November 11, 2009

Dr. Axel V. Wolff National Institutes of Health/OLAW RKLI – One Rockledge Ctr, 3603 6705 Rockledge Drive Bethesda, MD 20892

Dear Dr. Wolff:

On behalf of People for the Ethical Treatment of Animals (PETA) and our more than 2 million members and supporters, I am submitting this complaint regarding the treatment of animals at the University of Utah (UU) (PHS Assurance # A3031-01).

A PETA investigator ("LZ") was hired as an animal support technician at UU, where she worked from February 2009, to October 2009. During this time, she witnessed numerous violations of the Public Health Service's *Guide to the Care and Use of Laboratory Animals* (the *Guide*). Based on the enclosed video, photographs, and log notes, PETA believes that UU has consistently violated federal law, regulations, and animal welfare guidelines governing animal experimentation. The evidence shows UU exhibited problems in a number of areas, including the following:

- Veterinary Care: UU failed to provide adequate veterinary care to animals (National Resource Center [NRC] 12 and 56); failed to minimize discomfort, distress, and pain of animals (U.S. Government Principle IV and NRC 56); and failed to ensure adequate surveillance, diagnosis, treatment and control of disease (NRC 56).
- Euthanasia: UU failed to promptly euthanize animals whose pain or distress could not be alleviated (NRC 65); failed to use appropriate methods of euthanasia consistent with the Association of Veterinary Medical Association (AVMA) Guidelines on Euthanasia (NRC 65); and failed to confirm death of animals through evaluation of vital signs (NRC 66).
- **Housing**: UU failed to provide sufficient space to animals (NRC 25) and failed to provide a secure environment to animals (NRC 23).
- **Employee Competence**: UU failed to ensure that personnel were adequately trained and qualified to work with animals (NRC 13).
- Socialization and Environmental Enhancement: UU failed to house primates in an environment that met their psychological and physical needs (NRC 23, 37, and 38); failed to ensure that mice were housed in socially compatible groups (NRC 22, 25 and 37); and failed to provide environmental enrichment to enhance animals' well being (NRC 37).



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 Animal Numbers: UU failed to ensure that the minimum number of animals required to obtain valid results would be used (Government Principle III).

1. Failure to maintain a program of adequate veterinary care by failing to provide prompt and appropriate veterinary care and failing to ensure adequate surveillance, diagnosis, treatment, and control of disease

The *Guide* states unequivocally that "[a]dequate veterinary care must be provided, including access to all animals for evaluation of their health and well-being." The *Guide* clearly specifies that adequate care includes "preventive medicine," "surveillance, diagnosis, treatment, and control of disease," management of protocol-associated disease, disability, or other sequelae," "anesthesia and analgesia," and "assessment of animal well-being." These guidelines were routinely violated at UU during the period in question.

A. Failure to provide veterinary care, including timely euthanasia, to sick and injured animals

The *Guide* advises that "a mechanism for direct and frequent communication should be established to ensure that timely and accurate information is conveyed to the veterinarian on problems associated with animal health, behavior, and well-being." However, on numerous occasions, PETA's investigator was advised by colleagues not to fill out a Health Status Report (HSR)—used to inform staff veterinarians of animals requiring veterinary care—even when animals were clearly in distress. She was informed that some Principal Investigators (PI) did not want the veterinarian to be alerted when animals used in their protocols became sick, and would get angry if the veterinarian was notified. This practice undermines the *Guide's* intent in recommending daily animal health checks, whilst outright defying the recommendation that "direct and frequent communication" be established with the institution's veterinarians.

•	On May 21, while LZ and were performing health checks in Rm. 1110 of the
	Comparative Medicine Center (CMC), pointed out a paralyzed mouse. The mouse
	could not use her back legs, but had to use her upper body to propel herself forward.
	said that when he first noticed the mouse's condition, he filled out a health report,
	but was informed by the veterinarian that as long as the mouse could access her food and
	water, she didn't need treatment. ⁴
_	On May 26 L.7 absenced a mayor who was hunghed up and reported that the mayor's five

• On May 26, LZ observed a mouse who was hunched up and reported that the mouse's fur was "fluffed up and greasy in appearance." She was advised by an animal technician named that she needn't fill out an HSR, saying, "We'll probably find him dead in a couple days."

⁴ PETA investigator, daily notes, 21 May 2009. PETA investigator,

✓ video footage [file 5/21/09 (3)].

¹Office of Laboratory Animal Welfare, *Guide for the Care and Use of Laboratory Animals*, National Academy Press: Washington, D.C. (1996): 12. (NRC 12)

²NRC 56.

 $^{^3}$ Id.

⁵ PETA investigator, daily log notes, 26 May 2009.

⁶ PETA investigator,

video footage [file name 5/26/09 (4)].

- On May 27, LZ discussed the condition of mice used in an aging experiment with In this protocol, overseen by PI Raymond Daynes, mice had small cuts on their bodies and their eyes appeared red and irritated. Most of the mice had lost much of their fur. In her daily log notes, LZ wrote: "said 'they (the PIs) don't wanna treat them (the animals).' So that's just how they are and there is nothing that can be done for them. I said I thought treatment for injuries and illnesses was at the discretion of the vet, and not the PI. said 'if it says it interferes with their (the PI's) study, then we can't do it.' She basically said they don't treat, document or advise anyone of these injuries." On May 29, LZ discussed the condition of the animals on Daynes' protocol with confirmed so observation that technicians were discouraged from submitted HSRs for mice who were suffering on Daynes' protocol. LZ wrote in her log notes: "He told me if one reports something to the vet, one has to call the PI and let them know, and apparently the PI, Daynes, and his lab techs will get mad and yell at one for doing so. I told him when I work in this room alone I will report any and all injuries I find." so
- LZ reported that in a conversation with an animal technician named needn't worry about rats suffering epileptic seizures in their cages. It further stated that even if the rats suffered a nose bleed during the seizure, as was common, it wasn't necessary to fill out a Health Status Report. 10
- In checking on a mouse who had suffered wounds as a result of fighting, LZ asked an animal technician named if any medication or treatment had been given to the mouse and whether a veterinarian was contacted. The responded that the mouse did not receive any treatment and that a veterinarian was not contacted.
- On June 15, LZ observed nude mice who had massive tumors all over their bodies. Some of the mice had tumors almost the size of golf balls that that covered almost the entire surface of their bodies. Many of the mice had multiple tumors. Some of the tumors had what appeared to be red scabs surrounding them. For some of the mice, the presence of the tumors appeared to inhibit normal walking. LZ asked if the veterinarian should be contacted, should the tumors get too big. It is responded that that was not necessary. She further said that the caretakers had been advised not to remove any of the dead mice found in any of the cages. The same statement of t

In a number of instances, even when HSRs were filled out by animal technicians, it would take days for the veterinarians and the Principal Investigator's (PI) technicians to follow through—extending the animals' pain, discomfort, and distress.

• On May 4, an animal technician named discovered a rat who appeared very ill and lethargic. It seemed that the rat was not grooming and his/her eyes were also red and looked swollen. A second rat in an adjacent cage was suffering a similar condition. Two days later, observed that the veterinarian had not yet come to see either of the

⁷ PETA investigator, daily notes, 27 May 2009.

⁸ PETA investigator, daily notes, 29 May 2009.

⁹ PETA investigator, **■** video footage [file name 5/29/09 (1)].

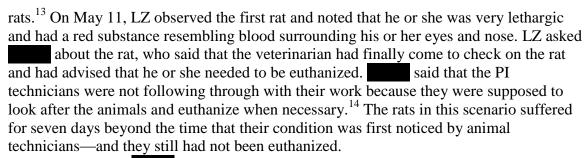
¹⁰ PETA investigator, daily notes, 15 June 2009. PETA investigator,

✓ video footage [file name 6/15/09 (5)].

¹¹ PETA investigator, daily notes, 7 May 2009.

¹² PETA investigator, daily notes, 15 June 2009. PETA investigator,

✓ video footage [file name 6/15/09 (7)].



