June 15, 2020

The Honorable Christi A. Grimm Principal Deputy Inspector General Office of Inspector General U.S. Department of Health and Human Services 330 Independence Ave., S.W. Washington, DC 20201

The Honorable Gary Cantrell Deputy Inspector General for Investigations Office of Inspector General U.S. Department of Health and Human Services 330 Independence Ave., S.W. Washington, DC 20201

Via e-mail: christi.grimm@oig.hhs.gov; gary.cantrell@oig.hhs.gov

Dear Principal Deputy Inspector General Grimm and Deputy Inspector General for Investigations Cantrell,

Thank you in advance for your time. I'm writing on behalf of People for the Ethical Treatment of Animals (PETA) and our more than 6.5 million members and supporters regarding a disturbing matter. **Based on the information presented below and in the wake of the COVID-19 pandemic that has caused National Institutes of Health (NIH)**– **funded animal experiments to be ramped down at universities across the nation, we respectfully urge your office to investigate, assess, and take corrective actions regarding the apparent egregious waste of NIH research grants**—worth up to billions of taxpayer **dollars each year**—and the apparent failure of NIH-funded **protocols to reduce and replace animal use in experiments as required by federal provisions.** 

**Apparent Annual Waste of Up to Billions of NIH Research Dollars** During the COVID-19 pandemic, numerous U.S. universities—which are named in the enclosed appendices to this complaint and which in FY19 received more than \$12 billion in taxpayer-funded grants from the NIH, nearly half of which is estimated to fund experiments on animals<sup>1</sup>—have urged their experimenters to suspend or end NIHfunded animal research activities that the universities categorized as extraneous, noncritical, non-essential, ramped down, disposable,



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<sup>&</sup>lt;sup>1</sup>National Institutes of Health. (2019, December 20). *NIH awards by location & organization*. <u>https://report.nih.gov/award/index.cfm</u>

unnecessary, or nonpriority and/or described using similar terminology. These directives, in turn, have reportedly led to the killing of thousands of animals deemed to be extraneous, noncritical, non-essential, ramped down, disposable, unnecessary, nonpriority, cull, or sacrifice and/or described using similar terminology. Several universities have also directly instructed experimenters to cull, euthanize, or reduce animal colonies associated with NIH-funded experiments by keeping only animals deemed to be high priority, critical, or essential or described using similar terminology.

In light of these troubling developments, PETA is questioning why any of these animals on NIH-funded protocols are being bought, bred, trapped, or experimented on in the first place since they're now so easily disposed of and since experiments are now being ended or delayed.<sup>2</sup> Universities cannot legitimately argue that all animals on NIH-funded protocols are vital to medical research<sup>3</sup>—and that the protocols are indeed worthy of NIH funding—while simultaneously classifying many of the animals as unnecessary and then killing them during the COVID-19 pandemic.

That non-essential, noncritical, or extraneous animal experimentation funded by NIH is taking place at universities across the country at an annual cost to taxpayers of billions of dollars is the height of absurdity and waste, and it is well within the mandate of your office to investigate and rectify this matter.

We respectfully urge the Office of Inspector General at the U.S. Department of Health and Human Services to investigate and assess the information below as it relates to universities' apparent waste of taxpayer money from NIH on frivolous animal experiments and/or extraneous animals during the COVID-19 pandemic. If waste is corroborated, we request that you take all corrective actions necessary to ensure that ongoing NIH-funded protocols involving such animals are permanently terminated, that new NIH-funded protocols that include such animals are no longer approved, and that the breeding and acquisition of new such animals for NIHfunded protocols are prohibited.

- 1) Any and all NIH-funded experiments that have been suspended and/or ended in accordance with universities' responses to COVID-19, such that they may be but are not necessarily limited to being—categorized as extraneous, noncritical, non-essential, ramped down, disposable, unnecessary, or nonpriority and/or described using similar terminology
- 2) The number and species of any and all animals who are in NIH-funded experiments at universities covered by item number 1 above

<sup>&</sup>lt;sup>2</sup>Parry, M. (2020, April 10). Colleges euthanized lab animals to protect employees from Covid-19. Now they face an onslaught of criticism. *The Chronicle of Higher Education*.

https://www.chronicle.com/article/Colleges-Euthanized-Lab/248483?cid=wcontentlist hp latest <sup>3</sup>Animals are "an integral component of continued progress in science, education and agriculture, and essential to the pursuit of medical and scientific discovery that advances human and animal health," stated University of Connecticut's spokesperson Stephanie Reitz in an interview. Kilyk, A. (2020, April 28). PETA calls on UConn to shut down animal labs. *The Daily Campus*.

https://dailycampus.com/stories/2020/4/28/peta-calls-on-uconn-to-shut-down-animal-labs

- 3) The number and species of any and all animals who are categorized by universities receiving NIH funds as extraneous, noncritical, non-essential, ramped down, disposable, unnecessary, nonpriority, cull, or sacrifice and/or described using similar terminology
- 4) The endpoint disposition (to include—but not be limited to—euthanasia, cull, sacrifice, kill, destroy, dispose, and/or reduction in cage census) of any and all animals used in experiments at universities receiving NIH funds covered by item number 1 above
- 5) The endpoint disposition (to include—but not be limited to—euthanasia, cull, sacrifice, kill, destroy, dispose, and/or reduction in cage census) of any and all animals at universities receiving NIH funds who are themselves covered by item number 3 above
- 6) The NIH funds used to conduct experiments at universities covered by item number 1 above, to include—but not be limited to—those used for the purchase, breeding, housing, feeding, maintaining, and/or veterinary care of any and all animals used in said experiments and/or the paying of salaries and/or wages of personnel who attended to any and all animals used in said experiments
- 7) The NIH funds used to purchase, breed, house, feed, maintain, provide veterinary care for, and/or pay salaries and/or wages of personnel who attended to any and all animals at universities covered by item number 3 above

## **Apparent Failure of NIH-Funded Protocols to Reduce and Replace Animal Use** NIH-supported language requiring the minimization of the experimental use of animals is present in the Health Research Extension Act of 1985, the National Institutes of Health Revitalization Act of 1993, the eighth edition of the Guide for the Care and Use of Laboratory Animals, and the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training:

- The Health Research Extension Act of 1985 states, "The Director of NIH shall require each applicant for a grant, contract, or cooperative agreement involving research on animals ... to include in its application or contract proposal ... (1) assurances satisfactory to the Director of NIH that- ... (B) scientists, animal technicians, and other personnel involved with animal care, treatment, and use by the applicant have available to them instruction or training in the ... use of *research or testing methods that limit the use of animals* or limit animal distress."<sup>4</sup> [*Emphasis added*]
- The National Institutes of Health Revitalization Act of 1993 states, "The Director of NIH ... shall prepare a plan ... for the National Institutes of Health to conduct or support research into ... methods of such research and experimentation that reduce the number of animals used in such research."<sup>5</sup> [Emphasis added]
- The eighth edition of the Guide for the Care and Use of Laboratory Animals states, "The *Guide* ... endorses the following principles: *consideration of*

<sup>&</sup>lt;sup>4</sup>National Institutes of Health. (2018, April 27). *Health Research Extension Act of 1985*. <u>https://olaw.nih.gov/policies-laws/hrea-1985.htm</u>

<sup>&</sup>lt;sup>5</sup>National Institutes of Health. (n.d.). *NIH Revitalization Act of 1993*. <u>https://grants.nih.gov/grants/olaw/p1103-43.pdf</u>

*alternatives (in vitro systems, computer simulations, and/or mathematical models) to reduce or replace the use of animals.*<sup>76</sup> [*Emphasis added*]

• The U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training (1985) states, "The animals selected for a procedure should be of an appropriate species and quality and *the minimum number required to obtain valid results.*" [*Emphasis added*]

U.S. government data show that 780,070 animals whose treatment is regulated by the federal Animal Welfare Act (AWA) were used in fiscal year 2018 in laboratory experiments.<sup>8</sup> However, these limited figures do not account for the use of species excluded by the AWA, namely mice of the genus *Mus*, rats of the genus *Rattus*, birds bred for experimentation, fishes, reptiles, amphibians, and agricultural animals used in agricultural experiments. Including these species not covered by the AWA, estimates for the total number of animals used in laboratories are 100 million or more.<sup>9,10,11</sup> Using data from a purposive sample of the top 25 largest public and private recipients of NIH funds for 2011, PETA researchers showed that over a 15-year period, U.S. facilities had a statistically significant 72.7% increase in their use of all vertebrate animals in experimentation.<sup>12</sup>

This disturbing rise in the number of animals used in NIH-funded experiments compounds the current problem of universities deeming many of their federally funded experiments—and the animals used in them—to be extraneous, nonessential, or noncritical or describing them using similar terminology. When NIHfunded universities buy, breed, trap, and/or use animals who at any time—not just during the COVID-19 pandemic—can be deemed to be extraneous, non-essential, or noncritical or described using similar terminology, they are squandering limited research funds, which are provided by taxpayers, and flouting the bedrock "3Rs" principle of reducing, replacing, and refining the use of animals in experimentation that is enshrined in government regulations and policies.

