conditions, also raised concerns about the way in which monkeys in the country are being exploited and treated.

Trapping of wild long-tailed macaques:

Mauritius is a large exporter of long-tailed macaques, including wild-caught individuals. In 2023, 15,097 macaques were exported, including 11,014 to the USA, of whom 2,637 were wild caught. In 2022, 11,897 long-tailed macaques were exported, including over 4,000 of whom were wild-caught. The capture of monkeys from the wild unavoidably inflicts substantial suffering for the monkeys and is inherently inhumane. Monkeys are

highly social animals whose sense of well-being and whose welfare – as with human beings – are strongly and inextricably dependent on intact family and similar social structure. Removal of individuals from the social group results in fractured families and social bonds. This causes extreme stress and distress for those taken as well as those left behind, the effects of which last indefinitely. In addition, monkeys may be injured or killed during trapping. These monkeys are especially vulnerable to disease and injuries during capture and transport and are more likely to be harbouring and shedding pathogens (disease-causing organisms) that could be transmitted to humans and other animals.

The substantial negative impact caused by trapping and removal of wild monkeys from their natural social groups is universally recognised by relevant organisations and official bodies, for example, the European Union (7) and the International Primatological Society (8).

The last population survey for long-tailed macaques in Mauritius to be published was carried out in the 1980's. To date, the report of a more recent population survey that was due to take place has not been published. An MOU with CRL for pre-clinical testing will result in greater numbers of macaques being used. If there are no population data available, Mauritius authorities cannot be confident that trapping is not having a negative impact on wild populations.

Pre-clinical testing and research:

Long-tailed macaques are regularly used in pre-clinical research. This, however, is by no means proof of necessity. Monkeys used in these toxicity (or poisoning) tests are forced to consume, inhale or be injected with chemicals that may cause vomiting, pain, convulsions, collapse of their vascular system, shock, difficulty in normal physiologic processes such as breathing, and death. Such testing can last for months, even years. Whilst there is little scientific evidence that the information gained is predictive of human effects, there are numerous examples of where they have not been (9). Over 90% of new drugs that enter human clinical trials fail because they are not safe or do not work, even though they have 'passed' tests such as those involving non-human primates. Sometimes these failures can be catastrophic, such as the Northwick Park Hospital disaster in 2006, in which six human volunteers nearly died testing a drug that had shown no effects in monkeys at 500 times the dose (10).

Because of the substantial differences between species, claims that non-human primates play an important role in finding cures for human diseases are not supported by the facts. This has been the case for drugs in general, as well as hundreds of failed HIV/AIDS vaccines, hepatitis C interventions, stroke treatments, Alzheimer's and Parkinson's disease treatments.

The standard housing inside research laboratories comprises small, barren, steel cages in which the animals are housed singly, with no meaningful enrichment or opportunities for socialisation. With little opportunity for mental stimulation and physical exercise, these highly intelligent, curious and social animals frequently develop abnormal and

self-destructive behaviours including pacing, rocking, swaying, bar biting, and self-mutilation. They are not only poor examples of their own species but are also unsuitable for scientific inquiry.

Because of biological differences between humans and other primates, as well as the unnatural conditions in which the primates must live, the results of such research cannot be safely or reliably extrapolated to humans.

The Way Forward – Alternatives:

There are humane alternatives to using monkeys in toxicity testing. For example, an innovative technique called microdosing can be safely used in human volunteers to measure how very small doses of potential new drugs behave in the human body. Another alternative includes using human cells. For example, blood and liver cells are already used within the pharmaceutical industry to test the safety of new drugs. These are, however, underdeveloped and under-used and it will take forward thinking, combined with compassion and funding, to make the most of these humane, human-relevant and effective methods.

