September 1, 2020

Betty J. Goldentyer, D.V.M. Deputy Administrator USDA-APHIS-Animal Care 4700 River Rd. Riverdale, MD 20737

Via e-mail: <u>Betty.J.Goldentyer@usda.gov</u>

Dear Dr. Goldentyer,

I am writing on behalf of People for the Ethical Treatment of Animals (PETA) and our more than 6.5 million members and supporters to request that the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) investigate a number of concerns related to the animal research program at the Washington National Primate Research Center (WaNPRC) at the University of Washington (UW; USDA Certificate No. 91-R-0001). I am submitting this complaint regarding the treatment and care of animals at WaNPRC, the lack of transparency and failure to immediately report primate welfare issues to the university's Institutional Animal Care and Use Committee (IACUC), and the lack of adequate oversight provided by the UW IACUC, due likely in part to the current composition of the UW IACUC.

The concerns summarized below are based on several sets of documents. Through the Freedom of Information Act, PETA has recently received the meeting minutes of WaNPRC's Senior Management Team for November and December of 2018. PETA is also in possession of the 2018 November and December meeting minutes from the UW IACUC as well as transcripts of the May and June 2020 UW IACUC meetings.

We believe that WaNPRC has consistently violated the federal Animal Welfare Act (AWA) and its implementing Animal Welfare Regulations (AWRs). The documentation shows that WaNPRC has:

1. Failed to handle animals in a way that does not cause trauma, behavioral stress, physical harm, or unnecessary discomfort [9 CFR § 2.38(f)(1)]

PEOPLE FOR THE ETHICAL TREATMENT OF ANIMALS

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- 2. Failed to ensure that personnel conducting procedures are qualified to perform their duties [9 CFR § 2.32(a)]
- 3. Failed to provide structurally sound housing for nonhuman primates [9 CFR §§ 3.80; 3.75(a)]

In addition, the information gathered by PETA seems to indicate that UW's IACUC failed to carry out its legally mandated responsibilities as specified in the AWRs. In particular, the UW IACUC:

- 1. Failed to make recommendations to the Institutional Official regarding any aspect of the research facility's animal program, facilities, or personnel training [9 C.F.R. §2.31(c)(5)]
- 2. Failed to ensure that personnel conducting procedures on the species being maintained or studied will be appropriately qualified and trained in those procedures [9 C.F.R. §2.31(d)(viii)]

Failure to handle animals humanely

Section 2.38(f)(1) of the AWRs states: "Handling of all animals shall be done as expeditiously and carefully as possible in a manner that does not cause trauma, overheating, excessive cooling, behavioral stress, physical harm, or unnecessary discomfort."

However, in late April 2020 a macaque at the WaNPRC Western facility was left in a trapping run for more than 24 hours without food or water. This incident was initially reported to the UW IACUC at the May 21, 2020 meeting¹. UW attending veterinarian, Kim Stocking, stated that an investigation revealed that both an animal technician and a veterinary technician had seen the macaque in the compound on **Saturday morning** when she received medication. On **Sunday afternoon**, a different animal technician and veterinary technician saw that the monkey was not in the compound. Neither of the technicians reported the monkey missing or contacted their supervisor(s). It was not until **Monday morning** that supervisors were notified and an effort was made to locate the monkey. The monkey was found confined in the trapping run with no water or food. The monkey was moderately dehydrated and required immediate treatment.

Following notification of this incident, the UW IACUC failed to recommend any corrective actions be directed at WaNPRC during their May, June or July 2020 meetings². Nor is there any indication that the UW IACUC brought this egregious example of training and leadership incompetence to the attention of the Institutional Official as would be expected under 9 C.F.R. §2.31(c)(5). The UW IACUC also failed to act on their responsibility to guarantee that WaNPRC personnel, when conducting even the *most basic* husbandry procedures of assuring that all animals are accounted for, are appropriately qualified and trained in those procedures [9 C.F.R. §2.31(d)(viii)].

¹ See attached May 21, 2020 UW IACUC meeting transcript, pp.11-17

² See attached June 18, 2020 UW IACUC meeting transcript pp.52-53 and July 16, 2020 UW IACUC meeting transcript pp. 91-95

Failure to ensure that personnel are qualified to perform their duties

Section 2.32(a) of the AWRs states: "It shall be the responsibility of the research facility to ensure that all scientists, research technicians, animal technicians, and other personnel involved in animal care, treatment, and use are qualified to perform their duties. This responsibility shall be fulfilled in part through the provision of training and instruction to those personnel."

However, the failure by the animal and veterinary technicians to alert their immediate supervisors when they were unable to locate the monkey referenced above suggests a lack of adequate training, specific operating procedures (SOP) and common sense. It is our understanding that basic husbandry protocols would require that the monkeys in this corral would have been observed and fed twice daily. There is no evidence to suggest that this monkey was observed and/or medicated by staff after Saturday morning.

Indeed, there appears to be a pattern of WaNPRC leadership failing to ensure that their staff are adequately trained to perform their duties as is evidenced by the notes from the November 15, 2018, WaNPRC Senior Management Team (SMT) meeting³. Sally Thompson-Iritani, former Director of the UW Office of Animal Welfare and current Associate Director of WaNPRC included the following updates in 11/15/2018 SMT meeting agenda:

"Update on AZ incident - animal down, human in surgery." "The other incident - Western had a tech doing a cage change out and one animal went to cage wash, but was found."

It is not clear from these notes the condition of the monkey who "went to the cage wash, but was found," but what seems obvious is that once again a lack of training, and/or compliance with SOPs resulted in workers failing to handle a vulnerable monkey in a competent and humane manner.

The reference in these SMT meeting notes to a monkey "down" and a "human in surgery" following an incident at the WaNPRC Arizona breeding facility is shocking. However, what is even more astonishing is that during the November 15, 2018, UW IACUC meetings⁴, neither of these incidents discussed by Sally Thompson-Iritani during the WaNPRC SMT meeting were reported to the full IACUC and there is no evidence that these incidents were reported to the Office of Laboratory Animal Welfare (OLAW) at the National Institutes of Health (NIH), as required. Nor is there any indication that the UW IACUC brought these egregious examples of training and leadership incompetence to the attention of the Institutional Official as would be expected under 9 C.F.R. $\S2.31(c)(5)$.

Failure to provide structurally sound housing for nonhuman primate

³ See November 15, 2018 WaNPRC Senior Management Team meeting agenda pp. 102-103

⁴ See November 15, 2018 UW IACUC meeting minutes pp. 104-110

Section 3.80(a)(2) of the AWRs states: "Primary enclosures must be constructed and maintained so that they ... [c]ontain the nonhuman primates securely and prevent accidental opening of the enclosure, including opening by the animal." However, PETA's review of the December 3, 2018, WaNPRC SMT meeting agenda⁵ revealed that WaNPRC's Associate Director, Sally Thompson-Iritani, discussed multiple incidents where monkeys had been found "out of cage":

Out of Cage Incidents - Ben/Sally

"There are currently six different styles of cages, it is not in the best interests of the staff and animals. There have been a number of "out of cage" incidents. Last week, there were a lot of incidents with the Seattle-style cages in the ARCF."

Once again, none of these "out of cage" incidents were disclosed during UW IACUC December 18, 2018, meeting⁶ and there is no evidence that these incidents were reported to OLAW.

Animal escapes and injuries appear to be rampant at the WaNPRC facilities in Seattle and Arizona. While some of these violations of [9 CFR §§ 3.80; 3.75(a)] have been reported to USDA/OLAW the attached documentation indicates that many other incidents have not been reported to the UW IACUC or to OLAW and that the UW IACUC consistently fails to hold WaNPRC leadership accountable for escapes that routinely cause significant injuries or death to the monkeys.

Indeed, since UW hasn't been cited and/or held responsible for these "out of cage" incidents-- including a recent January 2020 incident at the WaNPRC Arizona breeding facility where injuries occurred—the university appears to have taken a *laissez faire* attitude on the serious matter of "out of cage" incidents, jeopardizing the safety of monkeys and staff members.

UW's apparent contempt for animal welfare regulations appears to be amplified by Sally Thompson-Iritani who, in apparent conflict of interest, held both the position of Director of the UW Office of Animal Welfare and Associate Director of WaNPRC immediately prior to the 2018 incidents reported above. Dr. Thompson-Iritani was elevated by UW's Institutional Official, Dave Anderson, (himself a former director of WaNPRC), to the position of interim Director of WaNPRC in late 2019. This raises the very serious question of whether Dr. Thompson-Iritani has been inordinately "influenced" by her competing positions and intimate working relationship with WaNPRC and UW administration.

Moreover, and deeply concerning is the fact that the current composition of the UW IACUC is contrary to the NIH "<u>Guidance on Qualifications of IACUC Nonscientific and Nonaffiliated Members NOT-OD-15-109</u>"—guidance that mirrors requirements pertaining to IACUC composition in the AWA and its implementing regulations. The

⁵ See December 3, 2018 WaNPRC Senior Management Team meeting agenda pp. 111

⁶ See December 18, 2018 UW IACUC meeting minutes pp. 112-118

UW IACUC includes a voting member (J.B.)⁷, designated as "unaffiliated" though as recently as 2014 this individual served as a UW Biosafety Officer on the UW's Institutional Biosafety Committee⁸. As stated in NOT-OD-15-109 the 'unaffiliated' member should have no discernible ties or affiliations to the institution and "[r]eal or perceived conflicts of interest must be avoided to ensure the IACUC's and the institution's integrity. Appointment of an individual who is unambiguously unaffiliated is the most effective way to fulfill the intent of the Policy."

The UW IACUC has further undermined the intent of the Health Research Extension Act of 1985 with their appointment of the Ken Gordon (K.G.)⁹, executive director of the Northwest Association for Biomedical Research (NWABR), as a "nonscientific" member. NOT-OD-15-109 clearly states that the intent of PHS Policy is to have a diversity of perspectives in the membership of the committee with the expectation that the nonscientific member is an individual "with a naïve attitude with regard to science and scientific activities." Again, this reflects the intention of similar language in the AWA and its implementing regulations, a concordance that is strengthened by the initiatives taken toward agency harmonization to reduce regulatory burden. NWABR's mission is to promote biomedical research. We also note that several members of the UW IACUC serve as members of the NWABR board of directors, and that UW is a substantial donor to NWABR.

UW's Institutional Official, David Anderson, appointed these individuals who do not appear to meet the intent of the PHS Policy, The Guide, and the AWA to serve as the nonscientist and nonaffiliated members, and the UW IACUC chair, Jane Sullivan, routinely assigns these members to single-handedly conduct designated member review of research projects with the authority to approve, require modifications in (to secure approval) or request full committee review of research projects. All this appears to violate the letter and spirit of the AWA and its implementing regulations. We respectfully request that your agency's Animal Care (AC) and Investigative and Enforcement Services (IES) programs investigate the conduct of the IACUC, WaNPRC, its leadership, and its employees and take enforcement action against all appropriate parties.

I look forward to hearing from you and am available to assist in your investigation. I can be reached at 206-372-6190/907-855-1767 or LisaJE@peta.org.

Sincerely,

\$721.

Lisa Jones-Engel, PhD Senior Science Advisor, Primate Experimentation Laboratory Investigations Department

⁷ See attached UW IACUC roster Feb 21, 2020 pg. 119

⁸ See the highlighted portions of the October 15, 2014 meeting minutes from the UW Institutional Biosafety Committee meeting pp. 120-128

⁹ See attached UW IACUC roster Feb 21, 2020 pg.119

1	UNIVERSITY OF WASHINGTON
2	INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC)
3	MONTHLY MEETING
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5	Verbatim Transcript of Proceedings
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7	Via Zoom
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22	DATE: May 21, 2020
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1	Seattle, Washington Thursday, May 21, 2020
2	2:31 p.m.
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4	JANE SULLIVAN: Okay. I'm going to call the meeting to order. I see we have a quorum. And it
5	looks like all of our members have audio and video feed. So I'll just ask if anybody if any voting
6	member is only calling in on the phone, can you please unmute yourself know and let me know.
7	Okay. I'm going to assume that we're all going to be able to follow the same instructions that
8	we had last time. So for any votes, I'll ask members to unmute themselves and both call out your vote while
9 10	physically raising your hand so it can be seen in the video feed. And if you're feeling like you want an extra challenge, you can also hit the "raise hand"
11	icon. Don't use the "yes" or "no" vote options.
	And I also want to say, again, we do plan to let members of the public make the usual two-minute
12	statements at the end. But just in case there is some kind of a problem that we run into and you're not able
13	to give them to us now live, you can submit written comments to me, Jane Sullivan, University of
14	Washington, PO Box 357290, and that's Seattle, Washington 98195.
15	So I just have one more announcement before we begin the meeting. It's bittersweet. This is going
16	to be Laurie Istvan's last IACUC meeting. He will be retiring in mid June. That's certainly well deserved,
17	but we will really miss him. So thank you, Laurie, so much for everything you've done.
18	With that, we will move on to last month's minutes, and I hope all of you had a chance to look
19	those over and send any corrections or suggestions in. If you did not, now is the time to let me know that you
20	have any changes to make to the minutes. Does anybody have anything?
21	Okay. I will make the motion, then, to approve the April minutes as written. Can I get a
22	second on that? BOARD MEMBER: Second.
23	JANE SULLIVAN: Thank you. All in favor of so unmute, and all in favor, please say "aye."
24	BOARD MEMBERS: Aye. JANE SULLIVAN: Okay. I got nine on that.
25	Any nos? Any abstaining? Okay. Thank you very much. With that, we can move on to the director's

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KIM STOCKING: Okay. So I will start out, as I generally like to, about adoptions. In the last month, we adopted out four gerbils, two of which went to one of the folks in my office. So they went to good homes.

As Jane just mentioned, the OAW assistant director is retiring, and there is a new assistant director. His name is Bob Ennis, and he will be starting on June 1st. So welcome to Bob.