<sup>&</sup>lt;sup>6</sup>National Research Council (US) Committee for the Update of the Guide for the Care and Use of Laboratory Animals. (2011). *Guide for the Care and Use of Laboratory* 

Animals. https://grants.nih.gov/grants/olaw/guide-for-the-care-and-use-of-laboratory-animals.pdf <sup>7</sup>National Research Council (US) Committee for the Update of the Guide for the Care and Use of Laboratory Animals. (2011). Appendix B to the Guide for the Care and Use of Laboratory Animals: U.S. government principles for the utilization and care of vertebrate animals used in testing, research, and training. https://www.ncbi.nlm.nih.gov/books/NBK54048/

<sup>&</sup>lt;sup>8</sup>U.S. Department of Agriculture. (2020, January 7). *Annual report animal usage by fiscal year. Fiscal year 2018*. <u>https://www.aphis.usda.gov/animal\_welfare/annual-reports/Annual-Report-Summaries-State-Pain-FY18.pdf</u>

<sup>&</sup>lt;sup>9</sup>U.S. Congress, Office of Technology Assessment. (1986, February). *Alternatives to animal use in research, testing, and education*. Washington, DC: U.S. Government Printing Office, OTA-BA-273. http://govinfo.library.unt.edu/ota/Ota\_3/DATA/1986/8601.PDF

<sup>&</sup>lt;sup>10</sup>Taylor, K., Gordon, N., Langley, G., & Higgins, W. (2008, July 1). Estimates for worldwide laboratory animal use in 2005. *ATLA*, *36*(3), 327–42. <u>https://doi.org/10.1177%2F026119290803600310</u>

<sup>&</sup>lt;sup>11</sup>Ormandy, E.H., Schuppli, C.A., & Weary, D.M. (2009, February 1). Worldwide trends in the use of animals in research: the contribution of genetically-modified animal models. *ATLA*, *37*(1), 63–8. https://doi.org/10.1177%2F026119290903700109

<sup>&</sup>lt;sup>12</sup>Goodman, J., Chandna, A., Roe, K. (2015). Trends in animal use at US research facilities. *Journal of Medical Ethics*, *41*(7), 567–569. <u>http://dx.doi.org/10.1136/medethics-2014-102404</u>

Furthermore, the Congressional Research Service (CRS) has found that during the COVID-19 pandemic, "Suspending research may result in additional costs for activities such as animal care," and "Restarting research, when conditions permit, may also incur costs for staff time and supplies to … reestablish laboratory animal populations."<sup>13</sup> Taxpayers and NIH should not be responsible for these additional costs to "reestablish laboratory animal populations" since universities deemed many of them to be not essential to the experiments and because repopulating animals in laboratories at taxpayers' expense would appear to violate the aforementioned federal regulations and policies that mandate the minimization of animal use in experiments.

Based on this information, we urge your office to investigate and assess whether the universities and experimenters who receive NIH funds for experiments on animals—including, but not limited to, those listed in the enclosed appendices—are complying with federal mandates to reduce and/or replace the use of animals in experiments, given that they are using NIH funds to buy, breed, trap, and/or use in experiments countless animals who they deem to be extraneous, non-essential, or noncritical or describe using similar terminology. If noncompliance is corroborated, we request that you take all corrective actions necessary to ensure that universities comply with federal mandates to reduce and replace their use of animals in experiments, including by prohibiting the buying, breeding, trapping, and/or use in experiments of animals who are deemed to be extraneous, non-essential, or noncritical or described using similar terminology.

You can contact me at <u>ShalinG@peta.org</u> or 757-962-8325. We look forward to your reply regarding this important matter. Thank you.

Sincerely yours,

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Shalin G. Gala Vice President, International Laboratory Methods Laboratory Investigations Department

cc:

The Honorable Alex Azar Secretary, U.S. Department of Health and Human Services (alex.azar@hhs.gov; secretary@hhs.gov)

# **Enclosures:**

Appendix A: NIH-Funded Universities That Confirm the Apparent Waste of Taxpayer Funds and/or Failure to Abide by Federal Provisions to Minimize Animal

<sup>&</sup>lt;sup>13</sup>Congressional Research Service. (2020, April 10). *Effects of COVID-19 on the federal research and development enterprise*. <u>https://crsreports.congress.gov/product/pdf/R/R46309</u>

Use in Experiments by Highlighting the Destruction of Animals and/or the Discontinuation of Animal Experiments Deemed to Be Extraneous or Noncritical and/or Described Using Similar Terminology

- Appendix B: Twitter Posts From Experimenters at Universities Funded by the National Institutes of Health Who Confirm the Apparent Waste of Taxpayer Funds and/or the Failure to Abide by Federal Provisions to Minimize Animal Use in Experiments by Highlighting the Destruction of Animals and/or the Discontinuation of Animal Experiments Deemed to Be Extraneous or Noncritical and/or Described Using Similar Terminology
- Appendix C: Media Statements by National Institutes of Health–Funded Universities and/or Experimenters That Confirm the Apparent Waste of Taxpayer Funds and/or the Failure to Abide by Federal Provisions to Minimize Animal Use in Experiments by Highlighting the Destruction of Animals and/or the Discontinuation of Animal Experiments Deemed by Universities to Be Extraneous or Noncritical and/or Described Using Similar Terminology

# Appendix A:

#### NIH-Funded Universities That Confirm the Apparent Waste of Taxpayer Funds and/or Failure to Abide by Federal Provisions to Minimize Animal Use in Experiments by Highlighting the Destruction of Animals and/or the Discontinuation of Animal Experiments Deemed to Be Extraneous or Noncritical and/or Described Using Similar Terminology

- Arizona State University urged its experimenters to "not begin any additional animal experiments" and to "[e]stablish protocols ... to include ... halt of experiments."<sup>14</sup>
- Baylor University asked its experimenters to "[i]dentify any non-critical research experiments that can be ramped down or delayed" and "to avoid extra or unneeded rodents and reduce colony size."<sup>15</sup>
- Boston University requested its experimenters "to end all non-critical work involving animals."<sup>16</sup>
- Brown University urged its experimenters to start "ramping down research activities" and be prepared for the restriction of "non-critical" research.<sup>17</sup>
- Carnegie Mellon University asked its experimenters to prepare "for a ramp down of research"<sup>18</sup> and consider "means to reduce the required husbandry" by "decreasing animal census numbers, ceasing breeding activities" and, if necessary, by "depopulating" their "animal colon[ies]."<sup>19</sup>
- Columbia University announced "a rapid ramping down of research activities."20
- Cornell University implemented a contingency plan to "identify all essential animal cages" and "essential tanks" and to "cease all invasive research procedures."<sup>21</sup>

<sup>15</sup>Baylor University. (2020, March 23). COVID-19 research update.

<sup>&</sup>lt;sup>14</sup>Arizona State University. (2020, March 18). *Laboratory ramp-down guidance and checklist*. <u>https://www.asu.edu/ehs/documents/asu-research-lab-ramp-down-guidance.pdf</u>

https://www.baylor.edu/research/resources/index.php?id=967805#0

<sup>&</sup>lt;sup>16</sup>Boston University. (2020, March 23). *Memo: Animal Science Center update on COVID-19, 3/23*. <u>https://www.bu.edu/researchsupport/2020/03/26/animal-science-center-covid/</u>

<sup>&</sup>lt;sup>17</sup>Brown University. (2020, March 15). *To Brown researchers: ramping down research activities to reduce exposure*. <u>https://covid.brown.edu/news/2020-03-15/research</u>

<sup>&</sup>lt;sup>18</sup>Carnegie Mellon University. (2020, March 27). *Research at CMU during the COVID-19 pandemic*. <u>https://www.cmu.edu/alert/coronavirus/resources/researcher-resources.html</u>

<sup>&</sup>lt;sup>19</sup>Carnegie Mellon University. (2020, March 13). *COVID-19 pandemic preparedness guide for researchers*. <u>https://www.peta.org/wp-content/uploads/2020/06/Carnegie-Mellon-University-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information has been updated (<u>https://www.cmu.edu/research-office/communications/pandemic-preparedness-guide.pdf</u>).

