October 12, 2020 Francis Collins, M.D., Ph.D. Director National Institutes of Health

Via e-mail: execsec1@od.nih.gov

Dear Dr. Collins,

During the last fifty years I have been studying wild orangutans and working to protect them and their rain forest habitat in Indonesian Borneo. During my first years in Borneo I mentored a young graduate student from Oklahoma who was teaching free-ranging orangutans AMESLAN which is the American sign language of the deaf. When the German missionary, with whom we stayed whenever we were on one of our supply trips to town, heard about the sign language efforts, he was initially very concerned. He pondered the news. Finally, he said, "If orangutans learn language, then they will have souls, and I will have to convert them."

While in Borneo I never studied macaques but I frequently observed long-tailed and pig-tailed macaques in the forest. They clearly had intricate, complex social relationships and the youngsters played with each other energetically. It was clear where the expression "as much fun as a barrel of monkeys" came from. I also watched a sad macaque mother carrying her dead infant for at least two days. The grief on her face was palpable. I don't know if the German Catholic priest with whom we stayed would have agreed that macaques have souls but I suspect that he would have said that they came very close.

Recently I learned about Dr. Elizabeth Murray's three decades of experimental studies on "emotional responsiveness" in rhesus macaques. Sadly, I concluded that her years of research had led to

nothing that is applicable to human psychology, physiology, or psychiatry. In fact, there is little evidence that these studies have led to a better understanding of macaque "emotions."

For a primatologist, Dr. Murray's scientific work seems pointless. Monkeys are harmed, kept in totally barren environments, tortured with surgically and chemically inflicted brain lesions to see how they react to threats such as rubber snakes.

As a taxpayer I am outraged that my hard-earned money is supporting seemingly useless experiments of no discernible value on suffering monkeys. If the "Golden Fleece Awards" were ever resuscitated, it is experiments like this one on brain-damaged monkeys that would certainly be nominated.

The world has marched on and left unimaginative repetitive studies of no particular value, like Dr. Murray's, behind in the dust. Let's move on to the alternative research methods and creative technologies that are more in keeping with present day science and the evolving attitudes of many young people and the general public. (Even the dinosaurs moved on and took to the skies as birds.)

My fervent hope is that you can help end these unnecessary and cruel experiments for which there is little scientific or moral justification. I don't know if macaques have souls but they come close.

Best regards,

Biruté Mary Galdikas President, Orangutan Foundation International Full Professor, Simon Fraser University