6 So IACUC meeting metrics. I encourage you to see the meeting documents for those metrics. In 7 looking at those metrics, I think it speaks really well of the OAW office as well as all of you on the committee in that looking at the time to review an 8 approval of amendments, triannuals, and new protocols, 9 we're actually about the same amount of time, maybe even a little bit shorter time frame. So you guys have 10 really been jumping on, doing your reviews, and that is greatly appreciated because I know these are 11 challenging times.

So one facility issue to report. There were three ARCF rooms with various lighting problems in the last month, and these were all resolved within one hour. Two of the three rooms did not have any mice in them at the time the problem was noted, and there were no animal welfare issues associated with it.

On to protocol monitoring. There are 21 15 total protocols that are on monitoring. Still, because of coronavirus impacts, there's very minimal work being 16 done on most of these protocols at this time.

I did want to let the committee know that work on Protocol 2225-06, which is an NHP cardiomyocyte graphs in heart disease model, is being moved to a different protocol under a different PI but will still be remaining on that monitoring. And that protocol number, if people are interested, is 4486-02.

So on to follow-up of two previously reported 20 adverse effects. The first one is a follow-up on that ARCF NHP escapee adverse event that I reported on last 21 month. The male escapee is still being kept separate from his social partner while reenforcement of the 22 connection between the two cages is being finalized. Once the caging is finished and it's shown that he 23 should not be able to break the locks and everything on that and break the connections and escape out into the 24 room, behavioral management services will work on reintroducing the male NHP to his social partner.

> The next follow-up is a PI response to letter of counsel that was sent to him in response to last

the PI's response is "As indicated in the letter," the 2 letter of counsel that we sent, "the lab believes these rats were given too high a dose of parasites due to 3 human error. Parasites used for infection must be prepared fresh, and therefore, the lab cannot establish 4 a laboratory stock of validated inocula. These parasites are quantified by direct visualization and 5 counting under a microscope, and therefore, no additional measures can be implemented to ensure proper 6 dosing. "The PI reviewed with the lab member involved 7 the procedures for quantification and inoculum preparation as well as monitoring requirements detailed in the protocol. The PI will discuss this case with 8 all members, with all lab members, at their next lab 9 meeting to remind everyone of the proper procedures." So would the IACUC like to make any other additional requirements, or are we satisfied with the 10 PI's response? 11 JANE SULLIVAN: It seems appropriate. I'm not hearing anyone KIM STOCKING: Okay. 12 else chiming in. So we will let the PI know that the IACUC deems the response appropriate, and we will also 13 follow up with our official letter to OLAW. So next, I move on to adverse events. The first one involves the ABSL-3 facility, and one cage of 14 five mice was not properly docked in the housing rack 15 after a husbandry staff member changed water bottles in all the cages. As a result, air flow was not reestablished when the cage was returned to the rack, 16 and all of the animals died. So in this particular setup, because it is a 17 BSL-3 agent that they were working with, these cages are completely sealed. There's no filter top or other 18 way for them to get air, unfortunately, except when they're engaged in the rack. So unfortunately, all the 19 animals in that one particular cage died. 20 Corrective actions. Moving forward, the ABSL-3 facility is requiring, barring extenuating circumstances, that two people will work in tandem 21 during prescheduled routine water bottle changes, 22 similar to what's already required for prescheduled routine cage changes. Both individuals will be 23 responsible for ensuring that cages are appropriately docked in the rack. The ABSL-3 facility will continue 24 with the standard process of visually confirming that individual cages that have been removed from the rack 25 have been correctly docked. So they will visually confirm that every time. The responsible individual

month's meeting, and this is on Protocol 4390-01.

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had been retrained by both an ABSL-3 facility director 1 and the facility manager, and this was reported to 2 OLAW. BOARD MEMBER: Kim, how many animals were in 3 the cage that died? KIM STOCKING: Five. Any other questions? 4 Comments? BOARD MEMBER: Did you say it was 5 self-reported? KIM STOCKING: The ABSL-3 facility manager 6 did report it to me as soon as she --BOARD MEMBER: Came in and saw it? 7 KIM STOCKING: Yeah. Okay. So the next adverse event, this one was self-reported, and it involves Protocol 4187-02. 8 Three rats had spinal injury surgery on the same day. 9 Two rats died during surgery, and one rat was found dead the day after surgery. After surgery, the group realized the rats had received an overdose of xylazine, 10 and xylazine is one of two components that goes into an 11 injectable anesthetic mix. These animals were anesthetized with a 12 recently acquired bottle of xylazine which was at a higher concentration than normally used. So this group was shipped by the vendor a different concentration of 13 this particular drug, and they did not realize it at the time, that the concentration was incorrect. 14 So corrective action. The lab has 15 implemented a policy of triple-checking the concentration of drug stock bottles: once when it's received, once when the bottle is brought from in 16 reserve to active status, and every time the drug is drawn from a bottle to make a dilution of the 17 ketamine-xylazine anesthesia. The group had also added the potential use of a reversal agent to their recently 18 approved triannual. So if they were to notice an issue with a rat being slow to recover, they could 19 potentially give a reversal agent, which may have 20 helped in this situation. And this has been reported to OLAW. 21 And for this particular group, again, it was self-reported. They don't have a history of having 22 adverse events or noncompliances, so I would move to recommend a letter of acknowledgment. 23 BOARD MEMBER: Second. JANE SULLIVAN: Anybody have any comments or 24 questions before we vote? Okay. Let's unmute ourselves, and all in favor, say "aye" and raise your 25 hand. BOARD MEMBERS: Aye.

JANE SULLIVAN: Okay. I got 16, just in case 1 somebody else is counting there. Any against? And any 2 abstains? Okay. Thank you. KIM STOCKING: All right. Then the next one 3 involves an adverse event at the Western facility. In this instance, one nonhuman primate was left in a 4 trapping run for at least 12 hours without access to food or water. She was found to be moderately 5 dehydrated and received immediate treatment and recovered by the next day. 6 So a trapping run is kind of a space back behind the compound at the Western facility where they 7 can kind of run those animals and separate them away from the compound, like when they need to separate out an animal or if they're cleaning the compounds or 8 whatever. And it's kind of back behind this wall, so 9 you really can't see from the compound who's in the trapping run, just to give you a little bit of context about it. 10 So an investigation revealed that both an 11 animal technician and a vet tech had seen her in the compound on Saturday morning when she received 12 medication. On Sunday afternoon, a different animal tech and vet tech saw that she was not in the compound 13 and looked in the trapping run but did not find her. She was found in the trapping run the next morning. There was no reason to move her into the trapping run 14 on either Saturday or Sunday, and no one admitted to 15 doing so. The doors from the compound into the trapping run are hydraulic doors whose controls are not accessible to the animals, so there's no way they could 16 have accidentally gotten themselves into that location. 17 So for corrective action, water bottles will be added to those runs so animals will always have access to water when they're in that location. 18 Otherwise, HR is handling any possible personnel performance issues related to this event, and this has 19 been reported to USDA and to OLAW. JANE SULLIVAN: I know these situations where 20 there's just no way to easily determine who's responsible are especially frustrating, but I do 21 appreciate that in this case, you know, the decision 22 was made to take action to add those water bottles. Of course, we would hope that we can eventually work out a 23 system that would prevent this from ever happening, but it seems as if the water bottle is the best way to ensure the least amount of distress to an animal who 24 does end up being inadvertently trapped in the trapping 25 run. BOARD MEMBER: And also, just for comment,



could be helpful here to really prod the most possible action in this case. MICHELLE: I have a feeling that since they know this can happen, this won't happen again. PRESTON VAN HOOSER: And I totally agree with you, Jane, and I agree with you, Michelle, but I also feel like -- I don't know. I feel like -- I know, the letter, who do you send it to? The PRC in general? But kind of back to the earlier adverse event with the BSL-3 mishap with the cage of five mice, I mean, I feel like as an IACUC -- I mean, I just think, for the record, I mean, these things bother me. I go home the rest of the day, and I think about it, and I kind of wish I would have spoken up a little bit about it. You know, these things may happen, and they're unfortunate. But I just feel like as an IACUC, do we want to -- and this is just an open question. Do we need to, as a matter of record, just acknowledge that, yeah, this is really unfortunate and we don't want it to happen again and leave it at that? I don't know. These are the things that are hard to fall asleep at night when you go home after these meetings and you have an adverse event and we don't send a letter in some cases. So I don't know how people feel, but I've had some trouble over the past, you know, year or two when I've thought about these things at night. I just feel like I understand the "who do you send it to?" But at the same time, you know, we are the IACUC, and I feel like they need to understand that we don't want that happening, and they need to make sure they follow that action plan and reiterate that they will in writing. Just a general comment. JANE SULLIVAN: No. I think we all do understand this, but I guess the thing that I come back to is so who would you send that letter to? PRESTON VAN HOOSER: I guess, for me, in the case of situations like this, when it's a facility issue, probably the director of that department and/or the chair. Or maybe in the BSL-3 case with the mice, maybe -- I guess that's a DCM, so maybe the chair and that facility supervisor. So I guess director or chair level. JANE SULLIVAN: What do other people -- and actually, I want to take a step back. Right now, we're only dealing with this primate center issue. I don't want to -- Preston, if you feel strongly, we can go back to vote on the mice that we just moved on from, but for now, I'll just open this up and ask what other

members think.

What do you want to do as a committee? Is this conversation documented in the minutes sufficient to, you know, register our significant concern, or would you guys like to see a letter going out probably to the director of the primate center?

BOARD MEMBER: What about a letter to the individuals that were involved?

JANE SULLIVAN: But we don't know yet. BOARD MEMBER: Well, we know who was

involved, but no one's admitting to it, right? JANE SULLIVAN: Yeah. And that's the HR part of it. Until we know what's happening, we can't be sending letters to people just because their names were on the roster at the time this happened.

BOARD MEMBER: I'm kind of of the opinion that sending a letter doesn't change what's happening, and I think the people involved are, you know -- I'm confident that appropriate actions are being taken. So not sending a letter doesn't mean that we aren't concerned. It's just, you know, I have confidence that people are doing what needs to be done to follow up.

KEN GORDON: So, Jane, I'm wondering about sending a letter to the director because I think it was the director that reported this but also including in that letter just a mention where they could look at systems that would encourage staff to report, because we want to know so we can learn, not because it's a punitive thing.

PRESTON VAN HOOSER: Yeah. That's really well said, Ken. I think that's where I was trying to go. It concerns me that someone doesn't want to speak up, because why? They're afraid of getting in trouble. So, Ken, I think you spoke that very clearly. I think that's a really important part of this for consideration.

JANE SULLIVAN: I'm actually confused because I don't know what Ken is referring to in the incident here. So, Ken, could you maybe --

KEN GORDON: So I'm guessing, like as Preston said, you know, one or both of these staff members maybe did something wrong, and they're not owning up to the error that they made or the oversight that happened. And they're not doing that maybe because they're concerned there might be some sort of punitive action on behalf of IACUC or the university, and we don't want to encourage that kind of system. We want to encourage a system where people self-report and they figure out what went wrong and they work with us to make sure it doesn't happen again in the future.

And so really what I'm wondering about is just letting the director know. Could she do things to encourage that kind of self-reporting and really support the staff to self-report?

JANE SULLIVAN: Charlotte, do you have any sense of -- my understanding, I don't necessarily have a reason to think that -- I just don't feel like we know enough. Maybe we need to find out more before we write a letter, but I think we're assuming. And I don't think it's crazy, but I think we're assuming that one of the four individuals who was around at different times on Saturday or Sunday, one or more of them must have been involved, but I actually don't think we know that. I mean, it's possible that somebody else who isn't even on our radar somehow was involved.

I mean, that's what I hate about these situations, where, you know, you know something bad has happened, and we want to figure out how to prevent it from ever happening again, and that means we have to know why it happened and how it happened. But I'm worrying that the line of reasoning that I'm just hearing assumes that one of those individuals on Saturday or Sunday must have been one of the ones responsible, and all I'm saying is it's my understanding.

CHARLOTTE HOTCHKISS: There's two things that happened. Somebody ran the monkey in the trapping run. We don't know who. We know who was assigned to work in that area on Saturday and Sunday. We don't know who or why the monkey was run. And it would be nice if that person would step up, but by the time this blew up, they knew they'd get in trouble. And it would be nice if they admit it.

But there's the other problem, was the people who found out she was missing on Sunday, and, I mean, I don't think they were trying to hide anything. I think they were thinking they must have just read the census wrong; she must have got moved and it wasn't noted. But they didn't notify somebody. And we know who they are because we know who was in there then, who was looking for the monkey, because they did mention it Monday morning when I got in. So there's two issues going on.

Again, I'm not sure what to put in a letter because there's information we don't have, and I don't think we'll ever get. In other words, I'm the one who likes to have everything documented to refer back to it, so I would be in favor of a letter that's probably coming to me to answer. So if you vote on a letter, I'm abstaining from the vote, for sure, but, yeah, I

mean, it would be just for documentation. I don't think it would cause us to take any additional actions because we're taking all the actions we can think of based on what we know, which isn't everything. DAVID MACK: I just want to acknowledge the sentiment of what Ken was saying, that in these instances where the letter -- it might not be appropriate for the letter to be somewhat punitive, but we take the opportunity to encourage people to operate in the way we want them to in the openness and self-reporting. I just want to put it out there that I really agree with that idea, and I don't think it necessarily -- I don't know if it makes me want to vote one way or the other, but I really like the idea that we take the opportunity to encourage all parties at all levels, supervisory or the individual care staff, that punishment is not our main objective. It's to be open and help us figure out what went wrong and how we fix it. RIC ROBINSON: Charlotte, are you pretty sure that we're unlikely to find out who did this? CHARLOTTE HOTCHKISS: Unless they admit it. I mean, we have suspicions because it's key card access into this facility, but we didn't figure out why, and we can't prove anything. So I don't think -- I don't think we're going to find out more than we know now. RIC ROBINSON: Well, if we were going to find out, I would say it's worth waiting a little bit just to nail this down. But if it looks like it's going nowhere, that's not going to work. CHARLOTTE HOTCHKISS: Yeah. I mean, unless there's some change. This happened a month ago, and we investigated as thoroughly as we could, but it stalled out a couple of weeks ago. JANE SULLIVAN: You know, I certainly hear you guys on the whole promoting self-reporting, and I do -- I think that this is already something this is very much a part of our culture and something that is promoted by our AV and by Sally. And so I think that that is -- that message is getting across, but I think it certainly doesn't hurt to emphasize that. I just don't quite know in this case how we could draft that letter in a way that would emphasize that message for people who are working with the animals. In other words, you know, we would ordinarily send this to the director of the primate center, but that person isn't the one that we need to convince on self-reporting. Anybody have any ideas for how to get that message from the IACUC?