<sup>&</sup>lt;sup>20</sup>Columbia University. (2020, March 15). *Re: Message from Dean Goldman regarding urgent ramp-down of CUIMC research*. <u>https://www.peta.org/wp-content/uploads/2020/05/Columbia-University-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information has been removed from Columbia's website (<u>https://research.columbia.edu/sites/default/files/content/SPA/Coronavirus/Message</u> %20from%20Dean%20Goldman%20regarding%20urgent%20ramp-down%20of%20CUIMC%20research.pdf).

<sup>&</sup>lt;sup>21</sup>Cornell University. (2020, March 17). *Coronavirus (COVID-19) and WCM's Animal Care and Use Program operational status contingency plan CCMP COVID-19 Update #3.* 

https://web.archive.org/web/20200330084541/https://research.weill.cornell.edu/node/6617. The original source of this information is now password-protected (https://research.weill.cornell.edu/node/6617).

- Drexel University suspended "on-campus, non-critical research activities" and urged its experimenters to "cull all non-critical animals," stating that "[n]on-critical animals should be euthanized."<sup>22</sup>
- Duke University issued a "research curtailment directive" according to which only the experiments "defined as essential" are allowed.<sup>23</sup>
- Emory University urged its experimenters "to conclude experiments, not start lengthy or complicated ones, and consider euthanasia of surplus animals."<sup>24</sup>
- Florida State University informed its experimenters that "all nonessential research occurring in a space owned or secured by FSU must be ramped down."<sup>25</sup>
- Georgia Tech asked its experimenters "to ramp down operations" and to "identify essential research experiments" that "should be a limited set of the current laboratory bench-based experimentation."<sup>26</sup>
- Iowa State University requested that its experimenters "prioritize ongoing essential [animal] research," "[c]onsider delaying new projects and delaying acquisition of new animal subjects," and "[r]educe rodent breeding to only numbers required to maintain lines."<sup>27</sup>
- Johns Hopkins University urged its experimenters to "be prepared on short notice to choose animals/cages you want and need to maintain ('mission critical' animals)" and informed them that "euthanizing animals" may be included in their plan to respond to this contingency.<sup>28</sup>
- Loyola University Chicago urged its experimenters to "stop orders for new animals and do not place new orders" and to consider "terminating the study in advance of the original schedule, collect biospecimens and store accordingly."<sup>29</sup>
- Marquette University requested that its experimenters identify "[i]rreplaceable animals," cease or reduce "[b]reeding," and cease "[a]ll ordering of new animals."<sup>30</sup>

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<sup>&</sup>lt;sup>22</sup>Drexel University. (n.d.). *Research involving animal models*.

https://drexel.edu/research/resources/response-to-covid-19-pandemic/research-involving-animal-models/ <sup>23</sup>Duke University. (n.d.). *DLAR & DLC animal care*. <u>https://www.peta.org/wp-</u>

content/uploads/2020/06/Duke-University-COVID-19-directive-regarding-animal-research.pdf. The original source of this information has been updated (<u>https://research.duke.edu/covid-19-animal-research</u>). <sup>24</sup>Emory University. (2020, March 18). *Guidance for managing Emory University research enterprise during COVID-19*. <u>https://www.emory.edu/coronavirus/messages/index.html?m=message-all-managing-</u>

<sup>&</sup>lt;sup>25</sup>Florida State University. (2020, April 2). *FSU research ramp down*.

https://news.fsu.edu/announcements/covid-19/2020/04/02/fsu-research-ramp-down/

<sup>&</sup>lt;sup>26</sup>Georgia Tech (2020, March 17). *Research ramp down plan*. <u>https://research.gatech.edu/research-ramp-down-plan</u>

<sup>&</sup>lt;sup>27</sup>Iowa State University. (2020, March 26). *COVID-19 & research. Important announcements and guidance*. <u>https://www.peta.org/wp-content/uploads/2020/06/Iowa-State-University-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information has been updated (<u>https://www.research.iastate.edu/covid-19-research/</u>).

<sup>&</sup>lt;sup>28</sup>Johns Hopkins University. (n.d.). *COVID-19 contingency plan submission form*. <u>https://researchanimalresources.jhu.edu/contingency/</u>

<sup>&</sup>lt;sup>29</sup>Loyola University Chicago. (2020, March 19). *Research continuity at LSC and WTC*.

https://www.luc.edu/coronavirus/previousmessages/2020-0319-2-researchcontinuityatlscandwtc.shtml <sup>30</sup>Marquette University. (2020, March 23). *Marquette University laboratory ramp-down instructions*. https://www.marquette.edu/innovation/documents/ramp-down.pdf

- Massachusetts Institute of Technology urged experimenters who use rodents to euthanize "animals no longer needed for studies."<sup>31</sup>
- New York University announced that "non-essential research" was suspended and "[o]nly critical research" was allowed to continue.<sup>32</sup>
- Northwestern University urged its experimenters "not [to] start new studies and euthanize all unnecessary animals" and to identify those considered "high priority, preserve."<sup>33</sup>
- Ohio State University informed its experimenters that "[o]nly critical research that needs to be done in the lab should be being conducted on campus at this time"<sup>34</sup> and instructed their University Laboratory Animal Resources staff to "euthanize animals that they identify meet [Early Removal Criteria]."<sup>35</sup>
- Penn State urged its experimenters to "immediately begin preparing for all on-campus research to be reduced to essential research-related activities by March 24,"<sup>36</sup> informed them that "no new animal work may be initiated" after that date, and urged them to "[p]repare to terminate projects that are underway," "[r]educe breeding to a minimal level," and "[i]dentify critical/priority cages (founder stock for breeding colonies, irreplaceable animals, etc.)."<sup>37</sup>
- Princeton University urged its experimenters "to halt all non-essential on-campus research activities."<sup>38</sup>
- Purdue University requested that its experimenters "ramp-down noncritical research"<sup>39</sup> and "[i]dentify and label the animals on your protocols that are the most critical to save."<sup>40</sup>

<sup>&</sup>lt;sup>31</sup>Massachusetts Institute of Technology. (2020, March 16). *Research continuity guidance for laboratories and research facilities*. <u>https://ras.mit.edu/about-research-administration-services/news-and-</u>events/research-continuity-guidance-laboratories-and

<sup>&</sup>lt;sup>32</sup>New York University. (2020, March 20). *Suspension of non-essential research*. <u>https://www.peta.org/wp-content/uploads/2020/05/New-York-University-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information has been removed from the university's website

<sup>(</sup>https://www.nyu.edu/life/safety-health-wellness/coronavirus-information/messages-to-thecommunity/suspension-of-non-essential-research.htm).

<sup>&</sup>lt;sup>33</sup>Northwestern University. (2020, March 18). *Important CCM operations update*. <u>https://www.peta.org/wp-content/uploads/2020/05/Northwestern-University-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information has been removed from the university's website (https://ccm.northwestern.edu/important-ccm-operations-update-3.18.20.pdf).