- On May 6, LZ and checked on several mice with rectal prolapse. A note on the mice's cage indicated that the mice's condition had been initially observed on April 29 and a veterinarian had recommended that the mice be euthanized on May 1. On May 6 and again on May 7, it was observed that these mice had still not been euthanized. On May 6, commented that whoever was working in that room (to euthanize animals) was not following up properly. 15
- On May 15, LZ performed health checks in CMC Rm. 1165 with animal technicians and and an animal two injured mice and observed cuts and scabs on the mice's ears and under their chest and neck. Although LZ filled out HSRs for these mice, seven days later on May 22, these mice had still not been cared for by the veterinarian. Commented that Dr. "does things differently than Dr." further reporting that Dr. didn't come into the animal facilities regularly and that he sometimes lost reports.
- On May 19, LZ noticed that two mice—who had cuts and scabs on their ears and cuts on their chest and neck—and for whom she had filled out HSRs on May 15, still had the same blue tag hanging outside their cage. The blue tag indicates that an HSR has been submitted to the veterinarian's office. LZ asked if this meant a vet had not yet seen the mice, and confirmed that this was the case. commented that sometimes it could take upwards of a week before the veterinarian would get around to seeing the animals. 18
- On May 26, LZ discussed the condition of mice being used in aging experiments with . On this protocol, overseen by PI Schickwann Tsai, animals suffered severe ulcerations and their ears appeared to have been ripped apart or burned off. commented that one day, they had submitted 30 HSRs for animals used in studies conducted by PI Tsai. LZ pointed out that the HSR for one of the cages with the blue tag on it dated May 13 had not yet been returned—meaning that a veterinarian had not checked on the animals since a report was filed 13 days previous. said that paperwork would sometimes get lost. LZ filled out a second HSR.

B. Failure to implement measures to prevent disease or injury

¹³ PETA investigator, daily notes, 6 May 2009. PETA investigator,

✓ video footage [file name 5/6/09 (6)].

¹⁴ PETA investigator, daily notes, 6-11 May 2009. PETA investigator,

video footage [file name 5/11/09 (2)].

¹⁵ PETA investigator, daily notes, 6-7 May 2009. PETA investigator,

✓ video footage [file name 5/7/09 (4)].

¹⁶ PETA investigator, daily notes, 15 May 2009.

¹⁷ PETA investigator, daily notes, 22 May 2009. PETA investigator,

video footage [file name 5/22/09 (3)].

¹⁸ PETA investigator, daily notes, 19 May 2009.

¹⁹ PETA investigator, daily notes, 26 May 2009. PETA investigator, **☞** video footage [file name 5/26/09 (2)].

The *Guide* acknowledges that "disease prevention is an essential component of comprehensive veterinary medical care" and that "effective preventive-medicine programs ... minimize[e] nonprotocol sources of variation associated with disease and inapparent infection." However, PETA's investigator reported numerous instances where UU exhibited problems which indicated either a failure to implement policies to ensure adequate preventive care or a failure to translate these policies into procedures and practices.

- On May 4, LZ was shown several mice with rectal prolapse. The mice's rectums appeared to be very red and dry and were pushed outside of their body. In mice, a prolapsed rectum is often a serious complication associated with diarrhea. It is possible that these mice did not receive treatment for diarrhea and this led to the more serious condition.²²
- On May 8, LZ and an animal technician named found two additional mice suffering with rectal prolapse. ²³
- On May 18, LZ and came across a cage in which an adult mouse was eating a neonatal mouse; there was one other adult mouse and three other neonatal mice in the cage. said that the adults would more than likely eat the remaining baby mice, but advised against removing the babies from the cage. 24
- On July 5, an animal technician named showed LZ a dead frog who had succumbed to red leg disease. Showed LZ a dead frog who had acknowledged that the disease was contagious to other frogs. However, she also noted that the facility did not treat the tanks to reduce the risk that other frogs would also succumb to red leg disease. 25

C. Failure to manage protocol-associated diseases, disability, or other sequelae

The *Guide* advises that animal care and use protocols should include "criteria and process for timely intervention, removal of animals from a study, or euthanasia if painful or stressful outcomes are anticipated,"²⁶ and it further directs the IACUC to ensure consideration of this element in its review of protocols. Through her tenure at UU, PETA's investigator discovered scores of mice who died in their cages as a consequence of the protocol on which they had been placed. It is unclear whether the IACUC permitted death to be used as an endpoint for the protocols in which these animals were used or whether the PIs deviated from the approved protocol and allowed death to be used as an endpoint. It is possible that the PIs, their technicians, and the animal care staff at UU failed to sufficiently monitor animals as their conditions deteriorated—and this negligence resulted in animals dying in their cages.

• On May 5, while conducting health checks with a cage containing a dead mouse. The PI was notified. 27

²¹ NRC 57.

²⁰ NRC 57.

²² PETA investigator, daily notes, 4 May 2009.

²³ PETA investigator, daily notes, 8 May 2009. PETA investigator, video footage [file name 5/8/09 (3)].

²⁴ PETA investigator, daily notes, 18 May 2009. PETA investigator, 🚅 video footage [file name 5/18/09 (3)].

²⁵ PETA investigator, daily notes, 5 July 2009. PETA investigator,

✓ video footage [file name 7/5/09 (3)].

²⁶ NRC 10.

²⁷ PETA investigator, daily notes, 5 May 2009, PI not known. PETA investigator,

video footage [file name 5/5/09 (7)].

- On May 6, while LZ and performed health checks in Rm. 1550, pointed out a cage containing a dead mouse and a second cage containing three dead mice. In the latter case, the mice had begun to decay; estimated that the mice had been dead for at least a week. In a third cage, pointed out a nude mouse who appeared to have been dead for a few days. Also on May 6, while LZ was helping change cages in a room housing rats, LZ discovered a rat who had died in his or her cage. 28
- On May 21, while conducting health checks with cage containing two dead mice. 29
- On May 26, while conducting health checks with in Rm. 1165, LZ found a dead mouse in one of the cages. The mouse's mouth and fingernails were black. agreed that something didn't look right but was unsure of what would have caused the black mouth and fingernails.³⁰
- On May 29, while changing cages in Rm. 1540, LZ discovered a cage containing two dead mice. ³¹
- On June 10, while performing health checks in Rm. 1110, LZ discovered a cage containing a dead mouse. In Rm. 1541, LZ discovered a cage containing three dead mice.³²
- On June 21, while performing health checks with in Rm. A0232 of the John A. Moran Center (Moran), LZ found a cage containing a dead mouse. 33
- On June 23, while performing health checks in Moran Rm. A0855, LZ found two cages containing one dead mouse in each.³⁴
- On June 28, while performing health checks in Moran Rm. A0680, LZ found a cage containing a dead mouse. 35
- On June 30, while performing health checks with an animal technician named in Rm. A0680, LZ discovered a dead mouse in his or her cage. 36
- On July 11, while performing health checks in Moran Rm. A0680, LZ discovered two cages containing one dead mouse in each. In Moran Rm. A0855, with LZ found a cage containing another dead mouse.³⁷
- On July 21, while performing health checks in Moran Rm. A0680, LZ discovered a cage containing a dead mouse. 38
- On August 10, while performing health checks in Moran Rm. A0680, LZ discovered a cage containing a dead mouse.³⁹

²⁸ PETA investigator, daily notes, 6 May 2009. PIs not known. PETA investigator **≠** video footage [file name 5/6/09 (5)].

²⁹ PETA investigator, daily notes, 21 May 2009. PI: Dean Li.

³⁰ PETA investigator, daily notes, 26 May 2009. PI: Charles Murtaugh. PETA investigator

video footage [file name 5/26/09 (2)].

³¹ PETA investigator, daily notes, 29 May 2009. PI: Lorise Gahring.

³² PETA investigator, daily notes, 10 June 2009. PIs: Dean Li, Hong-Hua Mu. PETA investigator

✓ video footage [file name 6/10/09 (1), (2), (4)].

³³ PETA investigator, daily notes, 21 June 2009. PI: Edward Levine. PETA investigator

video footage [file name 6/21/09 (2)].

³⁴ PETA investigator, daily notes, 23 June 2009. PI: David Krizaj.

³⁵ PETA investigator, daily notes, 28 June 2009. PI: Paul Bernstein.

³⁶ PETA investigator, daily notes, 30 June 2009. PI: Balamurali Ambati.