STEVE LIBBY: Do we have to do it this month? I mean, it sounds like if more information -- once there's more information, we could do it later. JANE SULLIVAN: Okay. Do people feel like that would be -- so we'll table it until next month and revisit what action we might want to take then,

especially if there's an update on the situation or from HR that they can share. Okay. Thank you, everybody. I think that was a helpful conversation.

KIM STOCKING: Okay. There were no

noncompliances to report, and that's all from here. So, Arizona?

CAROLYN: Hi, everybody. Nothing to report from Arizona.

JANE SULLIVAN: Woo-hoo. Thank you.

So, Kim, back to you for the adhesion rating scale and nonhuman primates.

KIM STOCKING: Okay. I'm going to put both of the -- well, we're start with the adhesion one, but both of them, what I'm going to say applies to both policies. So it's just the normal sort of looking at our policies and seeing if we need to make any revisions to the adhesion grading policy, grading scale policy. No revisions were made by the vet staff. The only thing that's different here is we put it into a slightly different format.

So any comments, questions?

JANE SULLIVAN: I'd just like to mention that I am especially pleased with this committee's development of this policy. It was one of the first things that we worked on after I came on as chair, and the goal here is to allow us to determine on an animal-by-animal basis how well the monkeys are tolerating biopsies that require access to the abdominal cavity. And we know from humans that when you go inside the abdomen, you can create what are called adhesions. My understanding, it's kind of like scar tissue, and it can be quite painful, but there's no way to predict which humans or animals are going to respond in this way.

And so, you know, one of the hardest things I think we have to decide as a committee is often how many is too many when it comes to something like biopsies, and it can be very hard. You know, is 12 too many? Is 16 too many? You know, how do we know?

And this adhesion policy allows us to -- you know, every time an animal is opened up for a biopsy, before anything happens, the extent of adhesions is monitored. And if that particular animal had tolerated previous biopsies very badly, has a lot of adhesions,

1 that animal is closed up. Nothing more happens to that animal. If that animal is doing just fine, then things 2 proceed. And then there is some other alternatives if it's somewhere in between. 3 And the key thing is this allows us to minimize the number of animals that are required for a 4 study because it means that we can get as much information from one animal as that animal's body can, 5 you know, tolerate without undue distress. And so it's this policy that allows us to make those judgments for 6 animals on protocols. So anyway, that's what this does, and I'm really proud of it because it allows us 7 to really take into account both the welfare of the animals, not putting them through undue distress, not using too many of them, and allowing the research to 8 move forward. So that's what this policy does, and I'm 9 really glad we have it. So we do need to vote. I'll make a motion 10 that we approve this policy as written. Can I get a second? 11 BOARD MEMBER: Second. JANE SULLIVAN: And any comments or questions 12 about the policy? Okay. Unmute, and let's vote. All in favor, say "aye" and raise your hand. 13 BOARD MEMBERS: Aye. Okay. JANE SULLIVAN: I got 16 there. And any opposed? Any abstaining? Okay. Thank you. 14 KIM STOCKING: Okay. And then the second 15 policy that was due for its three-year looking-at again is the prolonged physical restraint policy. This policy just defines what is prolonged restraint and the 16 criteria around that and monitoring and those kind of things. So no changes were made to this policy either 17 or no recommended changes were made to this policy. 18 So were there any questions, comments about this policy? Just format changes on this one as well. 19 JANE SULLIVAN: Okay. I'll move to approve the policy as written. 20 BOARD MEMBER: Second. JANE SULLIVAN: Thank you. All in favor, say "ave." 21 BOARD MEMBERS: Aye. 22 JANE SULLIVAN: Any opposed? Any abstaining? Oh, I'm sorry. Did I hear an opposed? Okay. Any 23 abstaining? Thank you. Sorry. I inadvertently muted myself. 24 Charlotte, we are up to the drug formulary. CHARLOTTE HOTCHKISS: Okay. If you have been around for a while, you know that we keep a formulary, 25 and we ask that it get approved when we add new drugs

1 because we use this as a standard for what we are allowed to add to protocols by the VVC process. And 2 most other species, they use published formularies, but there aren't many drugs published for primates. So we 3 keep this, and whenever we add anything, we bring it back to the IACUC to approve. 4 This time, we've added a new nonsteroidal antiinflammatory, robenacoxib, which is also known as 5 Onsior, and also a different formulation of magnesium oxide for supplementation when needed. And that's all It's just adding two drugs. 6 this is. JANE SULLIVAN: Any questions? Okay. I vote 7 to approve as written. RIC ROBINSON: I second. 8 JANE SULLIVAN: Okay. Everybody unmute, and all in favor, say "aye" and raise your hand. 9 BOARD MEMBERS: Aye. JANE SULLIVAN: Any opposed? Any abstaining? 10 Thank you. On to L-shaped housing variance. 11 CHARLOTTE HOTCHKISS: Okay. Some of you who were around last September may remember we asked for a 12 housing variance for a very specific pair of animals to connect two smaller cages together but then to add, 13 open up the panel between the upper and lower cages. So you had one side that is very tall and one side that is four inches shorter than what's required by the 14 regulations, but they have more floor space than they 15 need. And a very similar situation came up where we wanted to keep an animal in a certain style of caging for experimental reasons, but the animal needed more 16 floor space. So it came to another situation where we 17 wanted an L-shaped configuration, but it didn't fit exactly what we had approved before. So this is 18 supposed to be a generalized version of allowing one of these L-shaped if the height isn't high enough for the 19 required floor space, but we'll always make sure we 20 have more than enough floor space for what's required for the number of animals in the cage, and at least 21 half of it will be this double height. And so I hope you've had a chance to look at 22 the way it's written and it makes sense, but it's going along with the -- the regulations say that "Innovative 23 primate enclosures not precisely meeting the floor area and height requirements but do provide nonhuman 24 primates with sufficient volume of space and opportunity to express species-typical behavior may be 25 used when approved by the committee." So we're asking for approval from the committee for these general

1 L-shaped enclosures. So any questions? Okay. Well, then, I 2 guess, can I move that we approve this housing variance? 3 JANE SULLIVAN: I second. Okay. Everybody, unmute yourself and say "aye" and raise your hand if 4 you approve. BOARD MEMBERS: Aye. 5 JANE SULLIVAN: Okay. Any opposed? Any abstaining? Okay. Thank you very much. 6 Kim, any COVID-19 updates for us? KIM STOCKING: Oh, you betcha. 7 So just to let the committee know what's been kind of happening in the last month related to the 8 Animal Care and Use program as well as the Office of Animal Welfare. So animal care and veterinary staff 9 has continued to be adequate, and no modifications to husbandry practices have been necessary. So kudos to the animal care staff and the vet staff for, you know, 10 really continuing to step up and do a fantastic job taking care of our animals. And we have not -- unlike 11 some institutions I've heard where they, you know, had 12 to sort of ramp down activities there, we have managed to stay fully staffed the entire time. So thank you to 13 all of those folks who take care of those animals on a daily basis. In the vivarium, face coverings are required 14 in all animal facilities, and maximum-capacity signage 15 is posted in all housing and procedure rooms in order to maintain that six-foot physical distance whenever 16 possible. The animal use training program has resumed rodent hands-on training and facility orientations but 17 with a limited capacity as all sessions are now one-on-one in order to maintain a six-foot physical 18 distance as much as possible -- because in some cases, 19 they can't; they have to be up close to each other -and with appropriate PPE when they can't be at that 20 six-foot physical distance in order to limit potential exposure. And we are currently working through the waitlisted requests, because we had a number of 21 requests that we put on hold for training back in March 22 and April, and we're now working through those. Scheduling of surgery training and surgery 23 certification has resumed, and instruction in those classes can begin as early as next week. So we really 24 haven't been doing any surgery training, again because we can't maintain that six-foot physical distance when we're doing that training. 25 So in terms of semiannual inspections, in

1 May, we have been able to inspect some additional procedural lab spaces, and these are spaces where 2 there's lab personnel available to actually let us into those spaces, and they're actually doing animal work 3 currently. So I looked at some spaces yesterday. I'm going to look at some additional ones tomorrow, and 4 after that, after Friday, there will only be eight uninspected lab spaces left that we did not catch this 5 cycle. But all of these lab spaces are not currently in use, and those labs will be inspected once those 6 areas are back in use.

So any questions about those updates or just general questions about how things have been going for the last couple of months? Okay.

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8 So lastly, I just wanted to let the committee know that like most of the units around here, the 9 Office of Animal Welfare has a return-to-work Phase 1 plan, and my suspicion is that this Phase 1 plan will 10 also go into Phase 2, Phase 3. But in our plan, I did include some information related to IACUC functions, so 11 I wanted to let you know what those are.

So OAW reviewers and liaisons will continue to work remotely for the foreseeable future. And as I indicated earlier, I think they're doing a fantastic job staying up on all of that and really working well with our PIs and expediting things appropriately, especially anything that's coronavirus-related.

Most IACUC functions, including review and approval of animal-use protocols by designated member review as well as the monthly IACUC meetings, including public participation, will continue to be carried out remotely. So I see this continuing. Our Zoom, you know, Brady Bunch thing here will be continuing for the foreseeable future.

18 Review of animal-use spaces will continue. Site visits of new research space and of existing 19 animal-use spaces will be done in person. At some point, you know, we might want to consider maybe doing 20 video inspections, but that kind of poses some challenges. So the plan is to continue to do these in 21 person, but as part of that, we will use a minimum number of site visitors when we do these inspections, 22 although no IACUC member may be denied participation. So if you want to participate, feel free.

IACUC members will be asked to volunteer for site visits. It is anticipated that IACUC members
already on campus for other reasons will mostly be used, but again, if you want to participate, feel free.
Proper distancing and room occupancy will be maintained at all times during these site visits. Appropriate PPE

1 will be worn and hygiene practices followed. Vivarium site visits will be coordinated with 2 DCM and primate center facility managers. Lab space visits will be coordinated with the PI or the lab 3 manager to ensure lab member availability because they have to let us into those spaces. And as I indicated 4 previously, inactive labs may have their visits delayed beyond the usual six-month requirement if they're not actively doing any animal work, but they will need to 5 be reinspected prior to working with animals again in that space. 6 So any questions about how we're kind of 7 proceeding moving forward? Okay. That's what I have. JANE SULLIVAN: Thank you, Kim. 8 And finally, Laurie is going to launch our semiannual program review. 9 LAURIE ISTVAN: Yeah. Thanks, Jane. It is that time of the year again. So in conversation with Jane, we decided we 10 were just going to do a reprise of what we did six months ago, actually keep the same groups together to 11 review the same sections of the overall program. As 12 before, I'll be sending out an email with those assignments to the groups. And, Carolyn, you're new to 13 this. You'll be assigned to one of the groups to review one of the -- some block of sections with the 14 OLAW checklist. Again, if you have any information that you 15 feel you need or cannot find that you'd like me to round up for you, let me know sometime in the next couple of weeks. We will get that to you. I'm already 16 reviewing what you asked for last time, making sure you have that available to you as we start off on this. 17 And then I would ask you, for each of the 18 groups, the members to put together a summary that you get prepared to bring back to next month's IACUC 19 meeting and share with the group as a whole and start the conversation about how you think the overall 20 program is going. And then using those notes, we'll develop them into any set of recommendations that you 21 want to make to the IO, to yourself, and your overall view of how the program is proceeding. We'll put that 22 into the semi-annual report to the IO that you'll end up reviewing and approving in July. 23 And again, as Jane pointed out, I will be retiring here in another three weeks. So I will be 24 copying my successor on all of these emails. And to the extent that I'm still around, I'll do the 25 communication, but at some point after June 15th, he will take over just in time for the next IACUC meeting.

1 So any guestions? Again, thank you all for your work on it. Again, hopefully it will be fairly 2 easy. I don't think we've had any major changes to the program in the last six months, but one thing I want 3 you to particularly pay attention to this time is, you know, how has the program gotten through the COVID 4 restrictions, anything you think has worked well, anything you think could work better. This would be 5 the time to bring that to the fore and make sure that we document it. 6 Okay. I'll be getting those emails out to you, if not today, tomorrow sometime. 7 JANE SULLIVAN: Thank you so much, Laurie. And I'll mention, when Laurie and I were 8 talking, we certainly see the value of mixing things up, having different sets of eyes looking at the 9 different sections. But we did think that in the -you know, with the challenges of the COVID pandemic, it made sense to retain the previous group assignments for 10 the different sections. But you will not be forever 11 stuck with just that one group. We'll mix it up in the future, but just to keep things a little bit simpler 12 this time around, we thought we'd keep the same group assignments. So many excellent animals. I do love that 13 about the Zoom meetings. We get to see your homes and 14 your pets. Does anybody have anything that they want to 15 say before I close the meeting? PRESTON VAN HOOSER: Jane, I just want to take a minute in case the committee members weren't 16 aware, as Ken mentioned earlier, during this kind of unprecedented time how much we appreciate our animal 17 care staff and our vet staff. I just wanted to share with the committee, in case you weren't aware, we 18 actually had an appreciation lunch for them today. 19 And there's a program here, Compassion in Science at UW. There's 10 to 12 members that kind of got that going. When we heard that the animal care 20 staff were coming to work every day and were actually 21 having to eat via social distancing, that kind of stuck with me for about a month. And long story short, we 22 reached out to some restaurants in the Seattle area looking for a donation or a volume discount for pizza 23 or lunches to provide to these essential workers, and we actually had a restaurant step up and donate close 24 to \$2,000 in lunches today. And I spent from about 11:00 to 12:30 with a couple other members distributing 25 those lunches.