<sup>&</sup>lt;sup>34</sup>Ohio State University. (2020, March 18). Letter from Morley O. Stone to deans and associate deans of research. <u>https://research.osu.edu/files/OhioState\_Morley\_Stone-letter-deans-ADRs.pdf</u>

<sup>&</sup>lt;sup>35</sup>Ohio State University. (2020, March 30). *Guidelines for animal colony maintenance during the university state of emergency*. <u>https://orrp.osu.edu/2020/03/31/guidelines-for-animal-colony-maintenance-during-the-university-state-of-emergency/</u>

<sup>&</sup>lt;sup>36</sup>Penn State. (n.d.). *Reducing research activities in Penn State labs by March 24*. https://www.research.psu.edu/covid\_labs

<sup>&</sup>lt;sup>37</sup>Penn State. (2020, March 20). *Updates on COVID-19: Animal care and use (IACUC)*. https://www.research.psu.edu/covid\_iacuc

<sup>&</sup>lt;sup>38</sup>Princeton University. (2020, March 21). *Halting on-campus research activities*.

https://research.princeton.edu/sites/research/files/dfr\_halt-research-memo.pdf

<sup>&</sup>lt;sup>39</sup>Purdue University. (n.d.). *Definition of critical research and support functions*. https://coronavirus.purdue.edu/research/critical-research/

<sup>&</sup>lt;sup>40</sup>Purdue University. (2020, March 20). Memo to animal research community.

https://coronavirus.dev.purdue.edu/app/uploads/2020/03/COVID-19-Memo-to-Animal-Research-Community-March-20-2020-for-distribution.pdf

- Rockefeller University urged its experimenters to "identify essential research experiments," admitting that "[t]his high priority work should be a very limited set of the current laboratory bench-based experimentation,"<sup>41</sup> and to implement "actions such as reducing or cessation of breeding, unless critical to maintain the mouse strain."<sup>42</sup> It also suspended "[a]ll bench-based laboratory activity, with the exception of COVID-19-related research projects."<sup>43</sup>
- Stanford University urged its experimenters to "[p]rioritize essential, ongoing research; [c]onsider delaying new projects or new animal subjects; [and r]educe rodent breeding to only numbers required to maintain lines."<sup>44</sup>
- Texas A&M University asked its experimenters to "[s]uspend all research activities that have not been approved as essential," "[c]ancel all outstanding animal orders for non-essential research," "[c]ontinue to reduce cage census," and "not initiate new animal studies."<sup>45</sup>
- The City University of New York urged its experimenters to "[suspend] projects and not start new projects requiring on-site activities," and it informed them that "[o]rders for additional animals should be suspended."<sup>46</sup>
- The University of Alabama–Birmingham urged its experimenters to "limit operations to essential research," warned them that "NO NEW STUDIES MAY BE STARTED,"<sup>47</sup> and urged them to mark "priority cages."<sup>48</sup>
- The University of Arizona gave its experimenters the option to "completely ramp down" their laboratories.<sup>49</sup>
- The University of California–Berkeley implemented a plan "to ramp down, curtail, or postpone, animal research experiments."<sup>50</sup>

<sup>&</sup>lt;sup>41</sup>Rockefeller University. (n.d.). *Guidance for closing laboratories*.

https://www.rockefeller.edu/coronavirus/guidance-closing-laboratories/

<sup>&</sup>lt;sup>42</sup>Rockefeller University. (n.d.). *Comparative Biosciences Center COVID-19 response plan*. https://www.rockefeller.edu/coronavirus/comparative-biosciences-center-covid-19-response-plan/

<sup>&</sup>lt;sup>43</sup>Rockefeller University. (n.d.). *Guidance for conduct of approved COVID-19-related research during university closure*. <u>https://www.rockefeller.edu/coronavirus/guidance-conduct-approved-covid-19-related-research-university-closure/</u>

<sup>&</sup>lt;sup>44</sup>Stanford University. (2020, March 20). *What must research labs do to ensure the continued care of research animals?* <u>https://healthalerts.stanford.edu/covid-19/faq/what-must-research-labs-do-to-prepare-for-the-care-of-research-animals-in-case-of-disruption/</u>

<sup>&</sup>lt;sup>45</sup>Texas A&M University. (2020, March 25). *Research guidance during COVID-19*.

https://vpr.tamu.edu/covid-19? ga=2.175374181.657779861.1584721438-565303371.1583428777 <sup>46</sup>City University of New York. (2020, March 26). *Research continuity*. <u>https://www.cuny.edu/research/</u> <sup>47</sup>University of Alabama at Birmingham. (2020, March 27). *UAB Office of Research COVID-19 guidance*. <u>https://www.peta.org/wp-content/uploads/2020/06/University-of-Alabama-at-Birmingham\_COVID-19-</u> <u>directive-regarding-animal-research.pdf</u>. The original source of this information has been removed from the university's website (<u>https://www.uab.edu/research/home/business-continuity-plan</u>).

<sup>&</sup>lt;sup>48</sup>The University of Alabama–Birmingham. (2020, March 23). *Animal Resources Program COVID\_19 guidance*. <u>https://www.uab.edu/research/home/arp-covid-19-guidance</u>

<sup>&</sup>lt;sup>49</sup>University of Arizona. (2020, March 17). *Procedure for temporary laboratory closure*. https://research.arizona.edu/procedure-temporary-laboratory-closure

<sup>&</sup>lt;sup>50</sup>University of California–Berkeley. (2020, April 22). *COVID-19 research operations & continuity planning*. <u>https://vcresearch.berkeley.edu/research-continuity-planning-covid-19</u>

- The University of California–Davis urged its experimenters to "ramp down all noncritical on-campus research activities,"<sup>51</sup> defining "critical research," in part, as the "[m]aintenance of critical animal populations."<sup>52</sup>
- The University of California–Los Angeles requested that its experimenters "ramp down or terminate research."<sup>53</sup>
- The University of California–San Diego urged its experimenters to "[c]onsider culling non-essential animals."<sup>54</sup>
- The University of California–San Francisco informed its experimenters that "[i]n mouse facilities, breeding should be reduced to the minimum possible; no increases in cage counts will be permitted and all researchers should plan for additional reductions of cage counts in the future."<sup>55</sup>
- The University of Chicago urged its experimenters "to prioritize animals, ramp down colonies and non-essential experiments now."<sup>56</sup>
- The University of Cincinnati informed its experimenters that "only approved Critical [*sic*] research activities" are allowed<sup>57</sup> and urged them to "prioritize ongoing essential research," to "[c]onsider delaying new projects and delaying acquisition of new animal subjects," and "[r]educe rodent breeding to only numbers required to maintain lines."<sup>58</sup>
- The University of Colorado–Boulder urged its experimenters to "[i]dentify any research experiments or animal breeding that can be potentially ramped down, curtailed or delayed"; informed them that "OAR [Office of Animal Resources] will euthanize unnecessary breeders ... in order to prevent crowds near euthanasia

<sup>&</sup>lt;sup>51</sup>University of California–Davis. (2020, March 17). *Campus guidance on reducing on-campus research activities due to COVID-19*. <u>https://research.ucdavis.edu/campus-guidance-on-reducing-on-campus-research-activities-due-to-covid-19-2/</u>

<sup>&</sup>lt;sup>52</sup>University of California–Davis. (2020, March 17). *Classification of critical research*. <u>https://research.ucdavis.edu/definition-of-critical-research/</u>

<sup>&</sup>lt;sup>53</sup>University of California–Los Angeles. (n.d.). *Animal Research Committee (ARC)*. <u>https://rsawa.research.ucla.edu/arc/</u>

<sup>&</sup>lt;sup>54</sup>University of California–San Diego. (2020, March 18). *COVID-19: Continuity of research*. <u>https://web.archive.org/web/20200318202601/https://blink.ucsd.edu/research/COVID-19-research.html</u>. The original source of this information is now password-protected (<u>https://blink.ucsd.edu/research/COVID-19-research.html#Animal-Research</u>).

<sup>&</sup>lt;sup>55</sup>University of California–San Francisco. (2020, March 15). *Important: Directive to UCSF researchers to cease research activities*. <u>https://research.ucsf.edu/important-directive-ucsf-researchers-cease-researchactivities</u>

<sup>&</sup>lt;sup>56</sup>University of Chicago. (2020, March 19). Research town hall—COVID-19 response. <u>https://cpb-us-w2.wpmucdn.com/voices.uchicago.edu/dist/5/2473/files/2020/03/Research-town-hall-03182020v5-Final-For-Posting.pdf</u>

<sup>&</sup>lt;sup>57</sup>University of Cincinnati. (2020, March 23). *Coronavirus and your research*. <u>https://www.peta.org/wp-content/uploads/2020/05/University-of-Cincinnati-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information has been updated (<u>https://research.uc.edu/coronavirus-and-your-research</u>).