³⁷ PETA investigator, daily notes, 11 July 2009. PIs: Balamurali Ambati, Wolfgang Baehr.

³⁸ PETA investigator, daily notes, 21 July 2009. PI: Tianxin Yang.

- On August 15, while performing daily tasks in Rm. 1194, LZ removed a dead frog from tank #10. LZ noticed there were three incisions in the frog's stomach that had been stitched together. There was a small amount of blood coming out of one of the incisions. 40
- On August 17, while performing health checks in Moran Rm. A0867, LZ found a cage containing a dead mouse. In Rm. A0860, LZ discovered a mouse who had died in his or her cage.⁴¹
- On August 19, while performing health checks in Moran Rm. A0680, LZ found a cage containing a dead mouse. 42
- On August 23, while performing health checks in Moran Rm. A0232, LZ discovered a cage containing a dead mouse. 43
- On August 24, while performing health checks in Moran Rm. A0680, LZ discovered two cages containing one dead mouse in each. In Moran Rm. A0867, LZ found a cage containing a dead mouse. And, in Moran Rm. A0863, she found two cages containing one dead mouse each.⁴⁴
- On August 26, while performing health checks in Moran Rm. A0863, LZ discovered a cage containing a dead mouse. 45
- On August 29, while performing health checks in Moran Rm. A0860, LZ discovered two
 mice who had died in their cage.⁴⁶
- On September 6, while performing health checks in Moran Rm. A0855, LZ found a mouse who had died in his or her cage. 47
- On September 12, while performing health checks in Moran Rm. A0680, LZ discovered a cage containing a dead mouse. 48
- On September 13, while performing health checks in Moran Rm. A0867, LZ found a
 mouse who had died in his or her cage.⁴⁹
- On October 5, while performing health checks in Moran Rm. A0680, LZ found two mice who had died in two separate cages.⁵⁰
- On October 11, while performing health checks in Moran Rm. A0232, LZ discovered a mouse who had died in his or her cage. ⁵¹
- On October 14, LZ removed a dead mouse from his or her cage.⁵²

³⁹ PETA investigator, daily notes, 10 August 2009. PI: Wolfgang Baehr.

⁴⁰ PETA investigator, daily notes, 15 August 2009. PI: Michael Sanguinetti. PETA investigator

✓ video footage [file name 8/15/09 (4)].

⁴¹ PETA investigator, daily notes, 17 August 2009. PIs: Qi Fu, Wolfgang Baehr.

⁴² PETA investigator, daily notes, 19 August 2009. PI: Wolfgang Baehr. PETA investigator

video footage [file name 8/19/09 (1)].

⁴³ PETA investigator, daily notes, 23 August 2009. PI: Edward Levine.

⁴⁴ PETA investigator, daily notes, 24 August 2009. PIs: Qi Fu, Tianxin Yang, Paul Bernstein. PETA investigator

video footage [file 8/24/09 (2), (3)].

⁴⁵ PETA investigator, daily notes, 26 August 2009. PI: Paul Bernstein. PI investigator

video footage [file 8/26/09 (2)].

⁴⁶ PETA investigator, daily notes, 29 August 2009. PI: Balamurali Ambati.

⁴⁷ PETA investigator, daily notes, 6 September 2009. PI: David Krizaj.

⁴⁸ PETA investigator, daily notes, 12 September 2009. PI: Sabine Fuhrmann.

⁴⁹ PETA investigator, daily notes, 13 September 2009. PI: Qi Fu.

⁵⁰ PETA investigator, daily notes, 5 October 2009. PI: Balamurali Ambati.

⁵¹ PETA investigator, daily notes, 11 October 2009. PI: Edward Levine.

⁵² PETA investigator, daily notes, 14 October 2009. PI: Wolfgang Baehr.

- On October 18, LZ discovered two mice who had died in two separate cages.⁵³
- On October 19, while performing health checks in Moran Rm. A0680, LZ found a dead mouse in one of the cages.⁵⁴
- On October 20, LZ found a dead mouse in one of the cages in Moran Rm. A0680. 55
- On October 24, LZ found a dead mouse in one of the cages in Moran Rm. A 0680.⁵⁶

2. Failure to handle animals in a way that does not cause trauma, behavioral stress, physical harm, or unnecessary discomfort

Principle IV of the PHS Policy's *U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training* ("U.S. Government Principles") states that it is imperative to employ "[p]roper use of animals, including the avoidance or minimization of discomfort, distress and pain when consistent with sound scientific practices." Further, the *Guide* states, "Pain is a stressor and, if not relieved, can lead to unacceptable levels of stress and distress in animals. The proper use of anesthetics and analgesics in research animals is an ethical and scientific imperative." These guidelines were routinely violated at UU during the period in question.

A. Failure to minimize pain, distress and discomfort of animals through rough or incompetent handling

competent nanating		
•	On May 8, an animal technician named attempted to cut the teeth of mice that had	
	been permitted to become overgrown—indicating that UU may have failed to provide	
	mice with materials for gnawing. used a small pair of curved scissors to cut the	
	teeth, but did not use anesthesia or analgesia before or after the procedure. The mouse	
	immediately began to squirm and appeared to be in pain when the procedure was done.	
	LZ asked if the procedure hurt the mouse. said "sure." He said he had only done	
	this a couple of times and was still learning. After the second cut, the mouse began to	
	bleed. said that it was normal for the mouse to bleed. He acknowledged that the	
	mouse was "bleeding a little bit too much," but then proceeded to continue cutting the	
	teeth. After some time, concerned that the mouse was bleeding too much, went to	
	get shelp. came to look at the mouse and noticed that the mouse's nose	
	had been cut. decided that a veterinarian didn't have to be informed of this	
	situation, and stated that mice are often cut accidentally during these procedures. ⁵⁹	
•	On May 18, moved mouse pups from a cage by grabbing them by the handful.	
	LZ observed that she had seen several employees moving mouse pups from one cage to	
	another in this rough and uncaring manner. ⁶⁰	

⁵⁹ PETA investigator, daily notes, 8 May 2009. PETA investigator

✓ video footage [file 5/8/09 (1)].

⁵³ PETA investigator, daily notes, 18 October 2009. PI: Wolfgang Baehr.

⁵⁴ PETA investigator, daily notes, 19 October 2009. PI: Balamurali Ambati.

⁵⁵ PETA investigator, daily notes, 20 October 2009. PI: Balamurali Ambati.

⁵⁶ PETA investigator, daily notes, 23 October 2009. PI: Wolfgang Baehr.

⁵⁷Office of Laboratory Animal Welfare, Public Health Service Policy on Humane Care and Use of Laboratory Animals, *U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training*, accessed on 8 Jan. 2008

http://grants2.nih.gov/grants/olaw/references/phspol.htm#USGovPrinciples>.

⁵⁸NRC 64.

⁶⁰ PETA investigator, daily notes, 18 May 2009.

B. Failure to minimize pain, distress, and discomfort of animals as a result in inadequate animal care policies or incomplete implementation of policies

The *Guide* recommends that institutions develop "institutional policies governing the care and use of animals" to ensure the "proper care, use, and humane treatment of animals used in research, testing, and education." However, failure on the part of the UU IACUC to implement adequate animal care policies—or the failure of personnel to put the policies into practice—resulted in deficiencies in animal care.

- On May 5th, while performing health checks in Rm. 1530C with mouse, LZ noticed a mouse who was very small and barely moving. LZ pointed out the mouse to who said that the mouse had just been weaned. She tapped on the cage and said, "It looks kinda dead." She picked him/her up and the mouse was virtually unresponsive, but was still alive and breathing. Said that the mouse's mother had died and was consequently weaned early. It was determined that the mouse was not viable and was killed. It would seem that UU either failed to have a policy in place specifying care procedures for orphaned neonates; or, animal care staff failed to employ these procedures in this case, leading to the needless suffering and death of this animal.
- On May 5, LZ noticed that cages containing mice slated for euthanasia were stacked one on top of another in the "sac rack" (the rack designated for mice who would be killed). Although UU requires that cages containing mice be alternated with empty cages to ensure better air circulation, this is not practiced. On May 5, LZ counted 72 cages in the sac rack. Each cage held one to three mice, so the thermal load caused by animal respiration would be significant. On May 7, LZ again noticed that cages were stacked incorrectly in the sac rack, with cages containing mice stacked directly one on top of another, without empty cages between the cages holding mice.

