Explanation on the retraction of the manuscript Colchero F., Eckardt W., Stoinski T. (2021) ***Exploring the potential effect of COVID-19 on an endangered great ape.*** **Scientific Reports 11:20715**

It has been brought to our attention that we had made an important error in our simulation study of the potential effect of Covid-19 on the mountain gorilla population in the Karisoke region, Rwanda. Specifically, instead of using human infection fatality rates (IFRs) as a reference for our simulations, we used case fatality rates (CFRs) from studies published early during the pandemic in Wuhan, China, and Italy, adjusted to the longevity of the mountain gorillas. Case fatality rates, particularly those early during the pandemic, have been found to be considerably higher than the actual infection fatality rates. After carefully repeating and revising our analyses with this updated information, we have found that, by using the adjusted CFRs instead of IFRs, our published results significantly overestimated the chances of extinction of the population.

We acknowledge the difficulty of using simulation studies when there is little or even no information to explore ecological and epidemiological dynamics, and that these simulation studies need always to be taken with caution. In our project, we attempted to account for these sources of uncertainty by modelling a wide range of scenarios. However, even after these efforts, the update in IFRs produce changes in our results that cannot be ignored. Although using adjusted IFRs from human populations that have access to health care may arguably underestimate the actual IFRs in wild gorilla populations, the extent of the discrepancy in results is too important, while at this stage it is not useful to try to speculate what would be the appropriate rates.

While the revised findings are also important for mountain gorilla conservation, they substantially change the conclusions of this paper, and a simple correction would be insufficient. Therefore, in all consciousness, we, the coauthors of this study, have deemed necessary to retract it to avoid future projects to draw the wrong conclusions from it.

We are carrying out additional analyses with an improved modelling approach and in the hope to incorporate information on gorilla epidemiology, particularly from groups in zoological institutions that had COVID-19 outbreaks. Our intention is to submit a manuscript when these improved analyses have been completed, albeit not before gaging the opinion of experts in the field.

We can only stress that we have a deep respect for scientific rigor and accountability, and that we are convinced that science can only remain true to itself if we, as scientists, are willing to accept our mistakes and act upon them, irrespective of how late it may seem.

We are grateful to Drs. Sarah H Olson, Peter J Hudson, Chris Walzer, and Alexis Lécu for their timely critique of our study, for pointing out this serious oversight, and for their useful suggestions on how to improve it.

Sincerely,

Dr. Fernando Colchero