<sup>&</sup>lt;sup>58</sup>University of Cincinnati. (2020, March 17). *Recent updates*. <u>https://www.peta.org/wp-content/uploads/2020/05/University-of-Cincinnati-COVID-19-guidance-regarding-animal-research.pdf</u>. The original source of this information has been removed from the university's website (<u>https://researchhow2.uc.edu/docs/default-source/default-document-library/uc-research-continuity-planning-guidance-033020.pdf</u>?sfvrsn=949f5520\_14).

stations"; and asked them to contact OAR "for guidance on the best way to mark cages that can be euthanized."<sup>59</sup>

- The University of Colorado Anschutz Medical Campus asked its experimenters "to plan for potential phased reductions of research activities with animals," which included "[d]elaying the ordering of new research animals," "[d]elaying the start of new animal studies," "[d]ecreasing colony size to minimum maintenance levels, including separating most breeding animals to the minimum required to maintain unique lines," and "[e]nding research studies early in the vivarium."<sup>60</sup>
- The University of Connecticut urged its experimenters "to immediately reduce animal numbers and number of cages" and informed them that "[b]reeding must be reduced to the minimum possible; no increases in cage counts will be permitted and plans should be in place for reductions of cage counts in the future."<sup>61</sup>
- The University of Florida informed its experimenters that "only mission-critical, essential research should continue" and urged them to "consider reduction of animal census, including agricultural animals and USDA-covered species."<sup>62</sup>
- The University of Georgia requested that its experimenters stop "[a]ll non-essential [animal] research ... as soon as possible"<sup>63</sup> and issued a "University Research Animal Resources (URAR) and Researcher Pandemic Service Reduction Plan" that included the following instructions: "Cull animals not needed and begin breeding solely to maintain valuable colonies"; "[f]lag most valuable rat and mouse cages ... as VIP"; "[e]uthanize rodents requiring repeated treatment when research staff are unable to complete them"; "[target] euthanasia of mice and rats, for non-'VIP', priority save, cages"; and "[e]uthanize remaining animals as outlined in the URAR disaster plan, following sentient animal order."<sup>64</sup>
- The University of Iowa urged its experimenters "to begin identification of non-critical animal assets and/or existing naive cohorts that will not be able to be utilized for planned experiments and assist in arrangements for their disposition."<sup>65</sup>

<sup>62</sup>University of Florida. (2020, March 23). *UF Research Resumption Plan: Phase 2*. <u>https://www.peta.org/wp-content/uploads/2020/06/University-of-Florida-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information has been updated (<u>https://research.ufl.edu/covid-19-updates.html</u>).

https://research.uga.edu/docs/units/urar/UGA\_URAR\_service\_reduction\_plan\_COVID-19\_20200323.pdf <sup>65</sup>University of Iowa. (2020, March 18). *OAR addendum to recent* 

<sup>&</sup>lt;sup>59</sup>University of Colorado–Boulder. (n.d.). *Research & Innovation Office COVID-19 resources*. <u>https://www.colorado.edu/researchinnovation/research-innovation-office-covid-19-resources#vivarium\_considerations-2651</u>

<sup>&</sup>lt;sup>60</sup>University of Colorado Anschutz Medical Campus. (n.d.). *Coronavirus research guidance*. <u>https://www.peta.org/wp-content/uploads/2020/06/University-of-Colorado-Anschutz-Medical-Campus-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information has been updated (https://www.cuanschutz.edu/coronavirus/research-guidance).

<sup>&</sup>lt;sup>61</sup>University of Connecticut. (2020, March 23). *Research shut down notice March 23, 2020.* <u>https://ovpr.uconn.edu/2020/03/22/halting-research-march-23-2020/</u>

<sup>&</sup>lt;sup>63</sup>University of Georgia. (2020, March 23). *Guidance on essential animal research*. <u>https://research.uga.edu/docs/units/urar/EssentialAnimalResearch\_20200323.pdf</u>

<sup>&</sup>lt;sup>64</sup>University of Georgia. (2020, March 23). UGA University Research Animal Resources (URAR) and researcher pandemic service reduction plan.

*communications*. https://animal.research.uiowa.edu/sites/animal.research.uiowa.edu/files/wysiwyg\_uploads/3-18-20%20Animal%20Resources%20Preparations%20for%20COVID-19%20addendum.pdf

- The University of Louisville informed its experimenters that "all non-essential research activities are suspended" and "[n]on-essential research studies and experiments that have not yet started should be immediately postponed."<sup>66</sup>
- The University of Maryland–Baltimore asked its experimenters to consider "reduc[ing] colony size by euthanizing excess animals" and "evaluating all animals for status, meaning 'high priority', 'low priority' and 'euthanize first."<sup>67</sup>
- The University of Maryland–College Park informed its experimenters that "all basic and animal research experimentation requiring a physical presence at UMD will cease, unless specifically exempted by Deans/VPR."<sup>68</sup>
- The University of Massachusetts–Lowell informed its experimenters that "[a]ll research activities on campus are suspended."<sup>69</sup>
- The University of Michigan urged its experimenters to "ramp down all noncritical laboratory research activities by 5 p.m. on Friday, March 20"<sup>70</sup> by identifying "up to 20% of animals" that they "consider most critical to save"<sup>71</sup> and euthanizing "males if there are several of the same strain" and pups "prior weaning."<sup>72</sup>
- The University of Minnesota urged its experimenters to "euthanize [animals] as soon as [their] data is collected" and to mark "the 20% of 'priority save' cages."<sup>73</sup>
- The University of Missouri notified its experimenters "about ramping down research activities where possible."<sup>74</sup>
- The University of Montana implemented a plan in which "researchers with active animal studies" were urged to "consider finalizing experimental endpoints and

<sup>&</sup>lt;sup>66</sup>University of Louisville. (2020, March 24). *Updated COVID-19 guidelines for the UofL research community*. <u>https://louisville.edu/medicine/tech/updated-covid-19-guidelines-for-the-uofl-research-community-updated-3-24-2020</u>

<sup>&</sup>lt;sup>67</sup>University of Maryland–Baltimore. (2020, March 18). *Research Advisory Task Force (COVID-19)*. https://files.constantcontact.com/504da196201/008a10c3-b78f-461c-9a04-15c85e75a12d.pdf

<sup>&</sup>lt;sup>68</sup>University of Maryland–College Park. (2020, March 23). *Animal research guidance, March 23, 2020*. <u>https://www.peta.org/wp-content/uploads/2020/05/University-of-Maryland-College-Park-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information is no longer available online (<u>https://research.umd.edu/sites/default/files/documents/DLAR%20Guidance% 20SEVERE%203-23-20.pdf</u>).

<sup>&</sup>lt;sup>69</sup>University of Massachusetts–Lowell. (2020, March 26). *Guidance for campus research in response to COVID-19*. <u>https://www.uml.edu/Research/FAQ-research-COVID-19.aspx</u>

<sup>&</sup>lt;sup>70</sup> University of Michigan. (2020, March 18). *March 18, 2020 U-M ramps down noncritical laboratory research activities*. <u>https://research.umich.edu/sites/default/files/resource-download/covid-19\_u-m\_ramps\_down\_noncritical\_laboratory\_research\_activities.pdf</u>

<sup>&</sup>lt;sup>71</sup> University of Michigan. (2020, March 16). *Guidance on COVID-19 situation. Safeguarding & supporting your animal research*. <u>https://mailchi.mp/umich/covid-19-animalcare-guidance-3162020-2</u>

<sup>&</sup>lt;sup>72</sup> University of Michigan. (2020, March). COVID-19: Guiding principles for working safely with research animals in the vivarium. Potential ramp down of research operations. What are the best methods for us to reduce our animal breeding colonies, if absolutely necessary?

https://animalcare.umich.edu/announcements/covid-19-guiding-principles-working-safely-researchanimals-vivarium

<sup>&</sup>lt;sup>73</sup>University of Minnesota. (2020, March 17). *Office of the vice president for research*. http://view.ecommunications2.umn.edu/?qs=894dcc0c2da765cfa8a94a720473eec87c37c3b37dd134616c8f df634a3b3eb0bc896b59444b42346c837da327964e7787c3a9e83d43ea78176401590827a7da5c18649a0999 <u>394c2a3ae3c3b0706e81</u>

<sup>&</sup>lt;sup>74</sup>University of Missouri. (n.d.). Ramp-down letter. <u>https://research.missouri.edu/about/files/ramp-down-letter.pdf</u>

reducing population numbers in accordance with approved animal use protocols" and to "delay starting longitudinal studies until further notice."<sup>75</sup>