 Confirmed that UU policy requires that cages containing mice be separated by empty cages; however, this policy is not practiced. The compromised ventilation and increased heat and humidity add to the animals' discomfort and distress. And given that the animals may be forced to endure hours in the sac rack, the extent of unnecessary suffering is particularly acute.

 On May 5, LZ counted 72 cages in the sac rack, the extent of unnecessary suffering is particularly acute.
- On June 28, LZ learned that the five monkeys housed in Rm 1170 were being given only 10 milliliters of water for every kilogram of body weight, per day. 65,66 Almost two months later, on Aug 23, LZ observed that the monkeys were still being subjected to fluid restriction. While the *Guide* advises that "precautions ... be used in cases of fluid restriction to avoid acute or chronic dehydration" and that "the least restriction that will achieve the scientific objective [of the protocol] ... be used," the protracted period of fluid restriction to which the monkeys at UU were subjected seems to contravene this

⁶² PETA investigator, daily notes, 5 May 2009.

⁶¹ NRC 8

⁶³ PETA investigator, daily notes, 5 May 2009. PETA investigator,

✓ video footage [file 5/5/09 (8)].

⁶⁴ PETA investigator, daily notes, 7 May 2009.

⁶⁵ PETA investigator, daily notes, 28 June 2009. PETA investigator,

✓ video footage [file 6/28/09 (3)].

⁶⁶ This is equivalent to approximately 28 percent of the recommended daily intake of water.

⁶⁷ PETA investigator, daily notes, 23 August 2009.

⁶⁸ NRC 12.

- guidance. And, fluid restriction over such an extended period would certainly contribute to the monkeys' discomfort and distress.
- LZ learned that on Friday, September 11, a rabbit had been delivered from one building at UU to a different building on campus. ⁶⁹ The rabbit had been requested by a PI in the second building. No one in the second building noticed the rabbit until Tuesday, September 15. ⁷⁰ The rabbit was transported without any food or water. Incredibly, the rabbit was still alive—although the rabbit doubtlessly suffered as a result of the incident. That a rabbit could be transported and neglected for four days indicates serious deficiencies in communications—and basic observation skills—at UU. It would seem that either the university failed to have adequate standard operating procedures in place to ensure that animals are safely transported or animal care staff failed to employ these procedures.
- On October 11, LZ was informed by her coworker that the water line had been unplugged from a rack holding 30 cages that housed mice. It was unclear how the line became unplugged or how long it had been unplugged. LZ observed that some of the affected mice were hunched over, indicating that the mice were dehydrated. It would seem that failure to properly monitor the conditions in the animal rooms at UU resulted in mice suffering greater discomfort and distress than what which would be "necessary" for the purposes of the protocols in which the mice were being used.⁷¹

3. Euthanasia

A. Failure to use appropriate methods of euthanasia

The *Guide* defines euthanasia as "the act of killing animals by methods that induce rapid unconsciousness and death without pain or distress." The *Guide* elaborates: "Unless a deviation is justified for scientific or medical reasons, methods should be consistent with the *1993 Report* of the AVMA Panel on Euthanasia." ⁷²

However, PETA's investigator determined that UU uses carbon dioxide gassing to kill neonatal mice. On April 28, informed LZ that she would probably spend a lot of time "gassing lots of mice and rats." said it takes about five minutes to kill an adult mouse, but the smaller, younger ones—especially babies—can take up to half an hour before they die. This contravenes the instruction of the *Guide*, which states that minimizing the "time required to induce unconsciousness" is an important factor in evaluating the appropriateness of [euthanasia] methods. On May 4, LZ observed the rodent department manager's assistant () kill more than 100 mice, including mice who appeared to be only days old. These mice were pink, had no fur and many had not yet opened their eyes. All of the mice were killed by carbon dioxide gassing. As you are aware, killing neonatal mice with carbon dioxide is considered

⁶⁹ The Nora Eccles Harrison Cardiovascular Research and Training Institute (CVRTI).

⁷⁰ PETA investigator, daily notes, 15 September 2009.

⁷¹ PETA investigator, daily notes, 11 October 2009.

⁷² NRC 65.

⁷³ PETA investigator, daily notes, 28 April 2009.

⁷⁴ NRC 65.

⁷⁵ PETA investigator, daily notes, 4 May 2009.

unacceptable by the National Institutes of Health⁷⁶ and the AVMA's consensus document acknowledges that the time required to kill neonatal mice using carbon dioxide "may be prolonged."⁷⁷

The *Guide* specifies that "euthanasia should be carried out in a manner that avoids animal distress." However, on June 15, as LZ helped identify the cages in a room that contained mice who had been recommended for euthanasia, moved all nine mice to be euthanized into one cage. LZ asked if she should get a bigger cage as the cage was becoming overcrowded, but responded that there was no point in "wasting a bigger cage" since they were all being euthanized. Hice become distressed as the percentage of carbon dioxide increases in their environment and overcrowding results in panic. Mice will climb over one another in attempt to escape the aversive gas and fights invariably ensue, increasing distress to animals.

B. Failure to confirm death of animal through evaluation of vital signs

The *Guide* advises that "death should be confirmed by personnel who can recognize cessation of vital signs in the species being euthanatized" While observing kill mice on May 4, LZ asked how to tell if mice are dead. responded that you can just tell. Since the mice were killed in the context of "training" the investigator, this episode also represents failure to adequately train personnel caring for or using animals (NRC 13). On May 11, while observing as killed a rat with carbon dioxide, LZ asked how to tell when a mouse or rat has died after CO2 gassing. mentioned the toe pinch method for rats, but for mice, she said "you can pretty much tell."

The failure on the part of the facility's employees to confirm that animals had died was further evidenced through a conversation, on March 17, between LZ and an animal technician named explained that on an unidentified prior date, he had opened a facility freezer—used to hold the remains of animals found dead or killed—and found a live rat crawling inside. Walt said that he saw a hole in the bag—to which the rat had been confined—which the rat had chewed in an apparent attempt to escape and survive. An apparently reckless facility employee was suspected of having attempted to kill the animal and—having failed to confirm that the animal had died—placed him or her, alive, into the freezer.

4. Failure to ensure that the minimum number of animals would be used

The *Guide* recommends justification of the "number of animals requested"⁸² for a protocol, per the guiding principle articulated in the third of the U.S. Government Principles for the Utilization

⁷⁶ NIH Office of Animal Care and Use (OACU). Animal Research Advisory Committee (ARAC) Guidelines. Guidelines for Euthanasia of Rodents Using Carbon Dioxide. Available at: http://oacu.od.nih.gov/ARAC/EuthCO2.pdf

⁷⁷ American Veterinary Medical Association. 2007. AVMA Guidelines on Euthanasia. Available at: http://www.avma.org/issues/animal_welfare/euthanasia.pdf.

⁷⁸ NRC 66

³⁰ NRC 66

 ⁸¹ PETA investigator, daily notes, 11 May 2009. PETA investigator,

 video footage [file 5/11/09 (3)].
 ⁸² NRC 10.

and Care of Vertebrate Animals Used in Testing, Research, and Training, namely that "animals selected for a procedure should be of an appropriate species and quality and the minimum number required to obtain valid results." However, UU routinely subjected animals to cruel and invasive procedures only to—through neglect and inadequate planning—arrive at a place where the animals could not continue to be used in the protocol. Additional animals would have to be procured and subjected to the cruel and invasive procedures to replace the animals who had already been used. While PETA regards any use of animals in experimentation as objectionable, scenarios witnessed by PETA's investigator at UU represent incidents of unequivocally "avoidable" pain and suffering.

On July 28, LZ learned that had picked up a pregnant cat from Davis County Animal Shelter earlier that day. The plan was to use the cat's kittens in hydrocephalus experiments directed by PI James McAllister. Shortly after she arrived at UU, the cat gave birth to eight kittens. On July 29, LZ wrote in her daily log: "The kittens were drinking her milk, and the mother was purring." Six days later, on August 4th, LZ reported: "The kittens were nursing and the mother was purring."