And, Carolyn, I can't recall if you were

1 doing the appreciation lunch today out in Arizona. Ι think you were. 2 CAROLYN MALINOWSKI: We did, yeah. PRESTON VAN HOOSER: She coordinated that. 3 We couldn't get the Seattle box lunches from Seattle to Arizona, so she graciously coordinated that for all of her animal care staff and vet staff in Arizona as well. 4 And thanks to the PRC for using some funds that weren't 5 used for AT week because of the COVID to provide those lunches. 6 But I just want to let you all know I'm putting together a video of all the pictures we took at 7 distribution following physical distancing as well as from these ATs and vets that were eating these lunches today six feet apart. I'll put that all together and 8 share it with you guys next month, but right now my 9 inbox is getting blown up by just how appreciative these animal care techs and vet staff were of the IACUC/OAW/HSA/PRC/DCM leadership. So anyway, I just 10 wanted to let you know what happened today. It was 11 very successful. JANE SULLIVAN: Thank you. 12 CHARLOTTE HOTCHKISS: I want to let you know I will definitely eat at that restaurant. That was 13 fabulous food. PRESTON VAN HOOSER: Yeah. If you don't 14 mind, I will plug the restaurant. It's the London Plane in Pioneer Square, and really, they just stepped 15 up to the plate and wanted to support biomedical research and these essential workers that often don't 16 get recognized. We also have another restaurant in the area that's also sponsored 100 lunches for another one, and I'm working with Kim right now just to kind of see 17 how we might want to do that. I would really like to provide each of you a 18 lunch. I'd like to provide our trainers a lunch. I'd like to provide the weekend shift and the night crew a 19 lunch. But with coordinating something like this 20 following the physical distancing, it is somewhat challenging. So just stay tuned, but I really, really just want you all to know as IACUC members that these 21 folks were appreciated really well today. 22 JANE SULLIVAN: They're heroes in my book. Ι mean, it's just amazing that we have not had to, you 23 know, go to any of our more serious emergency plans because we've been able to stay staffed and assure that 24 all of our animals can continue to receive the care that they deserve. So kudos to them, and thank you, 25 Preston, so much for coordinating that. It's so important that we express our thanks.

1 Any other comments? KEN GORDON: Jane, I just want to do a 2 thank-you to Laurie for all the support that he's provided over the years, both to me in this role in 3 this committee but also as a presenter about facility reviews at our annual IACUC conference. And he's going 4 to leave very big shoes to fill. JANE SULLIVAN: He sure will. 5 PRESTON VAN HOOSER: Yeah. Thank you, Laurie. 6 BOARD MEMBER: Thanks, Laurie. You do a great job, buddy. 7 LAURIE ISTVAN: I appreciate it. It's been an honor to work with all of you for the last 8 seven-plus years. I'm going to miss it. JANE SULLIVAN: We will miss you. 9 STEVE LIBBY: Laurie, you're not going to miss my phone calls, are you? LAURIE ISTVAN: No, because they probably 10 won't stop anyway. 11 JANE SULLIVAN: Okay. With that, I will call the meeting to a close, and I will ask if any members 12 of the public who are online could please unmute themselves. You can share your video if you'd like, 13 and I will give you two minutes to make a statement. PUBLIC COMMENT: Hi, there. Can you hear me 14 okay? JANE SULLIVAN: Yes, we can. 15 PUBLIC COMMENT: Okay. I wanted to make a comment about the situation at the Western facility, about the nonhuman primate that was trapped in the 16 There was a lot of discussion here and a trapping run. lot of people not knowing who to hold accountable, but 17 certainly that facility has somebody ultimately in charge. I've been in positions of leadership in my 18 occupation my entire career, and if somebody that I 19 supervise makes a mistake, it is my responsibility, and the same would go here. 20 It doesn't matter which individual low-level person had an oversight. What matters is that the training and supervision in that facility is 21 substandard to the point that you can lose a monkey for 22 That's the problem. The person ultimately days. accountable, whether it's Charlotte or whoever, that's 23 the person not doing their job, and that's the person who needs to be reprimanded for this. Until the 24 leadership at the top is held accountable, it doesn't matter how many people you retrain in those low-level 25 positions if they're not answering to somebody who's making sure they're doing their job.

1 I wanted to say thank you to Preston. This is the first time in any of these meetings I've seen 2 anyone express any compassion or concern about what's happening to these animals, and you're the first person 3 I've seen even vocalize that you want to find a solution and hold people accountable. Every single 4 time Kim brings up an adverse event, she makes the excuse that "It's the first time it's happened" and "I think they've learned their lesson," and she always 5 wants to brush it over. Thank you, Preston, for doing 6 your job of trying to have oversight in holding these facilities accountable. Thank you. 7 JANE SULLIVAN: Thank you. Is there anyone else who would like to make a statement? PUBLIC COMMENT: Yes. 8 I would just like to reiterate that when these adverse events and 9 noncompliances happen, it's very troubling that the committee continues to try to find one person that is at fault. When there's mistakes, it's not one person. 10 It's an incredibly immature system of corrective action if all you're doing is looking to hold one person 11 accountable. There's training that takes place, which of 12 course is what you do every single time. You just 13 retrain them, but what about your training program? Have you considered looking at your training program? What about the supervisor? There's an entire culture 14 to look at, and just pointing to one person at fault is 15 a horrible way to address errors, and it continues to happen over and over and over again, particularly with this Western. All you're doing is looking for one 16 person to blame when it seems that nobody's stepping up to take responsibility. That speaks to a broken 17 culture at that facility, if nobody is willing to say, "Yes, I made a mistake." 18 And the IACUC committee doesn't ever really seem to reprimand anybody, not that that's necessarily 19 a solution, but you have to look beyond just retraining 20 people. It's an incredibly simplistic way to handle corrective action, and it's very disappointing that 21 that continues to be your go-to response, "Let's just retrain that one person," instead of looking at the overall program and what might need to be fixed there. 22 Additionally, I'm very troubled that you 23 continue to hold that primate that escaped in solitary rather than perhaps expediting getting him back with I mean, that's a kind of severe 24 his companion. punishment. They're already in cages. They're already

25 in a pretty bad situation, but to continue to hold him alone seems very punitive to me. So it's troubling

1	that you continue to do that. And again, the error with the parasites, from
2	what I can understand, you're saying it's very hard
3	determine whether they're getting the correct dose of parasites. So I'm not really sure why they continue a
4	procedure that is difficult to get right. It sounds like that's just going to lead to more problems and
5	more dosing errors. JANE SULLIVAN: Okay. Thank you very much.
6	Thanks, everybody, and I will see you next month. (Meeting adjourned at 3:39 p.m.)
7	(Recting adjourned at 5.55 p.m.)
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1	CERTIFICATE
2	STATE OF WASHINGTON)
3	COUNTY OF KING)
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5	I, a Reporter and Washington Certified Court
6	Reporter, hereby certify that the foregoing public
7	meeting was taken stenographically before me on May 21,
8	2020, and transcribed under my direction;
9	That the transcript of the proceedings is a
10	full, true and correct transcript to the best of my
11	ability; that I am neither attorney for nor a relative
12	or employee of any of the parties to the action nor
13	financially interested in its outcome.
14	IN WITNESS WHEREOF, I have hereunto set my
15	hand this 10th day of June, 2020.
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1	UNIVERSITY OF WASHINGTON
2	INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC)
3	MONTHLY MEETING
4	
5	Verbatim Transcript of Proceedings
6	
7	Via Zoom
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22	DATE: June 18, 2020
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1	Seattle, Washington Thursday, June 18, 2020
2	2:30 p.m.
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4	JANE SULLIVAN: I believe we have a quorum.
5	Can I ask, Tony, do we have a quorum?
6	TONY: Yes, we do.
7	JANE SULLIVAN: Great. Okay. With that, I
8	will open the meeting, and I, again, want to just run
9	through the procedure that we're going to have for
10	voting. We're going to make it just a little bit more
11	challenging this time, but I think we're up for it. So
12	just a reminder, after every vote, I will ask all of
13	the IACUC members to unmute themselves. This is
14	important. We need to be able to hear your voice as
15	you say "aye" or "nay" or whatever, so unmute yourself.
16	And I'm also going to ask you this time, when
17	you unmute yourself, also click on the little blue
18	raise-hand icon. So if you open up the "Participants"
19	tab at the bottom of your Zoom screen, you will open up
20	a little list of all of the participants. And at least
21	for me on my Surface Pro running Windows, the blue
22	raise-hand icon is at the bottom of that "Participants"
23	screen. And if you click on that once, it should make
24	a little blue hand appear next to your name.
25	We will give our administrators a few moments

to count all of the votes. And when we hear that the votes have been tallied, I'll ask you to click the raise-hand icon again to remove your little blue hand before I call for the next vote.

5 Okay. Is everybody straight on that? 6 Anybody who's unclear on that, please unmute yourself 7 and ask a question. Okay. I'm seeing mostly nodding 8 heads.

9 I'm also going to make the announcement that, 10 as per usual, we will allow any members of the public 11 who have joined our Zoom meeting to make a two-minute 12 statement at the end of the meeting. But just in case we run into any kind of technical problems, it is 13 absolutely your right to contribute these comments, so 14 I want to make sure you have a different mechanism for 15 16 submitting your public comments just in case we don't 17 get to hear from you live today.

So you would send your comments to me, Jane Sullivan, at the address that should be flashing on your screen now. I can see it. It's University of Washington School of Medicine, P.O. Box 357290, and that's Seattle, Washington 98195. So as I say, just in case, if you need to, you can send your comments there at the end of the meeting.

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Okay. I think we're ready to start our

meeting with the approval of the meeting minutes. So I 1 2 will ask Tony to -- excellent. Perfect. Thank you. 3 So I will ask if anybody has any changes to suggest to the May meeting minutes. Okay. With that, I will make 4 5 a motion that we approve the meeting minutes as written. Can I get a second? 6 7 BOARD MEMBER: Second. JANE SULLIVAN: Thank you. So again, I'd 8 9 like to ask everybody to unmute themselves, click the 10 raise-hand button. I'll give you all a moment to do that. And now say "aye" and raise your hand if you're 11 12 in favor. 13 BOARD MEMBERS: Aye. 14 JANE SULLIVAN: Okay. I'll ask you to take a moment to unclick your raise-hand icon. And any 15 16 opposed? Andrew? 17 ANDREW BURICH: Abstain. 18 JANE SULLIVAN: Abstain? Okay. We got it. 19 Thank you very much. Okay. With that, we will move on to protocol 20 review. Oh, I'm sorry. No, we're going to do the 21 22 attending veteran/OAW director's report first. I'm 23 getting ahead of myself. KIM STOCKING: Okay. So I'm going to start 24

out by reporting that there were nine nongenetically

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modified mice that were adopted out in the last month.

I wanted to give the committee an update on the training program. Specifically, we've been working on an introduction to rodent surgery online training course, basically revamping what we currently have. That has been revised, and we plan on rolling that out as part of our rodent surgery training to new students shortly.

9 I wanted to make the committee aware that 10 there is a Hoverboard upgrade coming in September in 11 case people were not aware. I think that the changes 12 that are coming are going to be really good, I think specifically related to the reviewer experience and how 13 14 people can review and respond to comments, but it is going to have a different look and a different feel and 15 16 some other changes that the committee for sure will need to be aware of. 17

18 At this point, the plan is to have IACUC member training starting sometime in mid to late July. 19 20 So I don't know exactly what that form will be. Ιt might be a webinar. It might be a Zoom, multiple Zoom 21 meetings. That's still being worked out, but we will 22 23 certainly let IACUC members know when we start to have that training available so that you guys can start to 24 25 get familiar with it. We will have a testing

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environment that people can go in and kind of play around in, just to give you a heads up on that.

I also wanted to let the IACUC know that the 3 OLAW annual report is now due on December 1st of each 4 5 This is a change that OLAW has implemented in vear. order to kind of align their schedule for the annual 6 7 report to be the same as the USDA. And so for the 2020 OLAW report, that report will only be covering 8 9 January 1st through September 30th of this year. So 10 it's a shorter window than normal, but then after that, 11 each of those annual reports will cover from 12 October 1st to September 30th of the following year.

Also, in case people were not aware -- I 13 14 don't remember if I have mentioned it or not; I probably haven't -- OAW will be renewing and updating 15 16 our OLAW assurance this year. So the assistant 17 director and myself will be working on an update to our 18 assurance which then we have to submit by the end of 19 August, and then we'll see what kind of feedback we get 20 from OLAW. But we need to have this done by the end of the year, so we'll be working on that in the next few 21 22 months for sure.

23 So for IACUC metrics, I encourage everyone to 24 look at the meeting documents.

There are no facility issues to report this

month, but on a facility-related issue, the entire life sciences building vivarium has now been approved for use. Previously, only zebrafish have been housed here, and now that they've taken care of those issues they were having with air handling and things like that, other species can now be housed in that location.

And this is a DCM-managed space, so DCM will be moving equipment in and getting staff trained and all of that. And once that occurs, then animals will start to move into that location. And that's going to be rodents and birds going into that location, so that will definitely be part of our semiannual inspections moving forward.

14 So protocol monitoring. We still have 21 15 total protocols that are on some level of monitoring. 16 The vast majority of these, there's not much activity 17 going on, again, probably coronavirus-related. Other 18 ones that do have activity going on, things have been going very, very well. So I'm happy to say that things 19 20 are going very well with those and no issues really to 21 report.