- The University of North Carolina–Chapel Hill told its experimenters that "[a]ny labbased research or core activity that is not approved as 'critical research activity' is expected to be ramped down, curtailed, suspended, or delayed as soon as possible and no later than Wednesday, March 25" and urged them to "indicate which of their rodent cages are priority and are critical to maintain" by "writing 'PRIORITY' in red ink on the DCM RFID card."<sup>76</sup>
- The University of Pittsburgh urged its experimenters to "[i]dentify all non-essential research-related activities that can be delayed, ramped down, curtailed, or suspended ... and begin the process to do so."<sup>77</sup>
- The University of Rhode Island informed its experimenters that "[a]ll non-essential animal research ... needs to be drawn down and halted" and that "preparations should be made [for long-term studies] to reduce animal counts to minimal needed to complete study goals."<sup>78</sup>
- The University of Southern California urged its experimenters to "suspend certain studies and euthanize animals."<sup>79</sup>
- The University of Texas–Arlington asked its experimenters to "[r]educe your colony size by eliminating animals that will not be used in experiments" and to "[r]educe the number of breeding cages in your colony if you will not be using these animals."<sup>80</sup>
- The University of Texas Health Science Center at San Antonio urged its experimenters to "DELAY initiation of new, approved animal experiments that would increase the number of cages in-house," to "focus their efforts on maintaining or decreasing the current number of cages in their rodent colony," and to "review current rodent cage counts with their staff and remove excess from their census."<sup>81</sup>
- The University of Texas Medical Branch at Galveston requested that its experimenters "not initiate any new animal projects and consider reducing current rodent colony size as much and as quickly as possible," "reduce experiments and

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<sup>76</sup>University of North Carolina–Chapel Hill. (2020, March 19). COVID-19 guidance from UNC DCM management. <u>https://research.unc.edu/comparative-medicine/covid-19-guidance-animal-models/</u>
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<sup>77</sup>University of Pittsburgh. (n.d.). *COVID-19: Reduction in research operations*. https://www.svcresearch.pitt.edu/covid-19-reduction-research-operations

<sup>78</sup>University of Rhode Island. (n.d.). *COVID-19 research involving IACUC*. <u>https://www.peta.org/wp-content/uploads/2020/06/University-of-Rhode-Island-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information has been updated (<u>https://web.uri.edu/research-admin/externalrelations/news/covid-19-research-involving-animals/</u>).

<sup>79</sup>University of Southern California. (2020, March 16). *March 16, 2020—COVID-19 research continuity plan.* <u>https://web.archive.org/web/20200401232429/https://research.usc.edu/coronavirus/</u>. The original source of this information has been updated (<u>https://research.usc.edu/coronavirus/#vivaria</u>).

<sup>80</sup>University of Texas–Arlington. (2020, March 19). *Coronavirus (COVID-19) impact on UTA research*. <u>https://www.peta.org/wp-content/uploads/2020/05/University-of-Texas-at-Arlington-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information has been updated (<u>https://resources.uta.edu/research/coronavirus/index.php</u>).

<sup>&</sup>lt;sup>75</sup>Wilson, K. (2020, March 10). UM researchers prepare for potential coronavirus interruption. *Missoulian*. <u>https://missoulian.com/news/local/um-researchers-prepare-for-potential-coronavirus-</u> interruption/article\_fe1cc6ca-19c9-5cc6-8661-602f67c58e4b.html

<sup>&</sup>lt;sup>81</sup>University of Texas Health Science Center at San Antonio. (2020, March 30). A message from the vice president for research. <u>https://wp.uthscsa.edu/coronavirus/2020/03/30/03-30-20-vpr-message/</u>

animal use whenever possible," "[l]imit rodent breeding to maintenance of replacement breeders only," "[d]elay experiments requiring significant post-procedural care," and "[d]elay non-time-sensitive animal experiments."<sup>82</sup>

- The University of Virginia instructed its experimenters to label the cages of those animals who are "critical to maintain," and it warned them that the "strains that can be replaced ... will be euthanized."<sup>83</sup>
- The University of Wisconsin–Madison informed its experimenters that only "essential research" is allowed<sup>84</sup> and urged them to "[s]uspend plans to order and ship animals" and "consider reduction or cessation of non-critical animal breeding, including agricultural animals and USDA-covered species."<sup>85</sup>
- Tufts University informed its experimenters that "[c]ritical animals/cages or those requiring treatment should be labeled, and consideration should be given to reducing cage census."<sup>86</sup>
- Utah State University's Laboratory Animal Research Center issued an "Epidemic Response Plan" that included actions from the "cessation of non-critical animal breeding" to the "[t]argeted euthanasia of non-critical rats and mice" and the "[e]uthanasia of all animals."<sup>87</sup>
- Virginia Tech urged its experimenters to "have contingency plans in place" that "include provisions for terminating studies and euthanizing animals."<sup>88</sup>
- Washington State University urged its experimenters to have a "depopulation" plan.<sup>89</sup>

(https://liveutmb.sharepoint.com/sites/collaboration/webfiles/Shared%20Documents/Forms/AllItems.aspx?i d=%2Fsites%2Fcollaboration%2Fwebfiles%2FShared%20Documents%2FResearch%20Resources%2FRes earch%20Resources%20Webfiles%2FCOVID19AnimalSubjects%2Epdf&parent=%2Fsites%2Fcollaborati on%2Fwebfiles%2FShared%20Documents%2FResearch%20Resources%2FResearch%20Resources%20W ebfiles&p=true&originalPath=aHR0cHM6Ly9saXZldXRtYi5zaGFyZXBvaW50LmNvbS86Yjovcy9jb2xs YWJvcmF0aW9uL3dlYmZpbGVzL0VVdERsZjRGN1ExSnZsaEN6YWVuYkhvQlA5NnhZcm9odjUzTT YxOFpqZ3NMbHc\_cnRpbWU9U19BaFJQSG0xMGc).

<sup>&</sup>lt;sup>82</sup>University of Texas Medical Branch at Galveston. (2020, March 24). *UTMB ARC COVID-19 response updates*. <u>https://www.peta.org/wp-content/uploads/2020/05/University-of-Texas-Medical-Branch-at-Galveston-COVID-19-directive-regarding-animal-research.pdf</u>. Access to the original source of this information is not consistent, and users might be required to log in

<sup>&</sup>lt;sup>83</sup>University of Virginia. (2020, March). Memo from the Center for Comparative Medicine to the UVA research community. <u>https://research.virginia.edu/sites/vpr/files/2020-</u>03/CCM.toResearchCommunity.ANIMALS.pdf

<sup>&</sup>lt;sup>84</sup>University of Wisconsin–Madison. (2020, March). *COVID-19 (coronavirus): Researchers*. https://covid19.wisc.edu/research/

<sup>&</sup>lt;sup>85</sup>University of Wisconsin–Madison. (2020, March). *COVID-19 (coronavirus): Campus research activities update*. <u>https://covid19.wisc.edu/campus-research-activities-update/</u>

<sup>&</sup>lt;sup>86</sup>Tufts University. (2020, March 19). *COVID-19: Research continuity update*. https://viceprovost.tufts.edu/news/2020/03/19/covid-19-research-continuity-update/

<sup>&</sup>lt;sup>87</sup>Utah State University. (2020, March 23). Utah State University Laboratory Animal Research Center (LARC) epidemic response plan. <u>https://research.usu.edu/wp-content/uploads/2020/03/USU-LARC-</u> Epidmeic-Response-Plan\_Color-Coded-3-23-20.pdf

<sup>&</sup>lt;sup>88</sup>Virginia Tech. (2020, March 27). *Animal care and use FAQs*. <u>https://www.peta.org/wp-content/uploads/2020/05/Virginia-Tech-COVID-19-directive-regarding-animal-research.pdf</u>. The original source of this information has been updated (<u>https://www.research.vt.edu/covid-19-updates-impacts/faqs/animal-care-use.html</u>).

<sup>&</sup>lt;sup>89</sup>Washington State University. (2020, March 17). *Checklists for research laboratory practice modifications due to COVID-19.* 

https://s3.wp.wsu.edu/uploads/sites/2542/2020/03/WSU Lab Checklist 03.17.2020 checked.pdf

- Washington University in St. Louis asked its experimenters to "[d]evelop plans to scale back [their] breeding colonies," tag "essential animals," and consider using "euthanasia services ... during the current shift to Alternate Operations ... for euthanasia of five or more cages of normal adult animals."<sup>90</sup>
- West Virginia University requested that its experimenters "look through their [animal] colonies and make sure that they are not keeping lines that are not necessary."<sup>91</sup>
- Yale University informed its experimenters that "animal research experiments should be ramped down, curtailed, or postponed."<sup>92</sup>

<sup>&</sup>lt;sup>90</sup>Washington University in St. Louis. (2020, March 25). *FAQs*. <u>https://www.peta.org/wp-</u> content/uploads/2020/05/Washington-University-in-St.-Louis-COVID-19-directive-regarding-animalresearch.pdf. The source of this information is password-protected (https://research.wustl.edu/covid19/animal-care-and-use/faqs/).