Later that day, the kittens were used in an initial surgery in which they were injected with a compound that would produce excessive fluid in their brains. On August 5th, the manager of the large animal department, expressed concern that the kittens' mother was rejecting the kittens. LZ visited the cats' quarters and observed that:

"The kittens appeared dirty, and there was an odor coming from the cage. The kittens had what appeared to be feces on their bodies ... Other employees stated they also smelled this odor. I didn't notice any major changes in the kittens' behavior. said it can take a few days after the surgery is performed before major changes occur in their attitudes and behavior ... The mother didn't appear to want anything to do with them. said the mother hasn't really been caring for the kittens since the surgery ... said that she and tried to hold the mother down while the kittens fed, but the mother was stressed and wouldn't 'cooperate' so that idea was abandoned. Next, they tried putting the mother and her kittens into a kennel, which was smaller than the cage to which they were normally confined, so the mother and kittens would be closer, with the hope that the mother would then nurse the kittens. This apparently worked for a short time, but the cat and her kittens were soon moved back to the original cage ... There seemed to be a lot of confusion about what exactly was supposed to be done to care for the kittens. In response, the technicians had a meeting with Dr.

It was decided that the kittens would have to be fed by syringe. One kitten had gone missing. On August 8, LZ learned that all but one of the kittens used in the hydrocephalus experiment had died. Following her kittens' procedure, the mother did not take care of her kittens and the attempt to bottle-feed the kittens was unsuccessful. On August 12, LZ learned that the last kitten underwent an MRI on August 6 or August 7; it is unclear whether the kitten was euthanized or simply died after the MRI. No data was obtained from any of the eight kittens in the litter; the protocol was supposed to last four to six weeks and a shunt was supposed to be implanted in the

⁸³ U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training, Principle III.

brain to expel some of the fluid. It would therefore seem that all eight kittens were wasted. It is baffling that a plan to care for the kittens—in the not improbable circumstance that the mother cat would reject her kittens following the hydrocephalus procedure—was not in place in McAllister's IACUC-approved protocol. While animal care staff and the university's veterinarian floundered about trying to intervene in the care of the kittens following the hydrocephalus surgery, the kittens' health deteriorated and they died—before they were even 11 days of age. On August 10, LZ learned that the university would be looking for more pregnant cats for McAllister's protocol. 84

Following the debacle with the first litter of kittens, UU purchased two more pregnant cats. On September 19, LZ noticed that there were two new pregnant cats, F09-045 and F09-046, in Rm. 1840. These cats' kittens would be used in McAllister's hydrocephalus experiments. On September 23, F09-045 gave birth to four kittens. Two of the kittens were determined to be too weak to be used in the protocol and were euthanized. The remaining two kittens were F09-050 and F09-052. On October 10, F09-046 gave birth to five kittens.

On October 13, LZ learned from ______, one of the PI's technicians, that he had taken two of the kittens—F09-050 and F09-052—for an MRI. _____ said that kitten F09-050 had aspirated and subsequently died inside the machine. He said that he had noticed that F09-050 had a full stomach before the MRI, but he didn't believe that this was something the investigators or their staff had worried about in the past. Although _____ acknowledged that the kittens had to be anesthetized before undergoing the MRI—and while he also acknowledged that humans must fast for six hours before being anesthetized—he said that he hadn't heard that it was necessary to withhold food from animals before they were anesthetized.

In the week following the death of F09-050, James McAllister's laboratory speculated that perhaps the kitten didn't aspirate, but that there was possibly something wrong with the MRI machine or the PI and his staff had the settings set too high, or they kept the kittens in the MRI machine for too long. From the date of the kitten's death—October 13—to LZ's last day of employment 13 days later, the matter remained unresolved. ** 's failure to recognize that the kittens should be fasted before being anesthetized is a transparent case of gross incompetence.

On October 17, LZ learned from an animal technician named that another kitten, F09-052, also died in the MRI machine; it is unclear whether was responsible for this incident, or whether it was another of the PI's technicians.

Of F09-046's kittens, one was determined to be too weak and was euthanized. On October 19, two kittens were found dead in their cage. At that point, the remaining two kittens were euthanized.

⁸⁴ PETA investigator, daily notes, 28 July − 12 August 2009. PETA investigator, **s** video footage [file 7/28/09 (1) (3); 8/5/09 (1), (2); 8/12/09 (1)].

Thus, from July 28 to October 19, McAllister's protocol consumed three litters of kittens—17 kittens—but none of the experiments lasted longer than 13 days and no data was gleaned from these animals.⁸⁵

5. Failure to provide adequate housing to ensure safety and well-being of animals

The *Guide* recognizes that "proper housing and management of animal facilities are essential to animal well-being" and that "a good management program provides the environment, housing, and care that permit animals to grow, mature, reproduce, and maintain good health [and] provides for their well-being." The *Guide* further advises that "planning for adequate and appropriate physical and social environment, housing, space, and management" should include consideration of the "species, strain, and breed of the animal and individual characteristics, such as sex, age, size, behavior, experiences, and health."

A. Failure to provide adequate housing to ensure well-being of animals

Through her tenure at UU, PETA's investigator witnessed severe overcrowding of mouse cages, leading to barbering (the aggressive and excessive grasping and plucking out by dominant mice of the fur of passive mice), fights, and cannibalism. Although UU maintains a policy that neonatal mice should be removed from their parents at 21 days of age, this policy was frequently not practiced by PI technicians and animal care staff, resulting in cramped quarters and increased stress for the animals—a situation that was exacerbated if the mother gave birth to a second litter. In some cases where overcrowding was not a problem, socially incompatible mice were housed together in the same cage, leading to aggressive attacks on weaker mice by dominant mice.

The *Guide* unambiguously states: "Regardless of the category of research, institutions are expected to provide oversight of all research animals and ensure that their pain and distress is minimized." But the injuries sustained by mice in the circumstances described earlier clearly constitute suffering that falls outside that which would be considered "necessary" for the purposes of the experimental use of the animals. Thus, the prevalence of injuries and deaths at UU caused by overcrowding and co-housing of socially incompatible individuals is not only a failure to provide safe and adequate housing, but also a failure to ensure that pain, discomfort, and distress to animals is minimized.

• On May 5, LZ and were conducting health checks in Rm. 1540 when they came across a mouse who was missing fur from his or her body. 89 identified the condition as being the result of barbering. However, she dismissed LZ's concerns and claimed that this was "normal" behavior, even though barbering is understood only to occur

⁸⁵ PETA investigator, daily notes, 19 September – 19 October 2009. PETA investigator,

✓ video footage [file 9/19/09 (4); 10/13/09 (4); 10/19/09 (1)].

⁸⁶ NRC 21.

⁸⁷ *Id*.

⁸⁸ NRC 4.

⁸⁹ PETA investigator, daily notes, 5 May 2009. PETA investigator,

✓ video footage [file 5/5/09 (2)].

occasionally in group housed mice in laboratories. Thus, this incident represents a failure on the part of UU to ensure safe housing for animals and also a failure on the part of the facility and the attending veterinarian to "give research personnel advice that ensures that humane needs [of animals] are met." Also on May 5 and again in Rm. 1540, LZ and noticed that in a cage containing four mice, two had scabs on their backs and were missing substantial quantities of fur. mentioned that in another cage, the animals' wounds had gotten so bad that they had to be separated. She showed LZ a mouse who was missing fur on his or her back. The skin was red and dry and said that the whole area had been "raw." said that another mouse had been "chewing the shit" out of him or her. She mentioned a mouse whose penis was bitten repeatedly by other mice. In Rm. 1540, LZ noticed a cage that was marked with a blue tag marked "overcrowded." There were mice who needed to be weaned, but had not been as yet. informed LZ that it was the responsibility of the PIs and their technicians to wean mice from their mothers. See the safe of the pick of the p