There are no adverse events to report this month. And I don't have a noncompliance for this month, but I will give the committee a heads up that I did find out about a noncompliance late last week;

however, I do not have all of the information as yet, 1 so I'm not going to talk about it at this particular 2 3 meeting. And that is all I had from Seattle. Arizona? 4 5 CAROLYN MALINOWSKI: Nothing to report from 6 Arizona. All good down here. 7 JANE SULLIVAN: Sounds good. Thank you. Okay. Now we will move on to standard 8 9 procedure reviews. I think we had a handful, and I 10 think Aubrey was going to talk us through that. AUBREY: Yeah. Hi, everybody. So we have 11 12 four existing standard procedures that were just due for review this month. Two were Meloxicam, which is an 13 14 analgesic for rats for a 48-hour duration and 72-hour duration, and then there was a procedure for measuring 15 16 body length and weight in two species of fish. We also 17 have a new standard procedure that is up for review, 18 and so this new procedure will be for x-rays in 19 primates.

20 So hopefully everybody saw the summary 21 document that we put into supporting documents and were 22 able to access the procedures. And I guess if there 23 are questions, suggestions, edits, I'm all ears.

24JANE SULLIVAN: Do any members have any25comments or questions? Okay. For convenience, I will
make the motion that we approve the procedures as
 written. Can I get a second?
 KIM STOCKING: Second.

JANE SULLIVAN: Okay. So with the reminder, I'm going to ask everybody to unmute themselves, turn on their video if they have not, and at the appropriate time when I call for the vote, I want to see a hand, hear your voice, and see your little raise-hand icon. Okay. So all in favor, say "aye."

o all in lavor, bay aye.

BOARD MEMBERS: Aye.

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JANE SULLIVAN: Okay. It looks like everybody has had a chance to vote. So I'll ask you to click your raise-hand icon again to remove it.

14 Okay. Any opposed? Any abstaining? Okay.15 Thank you very much.

16 Now Charlotte is going to be covering a
17 reassignment of nonhuman primates policy that we will
18 vote on.

19 CHARLOTTE HOTCHKISS: So this is just a minor 20 clarification to the policy because of a question that 21 had come up; otherwise, it's the same policy we have 22 for assigning animals to new projects or reassigning 23 animals that have previously been assigned to another 24 project, that they do need to have an exam by a 25 veterinarian. The only thing we've changed is that if an animal has been assigned to a project and not used but needs to be reassigned to a project in the same investigator's group but it's a different protocol number, and again, if the animal hasn't been used, then we don't have to do a new veterinary exam.

And then we changed someone's job title because their job title changed. So I hope you've all have a chance to look at it, but that's all that's different there.

10JANE SULLIVAN: Does anybody have any11questions before we vote? Okay. I'll make a motion12that we approve the policy as written. Can I get a13second?

BOARD MEMBER: Second.

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JANE SULLIVAN: Thank you. Okay. So again, I'd like everybody to unmute themselves. Make sure you can be seen and be ready to raise your hand and say something, and use your little blue icon at the appropriate time. So all in favor, say "aye" and raise your hands.

BOARD MEMBERS: Aye.

JANE SULLIVAN: Okay. Let's take the raise-hand icon down, and I'll ask if any are opposed, please say so now and raise your little blue hand. Any abstaining? Okay. Thank you very much. Next, we will discuss site visits during COVID-19 restrictions. And, Kim, were you going to be saying a few words about this? I realize we don't have something assigned. I was going to say something like that about the Doodle poll, but that was it. Do you have anything?

KIM STOCKING: Yeah. I was just going to
talk a little bit about how we're planning on
connecting these. I know I talked a little bit last
time about what the OAW plan was just in general for
IACUC things as well as the semiannual inspections, but
I will kind of give you just some general guidelines.

And Tony, Bob, and I will also be meeting 13 14 next week to kind of really work through some of the logistical issues, and then I'd like to also kind of 15 16 come up with some additional wording on the email template reminders to just kind of remind you guys of, 17 18 you know, how we're going to try and safely conduct 19 these site visits for all concerned. So if you don't remember everything I just said, I'm just going to say 20 21 here, I well let you -- I do want to let you know that 22 we will also be emphasizing it in our reminder emails as well. 23

24 So as I indicated previously, the site visits 25 for any new research space or existing animal-use

spaces, we're planning on doing these in person. 1 The 2 only place right now where I think it's not clear 3 exactly what we're going to do is going to be Friday Harbor labs just because we don't know whether we want 4 5 to send people up to that location or whether we're 6 going to do something more creative like livestreaming 7 a tour or something like that. But that site visit's not due till September, so we have a little bit of time 8 9 to sort of see how things fall out there.

10 So the minimum number of IACUC site visitors 11 will be used, although no IACUC member may be denied 12 participation. So if you want to participate, please 13 let us know, and we will make sure that you get 14 included on any site visit you would like to attend.

And then per OLAW, for areas housing 15 16 non-USDA-regulated species, the IACUC may use as few as 17 one member to conduct those inspections. I think for 18 the most part we're going to try and get two people for 19 each inspection, but if for some reason we have some 20 challenges, it may end up being one person for those 21 non-USDA areas and for procedural lab spaces outside of 22 housing spaces.

For USDA-covered species, two IACUC members must participate, but we can potentially have those people split up within a location. But the plan would

be for any USDA-covered species, housing areas, we would have two IACUC members on those. So we have to have two for those.

We will try to use people already working at 4 5 SLU or in the downtown area to do those SLU visits. 6 And part of that is being driven by the fact that the 7 South Lake Union shuttle service is running; however, it's fewer runs and smaller shuttle capacity limits. 8 9 So for those people who are going to be doing South Lake Union site visits, it might be easiest just to go 10 11 straight to South Lake Union by whatever mechanism you 12 can get down there, but we'll certainly try and schedule folks if possible that are already going to be 13 14 in that vicinity.

So visitors who are coming onto a UW campus have to arrive wearing a face covering, and this is a UW requirement in all indoor spaces. So I just let people know, especially our non-affiliate, affiliate, and any other folks who are not UW employees or faculty, that you should arrive for the site visit wearing some kind of face covering.

JANE SULLIVAN: Kim?
KIM STOCKING: Yes.
JANE SULLIVAN: Since any external members
are not going to have access, the buildings are all

still locked up, and you need to have your UW ID card to get in, would it be possible to meet any visitors at the door and provide them with a mask?

KIM STOCKING: We can potentially do that. I 4 was going to talk a little bit more about face masks, 5 6 but I believe the -- and again, we have to -- we're 7 working all of the logistics of the actual site visits themselves out next week. But I believe Tony has 8 9 indicated he's planning on being here on those days 10 that there is a -- there are site visits, and so we 11 will arrange for folks to basically call Tony or he'll 12 meet you at the door.

JANE SULLIVAN: Great.

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14 KIM STOCKING: I think somebody will meet 15 those folks who cannot get in because, yes, all the 16 buildings are locked at this point.

JANE SULLIVAN: Great. Thank you.

18 And so I think the plan would KIM STOCKING: be to have site visitors meet up at the OAW office like 19 20 we generally do, and then our plan would be to hand people a paper procedural mask that would be used 21 22 actually when you go into the vivarium spaces. And 23 this is because, you know, DCM, you can wear cloth masks in DCM vivarium spaces; however, they want you to 24 25 remove those coverings when you exit the vivarium. So

if you only have one cloth mask with you, you should,
 you know, save that for your travel back and forth, and
 we will give you a paper procedural mask to actually
 use during the site visit. So that would be the plan.

5 So we do plan on providing face masks for 6 folks, and if people for some reason didn't bring a 7 face covering with them when they come on-site, we can provide that for them too. But as people are exiting, 8 9 especially the vivarium spaces, they're going to need 10 to take off whatever they're wearing as they're exiting and put something else on, and that's basically to help 11 12 prevent spread of allergens outside of the vivarium by removing anything you're wearing in the vivarium. 13

14 And then we're going to ask everybody to 15 maintain a six-foot physical distance wherever 16 possible, and so, like if you're talking with husbandry 17 staff or the supervisors or whatever, try and space 18 yourselves out as you're talking in the hallways or whatever. And then we need to adhere to room occupancy 19 20 limits. So certainly, within DCM spaces, they all have signs on the door that post the maximum number of 21 22 people that can be in a room. So that may mean that, 23 you know, only one or at most two people can go into, 24 like, a housing room at a time.

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So as I mentioned, you know, face covering in

DCM areas. If you're going to into an ABSL-2 area, we're going to need to remove whatever we've got. They will -- DCM will give us additional masks that we will then remove when we exit that area and then put on another mask again. So that gets a little tricky, but again, that's for safety reasons, occupational health reasons.

A face covering will also be required when visiting lab procedural spaces, so outside of the vivarium. Again, OAW can potentially provide, you know, paper masks for those. So if you stop by our office, we can provide, you know, paper masks for folks.

14 And then I would also ask that the site 15 visitors that are going to these procedural labs follow 16 any lab-specific requirements for that space. So every 17 lab is required to have their safety plan in place, and 18 so if there's some additional requirement or if they say only X number of people can be in this particular 19 20 space, then we need to abide by that. And so I would just, you know, ask that IACUC members be aware, you 21 22 know, that there may be some lab-specific requirements 23 that we will have to follow as well.

And then, of course, washing your hands frequently, using hand sanitizer if it's available.

Especially when you're exiting areas, you really should
 be washing your hands.

3 KEN GORDON: So for some of the smaller labs 4 which are the size of large closets, does that mean 5 that the IACUC member will go in by themselves, do an 6 inspection, and then maybe come out to the corridor to 7 have discussions?

8 KIM STOCKING: Yeah. I think that will have9 to be the case.

10 BOARD MEMBER: When two people are doing the 11 inspection together, would it be that only one of the 12 two would go in for the same reason?

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KIM STOCKING: Yes.

14 So for the primate center spaces, again, 15 you're going to wear a face covering when you go over 16 to that, when we walk over to that space. And then 17 once you get there, they already have all the PPE that 18 we would typically have, which is going to be, you know, more than sufficient to protect not only us but 19 the primates themselves, the nonhuman primates 20 21 themselves. So we're not going to have to provide too 22 much additional PPE outside of what the primate center 23 is going to have available.

24 So that's kind of, in a nutshell, how we're 25 going to be doing these site visits for the foreseeable

future as long as the coronavirus is around. So are there any questions related to any of that? Okay. I'm not hearing any.

JANE SULLIVAN: Can I add one? So I was going to just comment about the Doodle poll. Is this a good time for me to bring that up?

7 Okay. So I think you guys all received, either yesterday or maybe the day before, the first 8 9 Doodle poll invitation from Tony in a while to start 10 setting up times for our next site visits. He included 11 this in his email, but I just want to make sure 12 everybody knows we are not expecting you to or I should say we're not requiring you to perform site visits 13 14 during the pandemic if you do not feel comfortable doing so. So, you know, keep that in mind, but we 15 16 still would like you to fill out the Doodle poll.

And if you don't feel comfortable doing site visits yet, put in your name, but don't -- just don't indicate any available dates. And that way, Tony doesn't have to wonder whether you're just not comfortable yet doing site visits or if you just missed the email.

23 So please respond when you get a chance to 24 that poll so we can get started on scheduling the next 25 round of visits. I think they'll be starting up in

August.

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KIM STOCKING: Right. Okay. And then there 2 3 was one other thing that I wanted to mention as something that I would like site visitors to focus on 4 5 this next round. As people probably remember, the AVMA 6 has revised the euthanasia guidelines, and as part of 7 this, there has been a change in the CO2 fill rate for euthanasia of rodents. With the coronavirus kind of 8 9 putting the wrench into a lot of things, the rollout of 10 this particular change has been very spotty at best, I 11 would guess. We have done some initial communicating 12 around this environment, but I'm not sure how much it penetrated with all the other things going on. 13

14 So what I'd like to request site visitors do is when they are visiting procedural lab spaces -- so 15 16 this is outside of DCM-managed spaces -- where they're using CO2 for euthanasia, please check whether the lab 17 18 has implemented that change in fill rate to 30 to 70 19 percent. And then also kind of verify what kind of 20 flow meter, do they have the appropriate, you know, 21 equipment to do it, what flow rate they're using, and 22 whether they have signage related to that.

If they do not have those things, remind them about that change. Make a note of it on your site visit notes. And then I'm going to ask OAW liaisons to

follow up with those groups to ensure that change gets 1 implemented, because I really don't have a really good 2 3 handle right now on how many labs have made that change as yet. So this will be a good opportunity for us to 4 5 reenforce, you know, the need to make this change. 6 We'll also be sending out some additional wording in 7 early July, like the OAW navigator, reminding folks of 8 this change.

9 DCM has been working on implementing that 10 change in their spaces. They are not quite finished 11 with that. The plan is to have that done probably 12 early July, and with that, they will be swapping out 13 equipment as needed and updating the signage.

14 So all of this is still kind of in flux, but 15 we would like to really get on getting this change 16 implemented. So you guys will be helpful in helping us 17 identify places where maybe they just haven't quite 18 gotten the message or they've been busy with other 19 things and then forgot.

20 KEN GORDON: So, Kim, I'm happy to talk about 21 the change, happy to check if people have the right 22 range, but I don't know if I could check the equipment.

KIM STOCKING: Well, just ask them if they
have the right equipment to implement the change.
KEN GORDON: Okay. And they would say either

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yes or no, and I can just take their word on it?

KIM STOCKING: Yeah.

3 JANE SULLIVAN: Most groups should not need additional equipment. It's just a matter of changing 4 5 the level of flow. So the last time we did this, we 6 did have to have everybody get a flow meter that nobody 7 had before, but this should just be a matter of resetting the flow meter. And unless people have 8 9 really unusually sized chambers that they're using, the 10 flow meters should be able to accommodate the change in flow rate that's now recommended. 11

12 And, Kim, I wanted to ask. In the past, for example, in the months before our last AAALAC visit a 13 14 year ago, we had printed on the bottom of any number of documents that we were sent as site visitors. 15 There 16 was a little, you know, line at the bottom that said "Remember, AAALAC site visit is coming up." Would it 17 18 be possible to add a line about, you know, "Don't 19 forgot to ask about new CO2 rules," you know, that goes out to everybody when they're doing a site visit just 20 21 to help us remember? 22 KIM STOCKING: Absolutely.

JANE SULLIVAN: I would find that really,
really helpful.