<sup>&</sup>lt;sup>91</sup>Brown, G. (2020, March 24). Potential lack of staff leads to research animal reduction. *The DA*. <u>https://www.thedaonline.com/news/lack-of-research-staff-leads-to-animal-euthanasia/article\_6105137c-6d60-11ea-a18c-07afbd845107.html</u>

<sup>&</sup>lt;sup>92</sup>Yale University. (n.d.). Animal research. <u>https://your.yale.edu/research-support/animal-research</u>

# **Appendix B:**

Twitter Posts From Experimenters at Universities Funded by the National Institutes of Health Who Confirm the Apparent Waste of Taxpayer Funds and/or the Failure to Abide by Federal Provisions to Minimize Animal Use in Experiments by Highlighting the Destruction of Animals and/or the Discontinuation of Animal Experiments Deemed to Be Extraneous or Noncritical and/or Described Using Similar Terminology

- "Happy birthday! As scientists, we closed the lab and euthanized animals to help the fight against Coronavirus. We should also get together to lobby the NIH, the Congress and the White House to come up with plans to help out colleagues and trainees whose careers are affected."<sup>93</sup>
- "Lab is shut down. Grieving the 600 mice we culled, our time, our funding, and the once-in-a-lifetime chance to study the cells in my early-stage breast milk. Hopefully, we'll find other donors but I would have been longitudinal & fully compliant. Today, it's mostly terrible."<sup>94</sup>
- "It was a very difficult decision. But it is the right thing to do. We culled 40% of our colony today and aborted all non essential experiments. Let's find a good way to stay connected and make good use of these 8 weeks!"<sup>95</sup>
- "Healthy mice being flagged for euthanasia at columbia university medical center in manhattan [*sic*] due to lack of staffing due to covid. What a waste."<sup>96</sup>
- "I culled 168 mice this week. All my work hours are simply gone to trash. I am grieving but also trying to learn to work from home, which turns out a bigger challenge than trying to focus in the lab while people walk by. Now, I am my own distraction. #workfromhome #labshutdown"<sup>97</sup>

<sup>94</sup>Whitehead, K. [@KWhiteheadLab]. (2020, March 20). <u>https://www.peta.org/wp-</u>

<sup>93</sup>Yong, X. [@DrYongXu1]. (2020, March 29).

https://twitter.com/DrYongXu1/status/1244436197168025601 (https://www.peta.org/wpcontent/uploads/2020/06/DrYongXu1-March-29-2020-tweet-Baylor-College-of-Medicine.jpg). This handle belongs to Yong Xu, professor at Baylor College of Medicine (https://www.bcm.edu/people/view/yong-xum-d-ph-d/b2852c80-ffed-11e2-be68-080027880ca6).

<sup>&</sup>lt;u>content/uploads/2020/05/KWhiteheadLab\_March-20-2020-tweet-Carnegie-Mellon-University.jpg</u>. This handle belongs to Katie Whitehead, professor at Carnegie Mellon University

<sup>(&</sup>lt;u>https://www.cmu.edu/bme/People/Faculty/profile/kwhitehead.html</u>). The original post has been deleted (<u>https://twitter.com/KWhiteheadLab/status/1241105413870927873?s=20</u>).

<sup>&</sup>lt;sup>95</sup>Chio, C. [@Chiolaboratory]. (2020, March 16). <u>https://www.peta.org/wp-</u>

<sup>&</sup>lt;u>content/uploads/2020/05/Chiolaboratory-March-16-2020-tweet-Columbia-University.jpg</u>. This handle belongs to Christine Chio, professor at Columbia University (<u>https://icg.cpmc.columbia.edu/research-faculty/Christine-Chio</u>). The original post has been deleted (<u>https://twiitten.com/Chiolaboratory/stotuc/1220724186407445888</u>)

<sup>(</sup>https://twitter.com/Chiolaboratory/status/1239734186497445888).

<sup>&</sup>lt;sup>96</sup>Laru, L. [@laru\_lisa]. (2020, March 22).

https://twitter.com/laru\_lisa/status/1241862870515830795/photo/1 (https://www.peta.org/wpcontent/uploads/2020/06/laru\_lisa-March-22-2020-tweet.jpg)

<sup>&</sup>lt;sup>97</sup>Erdogan, O. [@kurabikuru]. (2020, March 20). <u>https://www.peta.org/wp-</u>

<sup>&</sup>lt;u>content/uploads/2020/05/kurabikuru-March-20-2020-tweet-Duke-University.jpg</u>. This handle belongs to Ozgun Erdogan, postdoctoral associate at Duke University School of Medicine

<sup>(&</sup>lt;u>https://pharmacology.duke.edu/people/researchandscholarship</u>). Her twitter account is now private (<u>https://twitter.com/kurabikuru/status/1241130520144154630</u>).

- "Good night, Boyden lab. Until we meet again. @eboyden3 handed his lab off to a very capable shutdown/emergency crew to ramp our lab down. Last lights are now off. Today was heartbreaking—so many mice culled. As a lab, we don't regret a thing. Now to help however we can."<sup>98</sup>
- "We just euthanized a bunch of mice that were well trained but still needed 2 weeks of experiment time. Wish we had widespread testing so that we could make this decision intelligently; instead, I am just assuming the worst."<sup>99</sup>
- "I feel you! We are currently at 2/3 euthanized, more to go tomorrow. I feel bad for my trooper of a lab manager, she cares so much for the animals and it was a lot of work to build the colony."<sup>100</sup>
- "University of Florida animal research suspended. Only research staff deemed as essential allowed on campus. Data collection not allowed."<sup>101</sup>
- "A metric shit ton should definitely be enough. It's great that you're helping out your colleague. I hope the transfer goes well. My institution is assuring that animal care will continue during our shutdown. Hoping I don't have to cull my colony..."<sup>102</sup>
- "We have made the best of the bad situation, and donated all culled mice to our local Raptor Rescue and Rehab. Our lab does this normally, but there definitely was a huge spike in quantity give the pandemic."<sup>103</sup>
- "A challenging week- preparing lab closure, euthanizing >3/4 of mouse colony, transitioning meetings & teaching to remote, plus homeschooling, & worrying about family & loved ones. But grateful that my lab, family, & friends are all at home, healthy & safe!"<sup>104</sup>

https://twitter.com/jfthrips/status/1243547868528545793 (https://www.peta.org/wp-

<u>content/uploads/2020/06/fthrips-March-27-2020-tweet-University-of-Florida.jpg</u>). This handle belongs to Joseph E. Funderburk, professor at the University of Florida (<u>https://vivo.ufl.edu/display/n4788</u>). <sup>102</sup>Steinel, N. [@NatalieSteinel]. (2020, March 19).

https://twitter.com/NatalieSteinel/status/1240844772060823552 (https://www.peta.org/wp-

<u>content/uploads/2020/06/NatalieSteinel-March-19-2020-tweet-University-of-Massachusetts-Lowell.jpg</u>). This handle belongs to Natalie Steinel, professor at the University of Massachusetts–Lowell (https://www.uml.edu/sciences/biology/faculty/steinel-natalie.aspx).

<sup>&</sup>lt;sup>98</sup>Kitko, K. E. [@kekitko]. (2020, March 20). <u>https://twitter.com/kekitko/status/1241149067717234689</u> (<u>https://www.peta.org/wp-content/uploads/2020/06/kekitko-March-20-2020-tweet-MIT.jpg</u>). This handle belongs to Kristina E. Kitko, postdoctoral associate at MIT (<u>http://syntheticneurobiology.org/people/display/353/30</u>).

<sup>&</sup>lt;sup>99</sup>Peron, S. [@PeronLab]. (2020, March 13). <u>https://www.peta.org/wp-content/uploads/2020/05/PeronLab-March-13-2020-tweet-New-York-University.jpg</u>. This handle belongs to Simon Peron, professor at New York University (<u>https://as.nyu.edu/faculty/simon-peron.html</u>). The original post has been deleted (<u>https://twitter.com/PeronLab/status/1238517106624339969</u>).