- On May 6, LZ and were conducting health checks in Rm. 1520D when pointed out a cage in which a male mouse had severely attacked a female mouse. Her back was red and bloody and a lot of fur was missing. She also appeared to be walking slowly as a result of her wounds. The mice were separated. 93
- On May 7, LZ and went back to check on the female mouse. They found her barely moving and hunched over in a ball. remarked, "She's dyin'" and later commented, "She's in a lot of misery and pain."
- On May 18, LZ was performing health checks in Rm. 1165 with when she came across a mouse in a cage with three others who had wounds on his or her back, sides and tail. The wounds appeared, to LZ and to be consistent with fighting injuries. The injured mouse was separated from the others. As LZ and to performed health checks in Rm. 1425B, to be consistent with fighting injuries. The injured mouse was separated from the others. As LZ and to performed health checks in Rm. 1425B, to be consistent with fighting injuries. The injured mouse was separated from the others. As LZ and to performed health checks in Rm. 1425B, to be consistent with fighting injuries. The injured mouse was separated from the others. As LZ and to performed health checks in Rm. 1425B, to be consistent with fighting injuries. The injured mouse was separated from the others. As LZ and to performed health checks in Rm. 1425B, to be consistent with fighting injuries. The injured mouse was separated from the others. As LZ and to performed health checks in Rm. 1425B, to be consistent with fighting injuries. The injured mouse was separated from the others. As LZ and to performed health checks in Rm. 1425B, to be consistent with fighting injuries. The injured mouse was separated from the others. As LZ and to be consistent with fighting injuries. The injured mouse was separated from the others. As LZ and the injuries injuri
- On May 19, while performing health checks in Rm. 1110 with several overcrowded cages. She placed blue tags on seven cages. 96
- On May 21, while performing health checks with animal technician in Rm. 1551, LZ observed that one of the cages of rats was overcrowded with approximately seven juvenile rats. There was already a card hanging from the cage marking it as being overcrowded; the card was dated May 5, 2009. 97
- On May 22, LZ was performing health checks with animal technician in Rm. 1110 when they came across a mouse who had wounds on his or her back and right side. said that the wounds appeared to be from excessive barbering. Also on May 22 and in

92 PETA investigator, daily notes, 5 May 2009. PETA investigator, **☞** video footage [file 5/5/09 (4), (5)].

⁹⁰ Kurien BT, Gross T, Scofield RH. Barbering in mice: a model for trichotillomania. BMJ 2005;331:1503-1505. Available at: http://www.bmj.com/cgi/reprint/331/7531/1503.pdf

⁹¹ NRC 13

⁹³ PETA investigator, daily notes, 6 May 2009. PETA investigator,

video footage [file 5/6/09 (2)].

94 PETA investigator, daily notes, 7 May 2009. PETA investigator,

video footage [file 5/7/09 (2)].

⁹⁴ PETA investigator, daily notes, 7 May 2009. PETA investigator,

✓ video footage [file 5/7/09 (2)].

⁹⁵ PETA investigator, daily notes, 18 May 2009. PETA investigator,

video footage [file 5/18/09 (2), (3)].

⁹⁶ PETA investigator, daily notes, 19 May 2009.

⁹⁷ PETA investigator, daily notes, 21 May 2009. PETA investigator,

✓ video footage [file 5/21/09 (2)].

- Rm. 1110, LZ and discovered the remains of a mouse pup who had been cannibalized—the face and insides eaten by his or her cage mates. The cage in which the pup was found was marked "overcrowded" and the scheduled wean date—which had evidently been ignored—was May 18. 98
- On May 26, LZ was performing health checks in Rm. 1165 with where they discovered the remains of a dead mouse who had been cannibalized. Also on May 26 and in Rm. 1165, LZ and found numerous mice who suffered wounds caused by excessive barbering and/or fighting ⁹⁹:
 - A mouse had sores on and around the mouth. identified the sores as being the result of too much barbering.
 - o LZ found a mouse with wounds on his or her chest. agreed that the wounds were caused by excessive barbering.
 - LZ found a mouse with wounds on his or body, consistent with fighting.
 agreed. The mouse's left eye was bleeding.
- On May 27, while LZ was performing health checks in Rm. 1741C with when they discovered the remains of a dead mouse in a cage; the mouse's face and insides had been eaten by his or her cage mates. In the same room, LZ came across a cage that appeared to contain two litters. The birth tag on the cage read April 16. The university's policy requires that mice be weaned 21 days after birth; thus the older mice in the cage should have been removed 20 days previous.
- On May 28, while LZ was performing health checks in Rm. 1150 with discovered a mouse with a sore on his or her mouth, consistent with wounds from barbering. In Rm. 1741C, she and found a cage containing four mice, all of whom had wounds or scabs on various parts of their bodies, consistent with those caused by excessive barbering. ¹⁰¹
- On June 2, while LZ was performing health checks in Rm. 1425C with a mouse with wounds on his or her neck, consistent with excessive barbering. In Rm. 1741C, LZ and discovered a cage in which three female mice had been badly attacked by the male mouse in the cage; all three females sustained injuries to their backs, hind quarters, and tails. As LZ filled out an HSR for the mice, referred to the anticipated negative response of PI Raymond Daynes to the HSR, commenting: "Daynes will have a cow." In the same room, LZ found a dead mouse in one of the cages. She noticed that the animal's tail and feet had bite marks on them. In Rm. 1531C, LZ and noticed a cage containing four mice, two of whom had severe wounds covering their bodies. agreed that the wounds were consistent with fighting. Due to the severity of the wounds, veterinarian Dr. was called; he deemed the wounds so severe that he ordered that both mice be euthanized.
- On June 3, while performing health checks in Rm. 1531C, LZ discovered a mouse with severe wounds on his or her back and sides. The mouse was housed individually but had no enrichment and was scratching his or her wounds. Dr. recommended that the

⁹⁸ PETA investigator, daily notes, 22 May 2009. PETA investigator,

✓ video footage [file 5/22/09 (1), (2)].

⁹⁹ PETA investigator, daily notes, 26 May 2009. PETA investigator,

✓ video footage [file 5/26/09 (3)].

¹⁰⁰ PETA investigator, daily notes, 27 May 2009. PETA investigator,

video footage [file 5/27/09 (1)(2)].

¹⁰¹ PETA investigator, daily notes, 28 May 2009. PETA investigator,

video footage [file 5/28/09 (1)].

¹⁰² PETA investigator, daily notes, 2 June 2009. PETA investigator,

✓ video footage [file 6/2/09 (2)].

- mouse be euthanized. In the same room, LZ found a mouse with scabs on his or her back, consistent with fighting; she separated the cage mates. ¹⁰³
- On June 4, while performing health checks in Rm. 1550, LZ came across an overcrowded cage containing nine live mice and one dead mouse. The birth tag on the cage read May 8, 2009, so the offspring should have been weaned 6 days earlier on May 29, 2009. 104
- On June 5, while performing health checks in Rm. 1550, LZ discovered a cage confining three mice; two of these mice had wounds on their backs which appeared consistent with fighting injuries. ¹⁰⁵
- On June 8, while performing health checks in Rm. 1530C, LZ discovered the remains of a dead mouse pup in one of the cages. LZ writes: "The mouse had been almost completely eaten. All I could find were random body parts, like the tail and feet. There was also something that resembled a rib cage, but it was difficult to tell what part of the mouse remained." In Rm. 1425B, LZ observed many overcrowded cages, placing tags on 14 cages. She observed that most of these cages were well past the wean date. 107
- On June 23, while performing health checks in Rm. A0855, LZ found a mouse with wounds on his or her back that appeared to be caused by fighting. She separated the mice. ¹⁰⁸
- On July 5, while performing health checks in Rm. A0680, LZ counted 53 cages containing mice that were marked as being overcrowded. She noted the number of overcrowded cages for which different PIs were responsible: Wolfgang Baehr (7), Qi Fu (1), Ning Tian (16), Tianxin Yang (17), Paul Bernstein (5), and Balamurali Ambati (7).
- On July 11, while performing health checks in Rm. A0680, LZ counted 28 cages marked as being overcrowded and noted the number of overcrowded cages for which different PIs were responsible: Wolfgang Baehr (8), Ning Tian (1), Tianxin Yang (7), and Balamurali Ambati (12). In the same room, she found three mice in two different cages with wounds on their backs that appeared to be the result of fighting. In Rm. A0232, LZ found that PI Edward Levine was responsible for five cages marked "overcrowded." 10
- On July 15, while performing health checks in Rm. A0680 with animal technicians and LZ found a mouse with a severe wound on his head and whose skull was exposed. Dr. confirmed that this wound was caused by fighting. The mouse was euthanized.
- On July 18, while performing health checks in Rm. A0680, LZ counted 16 cages marked "overcrowded." She noted the number of overcrowded cages for which different PIs were responsible: Wolfgang Baehr (4), Ning Tian (1), Tianxin Yang (6), and Balamurali Ambati (5). 112

¹⁰³ PETA investigator, daily notes, 3 June 2009. PETA investigator,

✓ video footage [file 6/3/09 (2)].