KIM STOCKING: Yeah. And speaking of AAALAC,

AAALAC has indicated that starting with their site 1 2 visits this fall, they are expecting institutions to 3 have implemented this change. So AAALAC is like, "Okay. Ready to implement. Let's get it done." So 4 5 yeah, anything we can do to, again, kind of identify 6 places where maybe that change hasn't been made, and 7 certainly, everyone going out and looking at those spaces, that will be helpful for us to identify if 8 9 there are any spots where we still need to make sure 10 that's communicated.

I will also mention that OAW reviewers have 11 12 been swapping out the standard procedures for CO2 euthanasia in rodents as labs have been amending their 13 14 protocols. So they also have been communicating with the groups as they have made those swap-outs of 15 standard procedures that, "Hey, here's the new 16 17 standard. You know, make sure that you're implementing it." 18

So again, I don't know how many labs out there are -- you know, haven't implemented the change yet, but we'll make sure that everybody is getting the message and making that change. So I appreciate all you guys' help with that.

24JANE SULLIVAN: Kim, did you have any other25COVID updates for us?

KIM STOCKING: Yeah. I just had a couple 1 2 other things. I just wanted to let the committee know 3 that animal care and veterinary staffing has continued to be really, really good. We have had to make no 4 5 modifications throughout this entire coronavirus 6 pandemic to the husbandry practices. The staff has 7 just been fantastic. So again, thank you to all of the animal care and veterinary staff for all of their 8 9 efforts. While other people have been, you know, 10 sheltering at home, they have been here every day 11 taking care of the animals. So thank you for that.

12 And then the animal-use training program, we have been kind of slowly implementing and bringing our 13 14 hands-on training classes back online. We now are doing all of our hands-on training classes, and that 15 16 includes surgery and surgery certification. All of 17 these classes at this point are being done one on one because we're trying to maintain a six-foot physical 18 distance wherever we can; however, that's not generally 19 possible for the entire class. So we are doing, you 20 know, additional PPE to try and limit potential 21 22 exposure, but we are back to, you know, doing all of 23 our training classes.

And I hope that researchers will be patient that we cannot do the same volume, you know, run

through as many folks in those classes as we have in the past. It does seem like the research labs are starting to get back into work on some level. I think we're seeing more people coming on-site, and we're certainly seeing more requests for training. So we are trying to accommodate people as best we can. So that's all the updates I had.

JANE SULLIVAN: Thanks, Kim.

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9 Okay. So I want to briefly bring back a 10 topic that we tabled at our last meeting. We were 11 talking about an animal that had been found in a 12 trapping run when she should not have been. She was fine, but there was concern that we didn't understand 13 14 how this could possibly have happened, but we also want to make sure that it doesn't happen again. And so 15 16 rather than trying to come to a conclusion about how we should handle the situation at the end of our last 17 18 meeting, we decided to wait until this meeting when we hoped that there would be more information about the 19 incident. 20 I'm going to ask, however, that we postpone 21 22 this for one more month, further discussion for one 23 more month. I spoke to the director of the primate 24 center, and they're concerned as well. They are 25 just -- when I spoke to Sally last week, they were in

the final stages of their investigation, and I think that this is -- we're going to have more information if we wait until next month and have Sally come and tell us what they have discovered and what actions the primate center has decided to take. And then that will give us an opportunity to talk amongst ourselves about whether there are any further changes that we might recommend to keep this from happening again. And I do want to emphasize that, you know, the goal here is not to find some scapegoat that we can blame this on. The point of trying to gather information is to try to understand what happened so we can understand what went wrong because there's really no other way to know what changes can meaningfully affect this going forward. So I'll give you all an opportunity, if you'd like, if any members would like to make a comment or ask a question, but otherwise, we will be having Sally come and present to the committee next month. Okay. Thank you all for that. And with that, I think we can move into our semiannual program review, and Bob Ennis will be taking us through our member presentations. BOB ENNIS: So this is the first one that I've had the privilege of doing, and I look forward to

it. Laurie did a really nice job of helping me

1 understand the process.

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I'll be compiling all the information. That will include the reports from the different groups that we'll hear from today. My plan would be to get a draft to the committee at least a week before our next meeting so you can look at that appropriately, and I look forward to that.

8 So we have five different groups that Laurie 9 assigned to different elements of the OLAW checklist. 10 I think the plan was to have a five-minute oral kind of 11 summary of those findings. So whichever group would 12 like to start, we would love to hear what your findings 13 were.

SCOTT HASKELL: I'd love to start with the veterinary one.

BOB ENNIS: Great.

SCOTT HASKELL: Okay. Thank you so much for putting up with my beard and hair. It's been five months since a haircut.

20 Semiannual review of the veterinary care 21 program: It was nice. Our group got together and 22 started going through the checklist as well as previous 23 comments about veterinary care on the last checklist. 24 So we decided initially that we would use our time to 25 review the veterinary care section of the checklist.

So on No. 1, provisions of vet care in 1 2 cephalopod, octopuses, and I still can't get over not 3 calling them octopi. DCM and OAW have worked with the octopus group to ensure appropriate husbandry, care, 4 5 and personnel training. The campus aquatic veterinarian has done an outstanding job in training 6 7 and getting everybody up to standards, has presented a class on lab-managed care and records for octopus. So 8 9 he did an outstanding job with that, and then he gave a 10 special seminar to the veterinary staff on octopus 11 regulations, husbandry, and veterinary care. Hands-on 12 training for the octopus handling has also been developed, so they've done an excellent job. Accolades 13 14 to the campus veterinary office.

No. 2, involve veterinary staff in updating 15 16 the training programs, primarily rodents, better surgery, anesthesia, analgesia, post-anesthetic 17 18 procedural monitoring. (Inaudible) has worked with these vet staff to design and revise online lessons 19 20 covering the topics, including revision of the 21 introduction to rodent surgery course, which will be 22 completed and implemented shortly.

23 No. 3, second to the last, we looked at the 24 assurance of upcoming revisions of the AVMA guidelines 25 for euthanasia which are incorporated into the IACUC

policies, e.g., euthanasia of research/teaching, 1 2 animals and SOP protocol standards. OAW has worked 3 with the labs to educate them on revisions and to add revised standard euthanasia procedure to the protocols. 4 5 Euthanasia of research/teaching animal policy was 6 revised and approved by IACUC in March of 2020. DCM 7 retrofitted the CO2 flow meters as we discussed earlier in this meeting. So it's really come along well. 8 9 Again, accolades to OAW for the work that they have 10 done through the continuance of the pandemic.

And finally, ensure that the AAALAC program description is updated to reflect changes made to the program: Work in progress. So I think everyone, pretty much, they agree that we've made significant improvements to the veterinary portion of this. It turned out well.

BOB ENNIS: All right. Thank you very much.Any questions or comments?

19Okay. What group would like to go next?20CHARLOTTE HOTCHKISS: I'll chime in. We had21four sort of separate categories to look at, but I'll22just go through them one by one. One was the animal23care and use program, and we think everything here is24running quite well, and the responsibilities are all25very well defined in various documents.

We had a concern last time about funding for facility repairs, but the major repairs have all been completed, and there are funds currently available for even minor facility repairs, although they are not limitless. And the university funding situation is very -- because of the pandemic, it's kind of up in the air, but for right now, everything is being covered.

Our big category was the disaster planning 8 9 and emergency preparedness. And in the past six 10 months, both the primate center and DCM have updated 11 their emergency plans, and they are all comprehensive 12 and complete and meet all the requirements of the guide. In addition, the primate center, DCM, and OAW 13 14 have had to write return-to-work plans, COVID 15 return-to-work plans that are (inaudible) in a room, as 16 was mentioned earlier, and clarifying mask guidance and, you know, several other measures that the 17 18 university is requiring. And so we were quite impressed with that, and we were quite impressed with 19 20 the way these three groups were able to implement their emergency plans when the pandemic hit. And as was 21 22 mentioned earlier, you know, all the animal care was 23 performed uninterrupted throughout this whole disaster.

The other two subjects we had were personnel security, which is, you know, pretty much the same and

was fine before, and then investigating and reporting 1 animal welfare concerns. Again, OAW has a well-defined 2 3 process for that, and that's fine. But mostly, we wanted to give kudos out for the emergency 4 5 preparedness. 6 BOB ENNIS: Thank you. Any questions or 7 comments? Okay. Who would like to go next? 8 9 KEN GORDON: Hi, Bob. This is Ken. So we 10 met to look at Sections 3, 5, 6, and 7. And our same 11 group reviewed these same sections six months ago, and 12 at that time, we thought there was satisfactory progress in relation to all those sections. 13 14 The only two things we want to note, under the IACUC Section 3, Bullet Point 4, it asks that the 15 16 IACUC evaluates the effectiveness of training programs. 17 And we know that for those training programs, really 18 there is like a pass/fail requirement before someone can move on to do a procedure of an animal or a 19 20 committee member can join the IACUC. We've got information about that. But for those kind of training 21 22 programs where it's more mentoring or one-on-one 23 learning or even the kinds of things that we've had at

25 taught about a new, say, species, we're not sure how we

our IACUC committees in the past where we've been

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measure the effectiveness of those trainings. And
 honestly, we're not sure if there's actually an easy
 way to measure the effectiveness of those trainings.
 We just want to note that for the record.

5 No concerns at all with Sections 5 and 6, and 6 with Section 7, most of that is under the control of 7 OAW. It's mainly administrative in terms of reporting out on our program through the various official 8 9 agencies. And so we're up to date with how those 10 reportings are going. What we did note, though, is in 11 the last six months, we have seen no noncompliance 12 reports in any of those areas.

BOB ENNIS: Thank you. Any comments?Questions for the group?

KIM STOCKING: So related to the 15 16 effectiveness of the training program, do you guys have 17 any thoughts about how -- what as an IACUC member you 18 would like to know or see? You know, because I agree. I think it's challenging. You know, the ops, we can 19 20 say we have a standard where here's where people pass out of our class, but then they do have to go back to 21 22 their lab and do, you know, additional training within their own lab. Most of the time, they're not -- you 23 know, they may be competent, but they're not 24 25 necessarily proficient or, you know, maybe not even

necessarily completely competent. So did you guys have
 any thoughts related to --

3 KEN GORDON: We honestly thought it's really 4 complicated and difficult, and other than having 5 someone monitoring a person who's done a training and 6 going ahead and making sure they've been operating 7 effectively, it's hard to know.

And we did discuss, you know, like, for 8 9 example, with mentoring. I think we all learned how to 10 do protocol reviews from a mentoring process. If that 11 mentor is teaching us the wrong things, then we turn to 12 learn the wrong things, and no one knows. We don't know what we don't know. And I think that's just 13 14 something to be aware of, but other than hiring professional evaluators to follow everyone in the 15 16 program around to see if they're effective, we just 17 don't know a simple answer to that question.

PRESTON VAN HOOSER: This is Preston. I recall three to five years ago, maybe longer, we actually implemented IACUC member training through OAW, Kim, where we actually set up mock IACUC inspections, and I know members went through and they were trained on that. I know it was a huge effort from our office, but that's one thing I recall.

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The other thing, Ken, is there is a webinar

next week, an AALAS webinar on effective and efficient
semiannual inspections, how to get the most out of your
IACUC inspections. And I know OAW is registered for
that, and I would encourage all IACUC members to tune
in to that. And if you don't have the invite, maybe
Tony can send that information out again for the
continued IACUC member training.

8

KEN GORDON: Thank you.

9 KIM STOCKING: Well, then, I would also let 10 you know that one of the next topics that I'm going to 11 be working with our instructional designer on is IACUC 12 member training, and I think there's some opportunity here to use some online tools and some other things. 13 14 Because like what Preston was referring to was, you 15 know, like, a mock, like, semi-annual inspection, which 16 is very time-consuming to set up and to run.

So certainly, if anybody's got any ideas 17 18 about, you know, ways that we can -- you know, things maybe on your IACUC member training or things that you 19 20 maybe feel you could stand to learn more about, let me know. Or if you have ideas about, you know, hey, this 21 might be a cool way to try and learn, you know, train 22 on this particular thing, let me know, because, you 23 know, now is the time, you know. Make some suggestions 24 25 on how we can improve that training because I do think

it's pretty dry to just read a bunch of, you know,
 slides online.

3 So we're trying to be creative. And 4 Michael's really good at that kind of stuff, but 5 certainly if you guys have ideas too, send it my way.

PRESTON VAN HOOSER: And I think one other 6 7 thing to throw out there that I think Tony has done a good job on is when he's scheduling the site visits, he 8 9 pairs us up so we're not always the same two members 10 doing the same site visit every time. And I know I've 11 benefited by going with not only senior IACUC members 12 that have been on the committee for a quite a while, but I know of one recently with Dr. Wirsing, who is 13 14 fairly new to the committee. He saw something that I hadn't seen, and I probably visited that space, you 15 16 know, a dozen times over the past 16 years.

So I think, again, for Tony to kind of mix us up rather than having the same two maybe do the same space every time, we can learn from one another. I find it very valuable when I'm going with different members and different skill sets.

22 BOB ENNIS: Thank you. Two more groups left. 23 Who wants to go next?

24 MICHELLE: Our group was tasked with looking 25 at the protocol aspect of the program, and we reviewed

some of the same -- we revisited some of the same items
 that we had recommended in the last review six months
 ago. And I will go over the three items that we came
 up with recommendations for.

5 The first was regarding humane endpoints. We 6 thought it would be a good idea to recommend that OAW 7 liaisons should be sure to include during liaison visits a discussion about what humane endpoints are 8 9 listed on the protocol for that lab and make sure all 10 relevant lab personnel are aware and knowledgeable 11 about checking for them. So implementing that as part 12 of a liaison visit would be a good way to follow up on humane endpoints in the protocol. 13

14 The second item was looking at protocols that have food and fluid restrictions included on them. 15 The recommendation is to have a standard reminder for IACUC 16 17 site visitors at the bottom of the visit schedule, 18 similar to what Jane mentioned today about the CO2 flow rate changes. So Tony can include that as well on the 19 bottom of the site visit schedule to remind site 20 visitors to check for food/fluid restriction logs, 21 including body weights, in order to confirm that those 22 23 are being collected.