<sup>&</sup>lt;sup>100</sup>Rauch, I. [@RauchLab]. (2020, March 19). <u>https://twitter.com/RauchLab/status/1240827252369055744</u> (<u>https://www.peta.org/wp-content/uploads/2020/06/RauchLab-March-19-2020-tweet-Oregon-Health-and-Science-University.jpg</u>). This handle belongs to Isabella Rauch, professor at Oregon Health & Science University (<u>https://www.ohsu.edu/school-of-medicine/rauch-lab/people</u>).
<sup>101</sup>Funderburk, J. E. [@jfthrips]. (2020, March 27).

<sup>&</sup>lt;sup>103</sup>Case, A. J. [@caseredoxlab]. (2020, March 28). <u>https://www.peta.org/wp-</u> <u>content/uploads/2020/05/Caseredoxlab-March-28-2020-tweet-U-of-Nebraska-Medical-Center.jpg</u>. This handle belongs to Adam J. Case, professor at the University of Nebraska Medical Center (<u>https://www.unmc.edu/physiology/faculty/case.html</u>). The original post has been deleted (<u>https://twitter.com/caseredoxlab/status/1243984296685326337</u>).

<sup>&</sup>lt;sup>104</sup>Shin, S. [@SunnyShinLab]. (2020, March 19). <u>https://www.peta.org/wp-</u> content/uploads/2020/05/SunnyShinLab-March-19-2020-tweet-University-of-Pennsylvania.jpg. This

"Seriously, FWIW, I went through each cage in our colony to see age/sex/geneotypes, made a list of cage IDs (with rack position #) for the vets to cull all unnecessary mice. All remotely. Really appreciate this functionality regularly as well (not just for pandemic operations)"<sup>105</sup>

<sup>105</sup>Creed, M. [@Meaghan\_Creed]. (2020, March 19).

https://twitter.com/Meaghan\_Creed/status/1240777082340347904 (https://www.peta.org/wpcontent/uploads/2020/06/Meaghan\_Creed-March-19-2020-tweet-Washington-University-in-St.-Louis.jpg). This handle belongs to Meaghan Creed, professor at Washington University in St. Louis

handle belongs to Sunny Shin, professor at the University of Pennsylvania

<sup>(&</sup>lt;u>https://www.med.upenn.edu/apps/faculty/index.php/g20001882/p8421823</u>). The original post has been deleted (<u>https://twitter.com/SunnyShinLab/status/1240796717626404864</u>).

<sup>(</sup>https://pain.wustl.edu/about/bios/basic-research/).

# **Appendix C:**

Media Statements by National Institutes of Health–Funded Universities and/or Experimenters That Confirm the Apparent Waste of Taxpayer Funds and/or the Failure to Abide by Federal Provisions to Minimize Animal Use in Experiments by Highlighting the Destruction of Animals and/or the Discontinuation of Animal Experiments Deemed by Universities to Be Extraneous or Noncritical and/or Described Using Similar Terminology

- "[W]e trust that labs will scale back the breeding of experimental mice accordingly if their research needs are diminished." —Peter Smith, associate director of Yale University's Animal Resources Center<sup>106</sup>
- "We've asked investigators to voluntarily delay experiments. If we have staffing issues, we would impose limitations on research. We couldn't staff large animal operating room—that is, we couldn't do procedures on anything larger than a mouse. And we would discourage any experiments that require a lot of resources, like daily or continual treatments. So far, I've been amazed at how responsive investigators have been. People are reading the news—they know what's going on. Nobody wants to be in the middle of an experiment they're going to have to stop." —Eric Hutchinson, associate director of Research Animal Resources at Johns Hopkins University<sup>107</sup>
- "It was heartbreaking ... scientifically and emotionally." —Sunny Shin, professor at the University of Pennsylvania Perelman School of Medicine, referring to the euthanasia of 200 mice<sup>108</sup>
- "This is a difficult situation for everyone, and I assure you the decision to euthanize animals is not made lightly." —Peter Smith, associate director of Yale University's Animal Resources Center<sup>109</sup>
- "I was staring at my mice one by one and deciding who lives and who dies." Isabella Rauch, professor at Oregon Health & Science University<sup>110</sup>
- "[T]he placement of new animal orders is prohibited at this time, as is breeding of animals unless essential to maintain a line." —Joel Malina, vice president for university relations at Cornell University<sup>111</sup>

<sup>&</sup>lt;sup>106</sup>Grimm, D. (2020, March 18). Respirators, quarantines, and worst-case scenarios: Lab animal facilities grapple with the pandemic. *Science Magazine*. <u>https://www.sciencemag.org/news/2020/03/respirators-quarantines-and-worst-case-scenarios-lab-animal-facilities-grapple-pandemic#</u><sup>107</sup>*Ibid*.

<sup>&</sup>lt;sup>108</sup>Grimm, D. (2020, March 23). 'It's heartbreaking.' Labs are euthanizing thousands of mice in response to coronavirus pandemic. *Science Magazine*. <u>https://www.sciencemag.org/news/2020/03/it-s-heartbreaking-labs-are-euthanizing-thousands-mice-response-coronavirus-pandemic</u>

<sup>&</sup>lt;sup>109</sup>Ibid. <sup>110</sup>Ibid.

<sup>&</sup>lt;sup>111</sup>Maharishi, M. (2020, April 3). Cornell responds to PETA's allegations of animal misconduct, affirms commitment to animal care. *The Cornell Daily Sun*. <u>https://cornellsun.com/2020/04/03/cornell-responds-to-petas-allegations-of-animal-misconduct-affirms-commitment-to-animal-care/</u>

- "[M]ost labs have closed, and their biomedical research has been suspended, requiring animals that they've cared for every day for a long time, including mice, rats and fish, to be humanely euthanized." —Oregon Health & Science University<sup>112</sup>
- "They can't use these animals for what they're intended, so they're being humanely euthanized. ... What they're doing right now is maintaining strains of animals so that they can come back and restart their studies. ... They're separating breeding pairs so there's no breeding."—Yale University laboratory employee<sup>113</sup>
- "In light of the current public health emergency, all but critical laboratory research is suspended. Examples of critical laboratory work include research on the causes and mechanisms of viral (COVID-19) infection." —Karen Peart, Yale University spokesperson<sup>114</sup>
- "Yes, maybe some of the experiments are not essential right now." Özgün Erdogan, postdoctoral associate at Duke University<sup>115</sup>
- "There is going to be so much really important research that just doesn't happen now because these animals were euthanized and because of the slowdown because of Covid-19 altogether ..... It's essentially a tragedy that animals are having to be euthanized without having gotten to get the experimental data from them." —Karen L. Bales, professor at the University of California–Davis<sup>116</sup>
- [Euthanizing animals felt] "wasteful." —Chris Dulla, professor at Tufts University, referring to the euthanasia of more than 500 mice in his laboratory<sup>117</sup>
- [The university's directive meant] "[ending] all non-critical work involving animals." —Rao Varanda, director of the Animal Science Center at Boston University Medical Center<sup>118</sup>

https://www.chronicle.com/article/Colleges-Euthanized-Lab/248483?cid=wcontentlist\_hp\_latest <sup>116</sup>Ibid.

<sup>&</sup>lt;sup>112</sup>Glucklich, E. (2020, April 6). PETA calls on OHSU to end animal experiments. *The Lund Report*. <u>https://www.thelundreport.org/content/peta-calls-ohsu-end-animal-experiments</u>

<sup>&</sup>lt;sup>113</sup>Stannard, E. (2020, April 9). Yale employee: Lab mice being euthanized. *New Haven Register*. https://www.ctinsider.com/news/coronavirus/nhregister/article/PETA-accuses-Yale-of-killing-lab-animalsas-15190545.php

<sup>&</sup>lt;sup>114</sup>Ibid.

<sup>&</sup>lt;sup>115</sup>Parry, M. (2020, April 10). Colleges euthanized lab animals to protect employees from Covid-19. Now they face an onslaught of criticism. *The Chronicle of Higher Education*.

<sup>&</sup>lt;sup>117</sup>*Ibid*.

<sup>&</sup>lt;sup>118</sup>Ellin, M. (2020, April 28). PETA calls out BU for animal treatment during pandemic. *The Daily Free Press*. <u>https://dailyfreepress.com/2020/04/28/peta-calls-out-bu-for-animal-treatment-during-pandemic/</u>