¹⁰⁴ PETA investigator, daily notes, 4 June 2009. PETA investigator,

✓ video footage [file 6/4/09 (1)].

¹⁰⁵ PETA investigator, daily notes, 5 June 2009.

¹⁰⁶ PETA investigator, daily notes, 8 June 2009. PETA investigator, **☞** video footage [file 6/8/09 (2)].

¹⁰⁷ PETA investigator, daily notes, 8 June 2009.

¹⁰⁸ PETA investigator, daily notes, 23 June 2009.

¹⁰⁹ PETA investigator, daily notes, 5 July 2009.

¹¹⁰ PETA investigator, daily notes, 11 July 2009.

¹¹¹ PETA investigator, daily notes, 15 July 2009.

¹¹² PETA investigator, daily notes, 18 July 2009.

- On July 19, while performing health checks in Rm. A0680, LZ found two mice with barbering wounds. She separated the mice. 113
- On July 25, while performing health checks in Rm. A0680, LZ counted 16 cages marked "overcrowded." Most of these cages had been tagged three days earlier on July 22. LZ noted the number of overcrowded cages for which different PIs were responsible: Wolfgang Baehr (6), Tianxin Yang (7), and Balamurali Ambati (3). 114
- On August 10, while performing health checks in Rm. 0867, LZ found a cage overcrowded with 15 older mice and a new litter of mice. The cage had not been previously marked as being overcrowded. She proceeded to separate the mice into four cages. 115
- On September 21, while performing health checks in Rm. A0680, LZ discovered wounds on the back of a mouse consistent with fighting. She separated the mice. 116
- On October 5, while performing health checks in Rm. A0680, LZ found a mouse with small wounds on his or her body, consistent with fighting. She separated the mice. 117

B. Failure to provide a secure environment that does not allow escape of or accidental entrapment of animals

In addition to problems stemming from overcrowding of animals in cages, UU also failed to provide safe housing for animals. The *Guide* advises that primary enclosures should be safe and "provide a secure environment that does not allow escape of or accidental entrapment of animals."118 However, PETA's investigator documented several instances where there were failures in this regard.

- On May 6, LZ helped restrain a pig in Rm. 1840. The pig had injured her foot when it got stuck in the metal grates on the bottom of her cage, and it was infected and swollen. Although the pig was given antibiotics, a painkiller and an anti-inflammatory the previous week, she was cold and shivering; she also had a fever and was huddled in the corner of the cage shaking and not moving much. The pig was euthanized on May 7. 119
- On May 7, while performing animal care duties in Rm. 1530C with animal technician , LZ came across had a dead mouse hanging from the wire-top of his or her cage by one foot. The mouse appeared dehydrated and very thin in the lower part of his or her body. The mouse's skin also appeared to be loose. It seemed that the mouse had been dead for awhile. confirmed the mouse appeared dehydrated. It is unclear whether the mouse simply got his or her foot stuck in the metal mesh independently (indicating the university's failure to provide secure housing that does not allow accidental entrapment of animals) or whether his or her foot become trapped by an employee closing the cage after putting the water bottle back in the cage (indicating failure to

¹¹³ PETA investigator, daily notes, 19 July 2009.

¹¹⁴ PETA investigator, daily notes, 25 July 2009. PETA investigator,

✓ video footage [file 7/25/09 (4)].

¹¹⁵ PETA investigator, daily notes, 10 August 2009. PETA investigator,

video footage [file 8/10/09 (1) (2)].

¹¹⁶ PETA investigator, daily notes, 21 September 2009.

¹¹⁷ PETA investigator, daily notes, 5 October 2009.

¹¹⁹ PETA investigator, daily notes, 6-7 May 2009. PETA investigator,

✓ video footage [file 5/6/09 (3)].

- handle animals in a manner that minimizes pain and distress, and negligence). noticed that the mouse had broken his/her teeth while trying to get free. 120
- On June 17, while performing health checks in Rm. A0680, LZ discovered a mouse pup who had gotten his or her foot stuck in the metal wire-top of the cage in a manner similar to that of the mouse discovered on May 7. This mouse was alive and hanging upside down. LZ was able to safely remove the animal's foot. ¹²¹
- On June 22, LZ entered Rm. A0232 and noticed that there was about half an inch of water covering the floor. A cage was half filled with water and LZ saw that there were mice floating in the water. She removed the mice, but observed that while they were all still alive, they were very cold, shaky and moved slowly. The flooding had been caused by a failure in the watering system. 122
- On July 19, LZ learned that two monkeys had escaped the previous night from their cages in Rm. 1170, likely as a result of someone failing to close their cage doors properly. Water, food, paper and other supplies were strewn all over the room. The monkeys had bitten the water lines attached to the walls and there was water on the floor. Additionally, the monkeys had also gotten into a large tub of Virkon, a cleaning agent, and spread it all over the room. While the monkeys' escape was deemed as having likely occurred as a result of human error, the opportunity for serious harm to the two monkeys who escaped and other monkeys in the room was significant. It would seem that either standard operating procedures to ensure safe enclosure of animals were not sufficiently emphasized, or personnel training was lacking.

6. Failure to ensure that personnel conducting procedures are qualified to perform their duties

The *Guide* states that institutions are required "to ensure that people caring for or using animals are qualified to do so." ¹²⁴ In addition, personnel who perform anesthesia, surgery, or other experimental manipulations "must be qualified through training of experience to accomplish these tasks in a humane and scientifically acceptable manner." ¹²⁵ PHS Policy IV.C.1.f similarly states, "Personnel conducting procedures on the species being maintained or studied will be appropriately qualified and trained in those procedures."

• On July 11, LZ spoke with an animal technician named about a rhesus macaque monkey named Frack who had been observed a number of times circling his cage. LZ asked if anything could be done about this behavior to which responded, "Not really ... They've been like this for a while." This comment betrays astounding lack of knowledge on the part of the animal technician of the behavior and needs of the very

¹²⁰ PETA investigator, daily notes, 7 May 2009. PETA investigator, **☞** video footage [file 5/7/09 (3)].

¹²¹ PETA investigator, daily notes, 17 June 2009.

¹²² PETA investigator, daily notes, 22 June 2009. PETA investigator,

✓ video footage [file 6/22/09 (3) (4)].

¹²³ PETA investigator, daily notes, 19 July 2009.

¹²⁴NRC 13.

¹²⁵NRC 14.

¹²⁶ PHS (Public Health Service). 1996. Public Health Service Policy on Humane Care and Use of Laboratory Animals. Washington, D.C.: U.S.

Department of Health and Human Services. 28 pp. LPL 99-158. Health Research Extension Act, 1985]

PETA investigator, daily notes, 11 July 2009. PETA investigator, st video footage [file 7/11/09 (3)].

animals with whose care she had been charged. A critical task performed by animal technicians is in monitoring the health of animals. It is clear that if a technician does not recognize circling, pacing and thrashing as being indicative of psychological distress, she cannot report the issue to the attending veterinarian.