And then the third item we had a recommendation on was a mechanism to follow up on pilot

projects. So for full committee reviews where we all 1 2 review the pilot protocol and discuss it with the 3 researchers usually, the IACUC should have a mechanism to keep track of the studies that are discussed so we 4 5 can formally follow up on the progress and results. I 6 think Laurie previously did that, and we're hoping that 7 Bob can continue to include pilot study reviews in subsequent IACUC meeting agendas. So you can put that 8 9 on your list, Bob.

10

BOB ENNIS: I just added it.

11 MICHELLE: And then for pilot studies that 12 are reviewed through designated member review, the DMR 13 process, we recommend establishing a way for liaisons 14 to check with the group on pilot study follow-up either 15 by email or during liaison visits. And that's what we 16 came up with.

17BOB ENNIS: Thank you. Comments? Questions18for the group?

19 KIM STOCKING: That's really good, Michelle, 20 I think, especially the pilot study. You just reminded 21 me of a pilot study that I have to circle back with the 22 group about because I did not ever really hear the 23 readout, and they were supposed to get back with me on 24 those results. So that's a very good reminder, and we 25 do -- I agree. We need a mechanism to make sure that

we're following up on those pilot studies and reporting
 back to the IACUC.

MICHELLE: Yeah. We agreed that it was really easy for those things to fall through the cracks and, you know, never really get follow-up, and it's important.

7 And the last group? BOB ENNIS: Thanks. PRESTON VAN HOOSER: I'll start us off. So 8 9 myself, Aaron, and Jeanot, we were reviewing Section 9, 10 personnel qualifications and training, as well as 11 Section 10, occ health and safety of personnel. The 12 three of us actually reviewed these sections the last time around as well. And of course, under the current 13 14 conditions of really not being able to work together, we communicated briefly via email, and I feel we all 15 16 three came to a consensus that we felt this is quite 17 satisfactory. There were a couple of things we want to 18 discuss, and I may let Aaron and Jeanot, you guys, jump 19 in here.

20 One thing in particular for Section 9, the 21 personnel qualifications and training. I believe Ken 22 kind of touched on some of the IACUC member training 23 already with somewhat of an overlap in Section 6. I do 24 feel at the last review period that we were looking at 25 kind of coming up with more ways for continuing

education for our IACUC members as well as our research faculty and staff, and I know OAW has done a really good job trying to, you know, lock in and set up webinars for the community, if you will, for opportunities for continuing education and training, one being this webinar next week, for example.

As far as the training itself, I mean, we have things well documented. I think our program covers all the content that's included per this OLAW checklist. I'm not going into the bullets and the weeds of everything. I think for our occ health and safety of personnel, I didn't have any concerns there. I think it's being well met.

14 Now, with that said, again, I think Aaron and 15 Jeanot -- with the current situation, with the 16 pandemic, you know, as Kim was starting off the meeting 17 with all of these sort of requirements of, you know, face masks being required, room occupancy requirements, 18 ABSL-2 procedures, I'm just wondering and posing this 19 20 out there, if we need to consider sort of incorporating some of this. I know the university, EHNS, for 21 22 example, has a training course that's now required, but 23 there's a lot of things that have been put into place in like the last two months that are brand new to us as 24 25 a committee and as an institution working with animals.

Aaron and Jeanot, do you guys have anything
 to add?

3 AARON WIRSING: Yeah. Just as far as the training is concerned from the standpoint of 4 5 refreshers, one, this pandemic is not going away 6 anytime soon. It's probably something we're going to 7 have to live with even in the fairly near future. And given that our understanding of what to do about 8 9 pandemics is really dynamic, changing all the time, and 10 there's this sort of tension that was mentioned earlier between care for animals and, of course, safety of the 11 12 people who are doing that, I think it's a great opportunity for some sort of ongoing refresher given 13 14 that we're probably going to have to constantly update the latest guidance. I think the university is doing 15 16 that, but there's probably guidance that's more 17 specific to that particular scenario of taking care of 18 animals.

JEANOT MUSTER: The way I interpreted what you had said, Aaron, the way I thought of it was I think the next IACUC member training, it probably would be a great idea to have it somewhat COVID-related, as in how to inspect facilities under these new guidelines with social distancing, you know, PPE and everything else that we are now required to wear, and if there's

anything special that we need to keep in mind as IACUC
 members going out to all these different sites. That's
 what I took from what you said, Aaron.

BOB ENNIS: Any other questions? Comments
for the group? Okay. Good work. Thanks, everyone.

6 So if you could send me summaries of your 7 findings sometime next week, that would be great. I 8 can include them in the review. And there's going to 9 be a different concurrence process that I think Jane is 10 going to talk about a little bit.

11 JANE SULLIVAN: Yes. So you may recall that 12 we fairly recently, in the last year or two, took a vote, and we all decided that we would be able to use 13 14 our emails to concur when it was time to submit our 15 semi-annual reports rather than having an ink 16 signature. And it turns out that that does not satisfy OLAW and particularly USDA requirements. They insist 17 18 on having a signature, but the good news is that they are willing to accept a scan or a photo of a signature. 19 20 So we don't have to get as fancy as, you know, digitally signing something, but we are going to have 21 22 to make it a little bit more complicated than it's been 23 in the past. And as I indicated, what they've told us is either a scan or a photo will suffice. 24

25

What I am going to propose, what I think is

the easiest thing for all of us to do is when the time 1 2 comes to submit our concurrence, Bob will send out the 3 email, as always happens. Rather than just sending back an email saying "I concur," what I will ask 4 everybody to do is find a blank piece of paper; write 5 6 clearly your name, the date, "I concur," and your 7 signature; and then shoot a photo of it and attach that to your email. I'm going to ask now does anybody have 8 9 a problem with using that mechanism for our 10 concurrence? 11 KEN GORDON: Are you sure they don't want 12 (inaudible) also at the same time? JANE SULLIVAN: No. 13 14 CHARLOTTE HOTCHKISS: I don't have a problem 15 with that, but will they take an electronic signature? 16 Because that's a lot easier. 17 JANE SULLIVAN: If you can put an 18 electronic -- well, no. It has to be your signature, so either a scan or a photo is what they're telling us 19 they will accept. So if you want to print out 20 something and sign it and scan it, you can do that. 21 22 CHARLOTTE HOTCHKISS: Okay. But not a PDF 23 electronic signature? They won't take it? JANE SULLIVAN: I don't think so. That 24 25 was -- they said either a scan or a photo.

KIM STOCKING: Yeah. They were very, very 1 specific about not taking like when you electronically 2 3 sign in PDF where it doesn't actually put your signature on there. That is not sufficient in their 4 5 mind, and so we -- it has to be an actual, physical, 6 you know -- your actual signature. They wouldn't take, 7 you know, your information block or whatever. They wouldn't take any of that information. 8

9 So, you know, I think Jane and I both kind of 10 argued, or at least maybe I had this argument with 11 Laurie about, well, somebody could forge your 12 signature, but, you know, that's just what they 13 suggested. Although, they are willing in light of the 14 pandemic to at least for the short-term modify that, 15 but I think, you know --

16JANE SULLIVAN: Kim, Kim, I was just --17KIM STOCKING: But we don't want to go there18because --

19JANE SULLIVAN: I don't want to either.20There's no need to go to a third thing, so I think21let's just do this.

22 KIM STOCKING: Yeah. I was just going to say 23 but we're not going to do that because eventually 24 they're going to say, well, that's not good now. So 25 it's just easier to bite the bullet and do it this way. JANE SULLIVAN: And we'll remind you of all of this, give very explicit instructions when the email goes out, but I just wanted to give everybody a heads up about that.

BOB ENNIS: That's it for me.

JANE SULLIVAN: Thank you. Does anybody have
anything else that they want to talk about before I
close the meeting and open it up to public comments?

5

9 PRESTON VAN HOOSER: Yeah. I just want to 10 just mention last meeting I had mentioned the 11 Compassion in Science program here at UW was 12 responsible for providing a bunch of appreciation lunches to our animal care/cage wash staff, vet staff, 13 14 and the BMS staff. I did not forget about kind of putting some pictures together of our animal care techs 15 16 and vet staff from that first lunch.

17 And I just want to let the committee know we 18 have since coordinated two other appreciation lunches since March 21st, and we have one more on July 3rd, and 19 20 that will probably be it for our appreciation lunches, 21 if you will. But it's -- there's over 400 lunches that 22 have been provided to our staff here at University of 23 Washington, including the staff out at Arizona as well. And, you know, that's over \$6,000 donated from our 24 25 local restaurants here in the Seattle and Puget Sound

area that support these essential workers that are advancing the research, as you know, that we have going on with COVID as well as other things. So I just want to do a huge shout-out again to all of the animal care staff, vet staff, cage wash staff, and BMS staff for doing such a great job.

JANE: Yeah, huge thank you. They are just
continuing to work and keep everything running
smoothly. I'm so appreciative.

Any other comments from members?

Okay. With that, I will close the meeting and ask any member of the public to unmute themselves and start talking. I hope we'll be able to navigate this. Everybody will be a chance to speak who wants to, and you will have two minutes. So if you unmute yourself and start to talk, take it away.

17 PUBLIC COMMENT: Good afternoon. Can you18 hear me? My name is Dr. Wayne Johnson.

19 JANE SULLIVAN: We can hear you.

10

20 PUBLIC COMMENT: I'll begin my two minutes
21 with your permission, Dr. Sullivan.

In your April 16th notes, you note that a male primate had escaped from a primate center cage, bringing along a female, subjecting himself and herself to injuries including lacerations. Your solution for
1 that was more locks, bigger locks, better locks. We
2 want you to open those cages and let those animals be
3 free, not more locks and not bigger locks.

In the beginning of the IACUC pages, now you 4 5 have benefit stories, stories that you're proud of in 6 terms of the way animal research translates for human 7 benefits. Why don't you put -- and are you proud of the cervical dislocations, the decapitations of live 8 9 animals, the 42 multiple survival surgeries on seven 10 different species in 2019? Are you proud of torturing 11 infant primates, imprisoning them, and finally 12 murdering them in toxicity studies?

In 1984, with the permission and the 13 14 encouragement of Dr. Van Hooser and Dr. Dennis, I took the full animal-use training program and found it very 15 16 interesting, all ten weeks. My question is are the 17 veterinarians who vowed to help animals when they were in veterinary school proud of presiding over the 18 torture, the terror, and the murders of the 16,000-plus 19 20 animals at the UW? Stop imprisoning them, stop torturing them, and stop killing them. 21 22 Thank you, Dr. Sullivan. 23 JANE SULLIVAN: Thank you.

PUBLIC COMMENT: My name is Margaret
 Parkinson. This is just my second meeting attendance,

although I have cared about animals and worked for animals for nearly 50 years. I don't know. I wonder if anybody is actually listening to these comments, but I can see that you're all there, and you appear to be listening, or most of you are.

JANE SULLIVAN: We are.

6

PUBLIC COMMENT: Good. Thank you. I'm glad
to know that. Last time I couldn't see anybody, so I
didn't know. It's sort of very dead feeling.

10 I'm a master's-level graduate of the 11 university, health sciences, and I understand the 12 scientific method. I understand that you use it to get the results that you get, but I'd like you, just for a 13 moment or two, to consider something broader than that, 14 because after all, we are human with the ability to 15 16 think about more than one thing at a time. You are 17 smart people, brilliant in many cases, I'm sure, and 18 I'm asking you to just think bigger for at least a 19 while.

Think about nonhuman animals, and there are things that don't -- I'm sorry. I can't read my writing. You know a lot about them, but you seem to deal mostly with biochemical aspects. What about the emotional aspect of these nonhuman animals, mental, social aspects? There's more, but those ones are important. Have you ever looked into the eyes of an
experimental animal and seen life and seen fear and
seen sadness and pain and loneliness, more things?
Even once in a while, you've seen happiness, but that's
most likely to have been in the eyes of your own pets
or companion animals.

I would love to have a human-to-human talk about some of these things with some or all of you, no antagonism, just looking to learn from each other. You are very smart. I know that. You can figure out ways of doing science without denying the freedom and lives of nonhuman species. I'm sincere in asking you to think about this and to talk about it. I know --

14JANE SULLIVAN: Margaret, I'm sorry to cut15you off, but you're quite a bit over time.

16 PUBLIC COMMENT: All right. Thank you. 17 JANE SULLIVAN: And I encourage you. I'm 18 happy to talk more about this if you want to contact me 19 directly.

20 PUBLIC COMMENT: Okay. I didn't get the 21 information when you had it up on the screen, so if 22 there's a way that you can.

23JANE SULLIVAN:Let me give you my email24address right now.It's jmsull@uw.edu.

25 PUBLIC COMMENT: Thank you, Jane. I will be

1 in touch.

JANE SULLIVAN: Okay. Does anybody else want to make a comment?

PUBLIC COMMENT: Yes, I would. I'd just like 4 5 to refer back to the incident that you're not talking 6 about again with the primate that was left in the run. 7 Jane indicated that that animal was fine in this meeting, yet at the last meeting, it was reported that 8 9 that primate was dehydrated and had been left there for 10 12 hours, which does not seem fine to me. So it's a little troubling that you deem a dehydrated animal to 11 12 be just fine.

I also would like to know what happened to the male primate that escaped and then was locked in solitary for two months. I'm not sure if you let him out yet. I certainly hope so. There's no follow-up on that one.

18 With regards to the AVMA guidelines that they 19 updated in January, it's a little disturbing that those 20 still apparently have not been implemented throughout 21 the entire facility when all it takes is a change in 22 the flow meter, I quess. So it doesn't seem -- again, 23 I'm just not sure why it takes so long for somebody to update AVMA guidelines that went into effect six months 24 25 ago.