Safety of people and poor science:

Long-tailed macaques caught up in the international wildlife trade consistently harbour and can shed deadly bacteria, viruses, mycobacteria and parasites that can be transmitted to humans. Direct or indirect contact with monkey urine, faeces, saliva, respiratory droplets or blood through the handling of monkeys or their crates, or exposure to a contaminated environment, risks the transmission of diseases. Between 2019 and 2023, monkeys imported into the U.S. and the EU arrived infected with Macacine herpesvirus 1 (herpes B), a highly pathogenic zoonotic virus; *Mycobacteria tuberculosis*, *M. bovis*, *M. caprae* and *M. orygis*, the causative agents of tuberculosis; and deadly gastrointestinal pathogens, including *Yersinia*, *Shigella*, *Campylobacter* and *Salmonella*. In addition, monkeys in quarantine showed clinical signs consistent with filovirus [Ebola-like viruses] infections.

Workers who have contact with monkeys at breeding facilities, during transportation and at the laboratories are potentially at risk, and subsequent infections put the greater community at risk. Records from primate laboratories show that workers are regularly exposed to pathogens at the facility during routine cleaning and husbandry tasks, such as washing animal cages, which can aerosolize animal urine, faeces, blood, and saliva, as well as through direct handling of monkeys or through injuries associated with equipment in the facilities.

Studies have shown repeatedly that animal testing is bad science and wastes non-human animal and human lives. The U.S. National Institutes of Health has reported that 95 out of every 100 drugs that pass animal tests fail in humans. Animal experiments prolong the suffering of humans waiting for effective cures because the results mislead experimenters and squander precious time, money and other resources that could be spent on human-relevant research.

Long-tailed macaques in Mauritius:

The species *Macaca fascicularis* has been living on Mauritius for over 400 years, and over time, these monkeys have become part of the ecosystem, contributing to its biodiversity. Although now well-established in Mauritius, the long-tailed macaque is labelled a 'pest' species and is widely persecuted, with population management and conflict often being cited to excuse or justify their ill-treatment. Issues involving macaques are no more so than with other introduced species on the island (such as cats, mongoose, pigs, rats) as well as the human population itself. People often use the negative impact on the pink pigeon as a reason to extirpate the long-tailed macaque, but the pink pigeon is already compromised by habitat loss and fragmentation because of human activities, such as sugar cane plantations. Further, it is clear that we do not have all the answers about the impact of introduced species. For example, although prevailing opinion was that introduced plant-eating mammals were more damaging to the environment and plants than are native species, a recently published critical assessment found that this was untrue (11). Researchers at Aarhus University, Denmark and the University of Oxford, compared the effects of large mammal species listed as native and introduced, in 221 studies from around the world. They found that the two groups of animals had indistinguishable effects on the abundance and diversity of native plants.

Nevertheless, whether a species is native or introduced, the *welfare and well-being issues are the same for the individuals*; long-tailed macaques are equally capable of suffering as are any other mammals in Mauritius. As a result, from a humanitarian perspective, the species deserves protection and to be treated humanely, just like any other animals, not killed or captured for research purposes.

Conservation:

The two major entities dealing with conservation of species do not appear to make any distinction between native species and those that were introduced when the global status of the species is at risk. The long-tailed macaque is listed as Appendix II by the Convention on International Trade in Endangered Species (CITES). Of equal concern is the increased conservation status of the long-tailed macaque to Endangered by the International Union for Conservation of Nature (IUCN) Red List of Threatened Species (12), the world's most comprehensive information source on the global conservation status of animal, fungi and plant species. The IUCN assessment is based on the current degree of exploitation of the species, driven in particular by the global trade in long-tailed macaques for laboratory use.

We appeal to you to abandon plans to sign a memorandum of understanding (MOU) with Charles River Laboratories and instead, we urge Mauritius to lead the way in the promotion and use of humane and cutting-edge technologies rather than encouraging the outdated and cruel practice of animal research to continue.

If you have any questions about our letter and our concerns, please contact Dr Buyukmihci at the E-mail address provided below.

Sincerely

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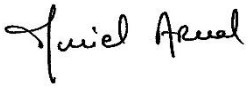

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