• The episode described earlier in which cut a mouse's nose and caused profuse bleeding while attempting to trim the mouse's teeth is a clear example of UU's failure to ensure that an employee who had been hired to care for animals and conduct certain procedures on animals was adequately qualified and trained to do so. 128

7. Failure to provide adequate environmental enrichment for animals

According to the *Guide*, animals must be housed in a physical and social environment that fulfills their species-specific needs. This includes allowing social animals to "form social groups with conspecifics through sight, smell, and possibly contact, whether the animals are maintained singly or in groups." The Guide goes on to state that, when animals must be singly-housed, "enrichment should be provided to compensate for the absence of other animals, such as safe and positive interaction with the care staff and enrichment of the structural environment." Animals should be housed with "a goal of maximizing species-specific behaviors and minimizing stressinduced behaviors." ¹³¹ Contrary to these requirements, UU failed to offer adequate socialization or enrichment to nonhuman primates, rabbits, pigs and mice. In numerous instances, LZ observed that in a given room, some individually-housed animals would have enrichment, while others did not. Some technicians were particular about providing enrichment to animals, while others were unconcerned about the animals' psychological well-being. Certainly, the failure on the part of the IACUC to include stringent details on enrichment in its animal care program is reflected in the uneven and slapdash provision of enrichment to animals in UU's laboratories. In her notes, LZ observed: "Most of the mice I have seen who are individually confined do not have any sort of enrichment in their cages. A few have a paper towel; most do not."132

• On May 6, LZ noticed that only two pigs in Room 1840 had balls in their cage; the other three pigs had nothing in their cages to provide any form of enrichment. the technician accompanying LZ, didn't know why the other pigs had nothing.

• On June 4, LZ asked _____, the rodent department manager, why some rats and mice had paper towels (for enrichment) while others did not. _____ responded that paper towels must be autoclaved before they can be placed in the cages. She added that there was no standard operating procedure on the matter of using paper towels for enrichment for mice and rats. _____ also said that the she didn't normally put paper towels in the cages because it was then easier for her to see the animals when performing health checks. While this admission demonstrates the extent to which enrichment seems not to be a priority for UU, it is particularly concerning that the manager of the rodent department would not appreciate the need to include enrichment for rats and mice. The fact that this

¹²⁸ PETA investigator, daily notes, 8 May 2009.

¹²⁹NRC 21.

¹³⁰ NRC 37-8.

¹³¹ NRC 22.

¹³² PETA investigator, daily notes, 18 May 2009.

¹³³ PETA investigator, daily notes, 6 May 2009. PETA investigator,

✓ video footage [file 5/6/09 (3)].

- employee prioritized the ease with which she could perform her job duties over a modicum of enrichment to provide for the psychological well-being of the mice and rats in her care betrays indifference toward the animals' well-being. 134
- On June 13, while performing health checks in Rm. 1165, LZ observed that there was no enrichment provided for six mice who were housed individually in this room. She placed a sheet of autoclaved paper towel in each cage. 135
- On June 15, while performing health checks with ______, LZ witnessed a mouse in one of the cages who was spinning in circles. She pointed the mouse out to who remarked, "He doesn't get tired of chasing his own tail." This mouse was individually confined and there was no enrichment of any kind in the cage.
- On June 17, LZ asked an animal technician named why most people don't place paper towels in the cages of rats and mice and was told that since there was no standard operating procedure (SOP) specifying that enrichment should be offered to rats and mice, "most people don't do it." The failure here extends, of course, beyond the individual technicians who fail to do the very minimum for the animals: by failing to implement an SOP in the animal care program to ensure that mice and rats receive minimal enrichment, the IACUC failed to implement an effective program to ensure the humane care of animals.
- On June 17, while helping feed rabbits, LZ observed that while some of the rabbits' cages included small "houses" in which they could hide, not all of the rabbits' cages included such houses. 138
- On June 27, LZ observed that five rabbits who were individually caged in Rm. A0224 didn't have any enrichment in their cages. She shared this information with together they found some Mason jar rings to put into the cages. 139
- On June 27, while helping feed a monkey in Rm. 1160, LZ observed that this cynomolgous monkey—who had "3003," "MF," and "3885" tattooed onto his chest—was housed alone in the room. The monkey had no contact—tactile, visual, auditory, or olfactory—with conspecifics. LZ was informed that 3003/MF/3885 did have a cage mate, but that individual had been killed after being used in an experiment. It would seem that poor planning on the part of the experimenter and negligence on the part of the IACUC, coupled with a culture of careless disregard, resulted in a situation where nothing was done to provide any sort of contact with conspecifics. ¹⁴⁰
- On June 28, while helping feed monkeys in Rm. 1170, LZ observed that two rhesus macaque monkeys—Frik and Frack—were caged individually. LZ observed that Frack would occasionally pace in his cage and would also act aggressively and thrash in his cage. A monkey named Fraggle swayed endlessly in his cage. LZ videotaped this behavior for six minutes. 141

¹³⁴ PETA investigator, daily notes, 4 June 2009. PETA investigator,

✓ video footage [file 6/4/09 (4)].

¹³⁵ PETA investigator, daily notes, 13 June 2009.

¹³⁶ PETA investigator, daily notes, 15 June 2009. PETA investigator,

✓ video footage [file 6/15/09 (2)].

¹³⁷ PETA investigator, daily notes, 17 June 2009.

¹³⁸ PETA investigator, daily notes, 17 June 2009.

¹³⁹ PETA investigator, daily notes, 27 June 2009.

¹⁴⁰ PETA investigator, daily notes, 27 June 2009. PETA investigator,

video footage [file 6/27/09 (1)].

¹⁴¹ PETA investigator, daily notes, 28 June 2009. PETA investigator,

✓ video footage [file 6/28/09 (3)].

- On July 5th, LZ again observed Frack circling in his cage and behaving aggressively. 142
- On July 19, LZ observed that four of the individually-confined dogs in Rm. 104 did not have a toy in their cage. 143
- On October 10, LZ noticed that three rabbits in Rm. A 0111 had no enrichment in their cages. 144

8. Failure to ensure safety of personnel

The *Guide* specifies that "an occupational health and safety program must be part of the overall animal care and use program," with a "focus on maintaining a safe and healthy workplace." On May 11, one of the autoclaves used to sterilize animal cages exploded at UU, resulting in injury to a maintenance worker named. At 6:30 am on May 11, had started the autoclave and turned his back when the device exploded. The explosion blew the door off of the autoclave and threw five to 10 feet. He was rushed to the ER. He had a large gash on his head, and needed stitches for multiple wounds on his body. 146

In a conversation with and and on May 26, LZ learned that the university needed to purchase a new autoclave for years, but faced with the daunting task of moving such a large piece of equipment, the university had put off the purchase—unconscionably placing their employees at substantially increased risk of occupational injury.¹⁴⁷

Conclusion

Based on the documentation compiled by PETA's investigator, there is reason to believe that the problems identified in this complaint are far from comprehensive and represent a larger issue of failed oversight and institutional noncompliance at the University of Utah. The very serious nature of these allegations warrants immediate investigation by the NIH. The actions of UU staff show a flagrant disregard for the law and for the animals for whom they are responsible. Noncompliance at UU appears to have become business as usual—a state of affairs that must not be allowed to continue.

We urge your office to treat this matter with gravity and respond swiftly to investigate and take appropriate action, including but not limited to, the following:

- Anyone found to be in violation of the *Guide* or other applicable laws, regulations, or policies, and those who authorized such violations, should be appropriately disciplined, up to and including dismissal. Those individuals who remain on staff should be prohibited from using or handling animals.
- Take immediate steps to ensure that gaps in adequate training and oversight of animal care and use at the University are addressed in a permanent manner.

¹⁴² PETA investigator, daily notes, 5 July 2009. PETA investigator, video footage [file 7/5/09 (2)].

¹⁴³ PETA investigator, daily notes, 19 July 2009.

¹⁴⁴ PETA investigator, daily notes, 10 October 2009

¹⁴⁵ NRC14.

¹⁴⁶ PETA investigator, daily notes, 11 May 2009.

¹⁴⁷ PETA investigator, daily notes, 26 May 2009. PETA investigator, 🚅 video footage [file 5/26/09 (1)].

• Revoke all active grants for which the grantees have failed to conduct an experiment in accordance with applicable guidelines and laws, and order repayment of funds used during the noncompliant period.

I look forward to hearing from you and am available to assist you in your investigation. I can be reached at (410) 889-1035 or alkac@peta.org.

Sincerely,

Alka Chandna, Ph.D.

Laboratory Oversight Specialist

Alka Cheda

Laboratory Investigations Department

Enclosures: PETA investigator's daily log notes regarding UU

Video footage of alleged noncompliances with the Guide at UU

Affidavit from undercover investigator