NATURE | NEWS

NIH defends monkey experiments

Director Francis Collins says the agency has changed how it conducts controversial studies, but argues the work is necessary.

Sara Reardon

28 January 2015

NIH/PETA

Researchers at the US National Institutes of Health are studying the effects of stress on infant macaques.

The US National Institutes of Health (NIH) has modified the way a controversial lab studies stress in monkeys in response to criticism by animal-rights activists and members of Congress who say that the research is inhumane.

At issue are experiments led by Stephen Suomi, a psychologist at the US National Institute of Child Health and Human Development (NICHD) in Poolesville, Maryland. Suomi's lab studies how removing newborn rhesus macaques from their mothers affects biological processes such as brain activity and gene expression, and behaviours such as alcohol consumption in the infants. He has performed similar experiments for about three decades, and has received roughly US$30 million over the past seven years for the work, according to the activist group People for the Ethical Treatment of Animals (PETA), which is based in Norfolk, Virginia. The group obtained documents and videos from the NIH through a freedom-of-information request.

In September, PETA began posting ads in the subway station near the NIH's campus in Bethesda, Maryland, and in newspapers, condemning the experiments as "cruel and archaic", and arguing that they yielded results that were not relevant to human health. The group also posted videos of NIH monkey experiments on its website.

PETA's campaign drew the attention of Congress. In December, four Democratic members of the House of Representatives wrote to the NIH, demanding that the agency's Department of Bioethics investigate the Suomi lab's practices and the justification for the experiments. "We know what the impact is when children are taken from their parents," says one of the lawmakers, Lucille Roybal-Allard (Democrat, California). "While [animal] research is necessary in many cases, we can't just do it without evaluation and having a clear purpose."

NIH responds

In a 23 January letter to Roybal-Allard and her colleagues, NIH director Francis Collins said that the agency had changed some details of the experiments after a review by the agency's Office of Laboratory Animal Welfare. Suomi's lab has stopped conducting some invasive procedures on the monkeys — such as spinal taps — and reduced the number of blood draws after determining that they were not necessary to achieve scientific goals.

But the NIH investigation concluded that the experiments were correctly classified under the US Department of Agriculture's rating system for pain and distress in lab animals. The monkey studies were placed in 'category C', which applies to experiments that cause only momentary or slight pain or distress and do not require the use of pain-relieving drugs.

Meanwhile, NICHD scientific director Constantine Stratakis notes that the videos that PETA posted are from 2008, and show an experiment in which young monkeys were not separated from their mothers. Suomi did not conduct that work, although it used animals from his lab. By contrast, the investigation requested by members of Congress, and subsequent changes to Suomi's research protocols, address his ongoing studies of maternal separation and other early-life stressors.

Mixed reaction

Debbie Jessup, Roybal-Allard's health-policy adviser, says that her office was not satisfied with the NIH's response, which describes changes made in September, before the lawmakers sent their letter. Roybal-Allard will continue to pursue the issue, Jessup adds.

PETA is not satisfied with the NIH response either, arguing that the experiments present a bioethical, not a welfare, problem and that human experiments could answer the same questions. "There may be interesting and novel results, but they're co-emerging in humans," says Katherine Roe from PETA's Laboratory Investigations Department.

Suomi disagrees. He says that the use of monkeys in his experiments is necessary because the animals mature up to four times faster than people. Carrying out his studies with human subjects would take decades, and would make it harder to isolate individual stressors.

Others are jumping to the NIH's defence. Howard Kurtzman, acting executive director for science at the American Psychological Association in Washington DC, defended Suomi's work in a 28 January letter to the four House members. "Dr. Suomi's work has been critical in understanding how the interactions between genes and the physical and social environments affect individual development, which in turn has enhanced our understanding of and treatments for mental illnesses such as depression, addiction, and autism," Kurtzman said.

Nature | doi:10.1038/nature.2015.16814