For yet another meeting in a row, you haven't talked about any protocols that have gone before the full committee. I still find that extremely suspicious. It's been, I feel like, a year since any of the protocols have been brought before the full committee, and it really just seems pretty shady for this committee to not be discussing that in a format so the public can be aware of what's going on. And that's it. JANE SULLIVAN: Thank you. Is there anybody else who'd like to make a statement? Okay. Everybody, thank you very much, and stay safe. (Meeting adjourned at 3:48 p.m.)

1	CERTIFICATE
2	STATE OF WASHINGTON)
3	COUNTY OF KING)
4	
5	I, a Reporter and Washington Certified Court
6	Reporter, hereby certify that the foregoing public
7	meeting was taken stenographically before me on
8	June 18, 2020, and transcribed under my direction;
9	That the transcript of the proceedings is a
10	full, true and correct transcript to the best of my
11	ability; that I am neither attorney for nor a relative
12	or employee of any of the parties to the action nor
13	financially interested in its outcome.
14	IN WITNESS WHEREOF, I have hereunto set my
15	hand this 5th day of July, 2020.
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1	UNIVERSITY OF WASHINGTON
2	INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC)
3	MONTHLY MEETING
4	
5	Verbatim Transcript of Proceedings
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7	Via Zoom
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1	Seattle, Washington Thursday, July 16, 2020
2	2:30 p.m.
3	
4	JANE SULLIVAN: I will open the meeting. Is everybody good? Okay.
5	So first announcement today, I want to welcome our new IACUC member, Kate. Kate is a vet with
6	the primate center who has served as an alternate for Charlotte for the past couple of years. And I'd also
7	like to express a huge thank-you to Charlotte who was our longest-serving member. She's been on since 2008,
8	so certainly deserves a break, and she'll be swapping positions with Kate to become an alternate.
9	Before we move on to our first item of business, I'd like to provide a little context. So
10	full committee review, or FCR, has traditionally been a mechanism to keep the IACUC informed about protocols.
11	And the protocols that have come up for FCR have usually been ones that propose using procedures or
12	tests that deviate from our currently approved practices. What some of you may not know is that the
13	decision to call for FCR usually comes only after extensive discussion with the research team to see if
14	the scientific goals of the project can be achieved with approved procedures and tests. These discussions
15	most often lead to modifications that bring protocols into alignment with our accepted practices, and this is
16	why the IACUC typically approves the protocols it reviews, because we've already done that back work to
17	make sure that they're going they're consistent with practices that we have previously approved.
18	But for many months now, this process has actually been working so well that we have not had any
19	protocols that have raised significant unresolved concerns warranting an FCR. And I take that as a
20	positive sign, but it has meant that the IACUC has not had the opportunity to hear directly from researchers
21	about their scientific projects. So Kim and I have been talking about ways to
22	increase transparency and better educate the IACUC, and we've decided to start bringing in more researchers to
23	tell us about their science without calling for FCR. And I want to make it clear: This absolutely does not
24	replace FCR. It's just a different mechanism to give us more flexibility in keeping the IACUC informed,
25	especially when we don't have protocols called for FCR. So our first presentation and discussion

1 using this new format today will be on a new mouse model for studying malaria, and we have Dr. Marion 2 Pepper and a post-doc from her group, Dr. Gretchen Pritchard, here. So thank you so much for joining us, 3 and I will ask Marion to take it away. MARION PEPPER: Well, thank you very much for 4 having me. We actually have Genevieve Tauxe who's here, a postdoctoral researcher, instead of Gretchen 5 because Gretchen just had a baby; so Genevieve will be filling in. 6 JANE SULLIVAN: Congratulations, and my apologies. 7 MARION PEPPER: Yeah. So I'm excited to be here and talk a little bit about our research and what we're trying to do here with this new mouse model of 8 Plasmodium infection. 9 So my lab is in the immunology department here at the University of Washington, and we study infectious diseases. And it doesn't take anyone at 10 this point to understand how important understanding immune responses to infection are. All you have to do 11 is just look at the news, right? We all know that 12 we're in the midst of a pandemic, and understanding how best to fight off infection or protect people against 13 infection through vaccines and the development of better drugs is clearly of the utmost importance. And so that's what my lab really works on. 14 And one of the things that we've been working 15 on for the last decade is trying to understand how to better protect people from malaria, which kills somewhere between 500,000 and a million children, 16 largely, a year. It's an enormous problem, and there's an enormous global health burden because of it. 17 And so what we do is we focus on both the human immune response to malaria, but we also focus on mirroring 18 models of malaria infection. Mice have been infected with the parasite 19 that causes malaria called Plasmodium for thousands of 20 years, and so we use a mouse model of a Plasmodium parasite that was originally found in the thicket rat 21 in Africa. And it can recapitulate a lot of similar symptoms that we see in humans so that we can work on developing vaccines and therapeutics. 22 For those of who you already know what the 23 malaria disease is like, I apologize. But for those of you who haven't really focused too much on this, just 24 to give you a brief overview of how this parasite is transmitted, a mosquito will take a blood meal, meaning 25 that they will ingest blood, which is required for the female mosquito to lay eggs. They cannot actually lay

1 eggs unless they've fed on blood. And then the mosquito, when it takes a blood meal, can take parasites from infected people. 2 The parasites develop in the mosquito, and then when they 3 next bite another person, they can deposit those parasites into the next person. So it's a cycle of 4 propagation between people and the mosquito or mice and the mosquito, if it's a malaria parasite that is trophic to the mouse. 5 And so what happens when a mosquito bites and 6 deposits these malaria parasites into the skin is that the parasite will then travel through the body to the 7 liver, and it will take residence in the liver where it will initiate an infection. And for about a week, you will have a symptom-free infection as the parasite is 8 growing, and that stage of the infection is called the 9 liver stage of infection. Because there are very small numbers of parasites at this time point and because there's no 10 real disease associated with it during this stage, that portion of the parasite's life cycle is a major target 11 of both drug development and vaccine development. Once 12 the parasite escapes from that stage of infection, that's when symptoms start. That's when the fevers 13 start, the respiratory problems, and the parasite divides like crazy and becomes really hard to control. So understanding how to actually control the infection 14 in its early nonsymptomatic or asymptomatic stage of 15 infection is really important for creating a good vaccine. Now, one of the things that we've studied 16 over the years is how that infection starts, how the immune system responds to it, but what we've had to do 17 over the years is take malaria parasites and inject them straight into the blood instead of allowing the 18 parasite to infect through the skin where it would normally be deposited by the mosquito. We now know 19 that the skin and the tissues underneath the skin 20 actually have their own responses, and they're key parts of the immune system that we're actually skipping 21 by injecting the parasite straight into the blood. So what we decided to do was to build an insectary, which a lot of other universities have done 22 as well, so that we can do the more physiological route 23 of infecting parasites via mosquito bite into the mouse. And what this will allow us to do is cycle the 24 parasite between the mouse and the mosquito so that we can test how we can create good immunity in the skin to 25 prevent infection and to control that infection at that

very early time point before symptoms start and before

1 people are dying, which is the really critical part here.

2

3

4

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So the insectary has been developed, and we are now rearing mosquitoes in the insectary. And what we would like to do is use these mosquitoes to do what we call "mosquito-bite challenges" of mice, so the mice, instead of being injected with the Plasmodium parasite, will be -- the parasite will be delivered through the more physiological route via the mosquito.

And so this will be sort of a two-pronged 6 effort because we'll need to propagate the mosquitoes, so they will need to feed on the mice, and then we also 7 need the infect the mice later with infected mosquitoes. So it's going to be this sort of two-pronged approach that we want to do, that Genevieve 8 can also talk about more. But we're hoping that using 9 this more physiological route of infection will allow us to really focus on what are the key immune components that prevent the spread of that parasite 10 into the more symptomatic and more deadly phase of the 11 malarial disease.

So that's sort of the overall broad picture, and what I will do now is pass it to Genevieve so that she can tell you little bit about the specifics of our model.

GENEVIEVE TAUXE: Okay. So thanks, Marion. 14 So I just wanted to give everyone a broad overview of how this procedure works and how we use the 15 mosquitoes to either inoculate mice with Plasmodium, as Marion described, or just to get a blood meal so we can 16 propagate the mosquitoes. So we do this, and we have now put together a dedicated facility inside of the 17 Brotman Hall animal facility.

So that is our new insectary, and it has been designed in accordance with the arthropod containment level guidelines. So that's a whole checklist of structural controls to make sure that if we're handling mosquitoes that might have a parasite like malaria, that we're doing it safely. There's no opportunity for them to get out of the insectary or even, hopefully, to even get out of their cages. And then, also, in the event that they do get out of their cages, of course, we have protocols to manage that as well.

So rodent malaria is considered an ACL-1 hazard. So if you're familiar with biosafety levels, it's sort of analogous to that. Rodent malaria is not able to infect humans, and so we treat it with some due caution, but we don't need to go to extremes. So the way the procedure actually works with

So the way the procedure actually works with the mice is whenever we need to have a blood feed occur

for the various reasons that Marion described, the procedure is actually quite similar. And in each case, we'll anesthetize the mouse, lay it on top of a cage of mosquitoes, and then allow the mosquitoes to bite through the mesh of the cage. And so I think we sent a slide that hopefully you can just get kind of a visual reference so you can see what the cages look like and have that in mind.

5 So you can see that this on the left is our standard stock cage for holding adult mosquitoes. The 6 top and most of the sides are made of just a mesh screen that the mosquitoes cannot fly through or crawl 7 through, but they can bite through. And so when you lay an anesthetized mouse on top of the cage, the 8 mosquitoes are able to access the mouse without escaping. They don't have any opportunity to get out.

9 If we're using a smaller number of mosquitoes -- for example, for an experimental 10 inoculation with malaria parasites -- then we can also use these smaller cardboard cages that you can see on 11 the right. These are just ice cream pint cups. They are modified to have a mesh top instead of a cardboard 12 top, and so they function pretty much in the same way.

And so we allow the mosquitoes to feed to 13 repletion. Depending on how many mosquitoes there are, this can take up to 30 minutes. And they will actually distribute themselves across all of the available hosts 14 that they can access. So if there's multiple mice, 15 they'll spread out across all those mice and across the So if the mouse is laid ventral side down, whole body. then the mosquitoes will distribute themselves across 16 that whole underside. So when we do this, we do -- we are planning to just have a small cloth over the mouse. 17 That's both for thermal support and also to provide a dark environment for the mosquitoes to feed. 18

So once that is completed, then the mouse 19 will be returned to a recovery cage and allowed to recover from the anesthesia, just as we do after normal 20 procedures. And one of the nice advantages of working with mice is they actually don't have a histamine 21 reaction to the mosquito bites. So that means that when the mouse recovers, it actually does not have any 22 apparent discomfort or itchiness from the mosquito And so then, once the mouse is recovered, we bites. 23 return them to their home cage, and we'll monitor them for the next several days to weeks for anemia.

24 So we've been working with the veterinary staff, and I'd like to thank Dr. Stocking for helping 25 us determine the appropriate number of mosquitoes to use per mouse so that we stay within the guidelines of 1 the UW policy on blood collection in lab animals. So all the details of that will be in the written 2 protocol.

So that's how it works. I guess I'll pass it back to Dr. Pepper or whoever else who might have questions.

4 MARION PEPPER: Yeah. So for today, I think that's all we wanted to tell you about, and we're very 5 pleased to have this important new research facility as part of the University of Washington. And hopefully, 6 we can be ready for the next pandemics and deal with the ones that we have if vector-borne diseases are 7 coming our way. So we think this is a really important addition, so thank you for listening to it.

8 JANE SULLIVAN: Thank you very much for telling us about it. I have to say I was especially 9 relieved when I read about the lack of a histamine response. As I was reading through the protocol, I was imagining myself as one of those little mice. 10 So that -- my understanding is that really focuses the 11 potential harms of this procedure to the blood loss that is associated with the bites, and it sounds as if 12 you and Kim have worked out a good strategy for making sure that that stays within the appropriate limits.

I'll open this up now to members of the IACUC, if you have any questions that you'd like to ask about this protocol that should be coming up for -- I guess it will be as an amendment for review soon, very soon. So this would be a good time if members want to ask some questions directly.

16 FARREL (RIC) ROBINSON: I have a couple of very basic questions. When I thought about mosquitoes 17 biting mice, it occurred to me that the fur on the mouse could be a barrier to the mosquito being able to 18 get blood. I assume that that's no trouble, but I would love somebody to explain to me why that's true.

19 GENEVIEVE TAUXE: I can confirm that's not really a problem. Especially on the underside of the 20 mouse, the fur is quite thin. The hairs are short, and so relative to the length of the proboscis, the 21 mosquitoes are able to reach past it without any problem at all.

FARREL (RIC) ROBINSON: And is there any way to confirm how many -- since there's no histamine reaction, is there any way to confirm that the mouse has been bitten or how many bites the mice have gotten or any kind of measurement like that?

GENEVIEVE TAUXE: Sure. The way we normally 25 do that is actually by looking at the mosquitoes. Once the mosquito has taken a blood meal, the abdomen is

actually quite obviously distended and red. So if 1 you've ever been bitten by a mosquito, you've probably 2 seen that. FARREL (RIC) ROBINSON: I don't like to think 3 about it. Thank you very much. KEN GORDON: Is there any way that you can stop us from having the histamine reactions? Because I 4 hate being bitten. 5 MARION PEPPER: The other thing that Genevieve eventually will want to work on is learning 6 about mosquito behavior and who are they selective for. So, you know, someday we can figure that out. That 7 would be helpful too. DAVID MACK: I just have -- it's not so much a protocol question. You said others are doing this. 8 I'm interested in how unique is this through-skin 9 delivery approach, because it is important to mimic nature as much as possible. How many other groups have this capacity? 10 So at this point, it's being MARION PEPPER: done at the NIH. Also, there's an insectary that was 11 just started this year at the University of Oregon. 12 Johns Hopkins also has an insectary. And I think this is going to be more common as people more and more try to recapitulate physiological routes of infection. 13 I think that these are going to be really important research tools so that we can get the most rigorous 14 data possible to really translate this into human 15 health. DAVID MACK: That's fantastic. MARION PEPPER: It's been great. We have 16 ongoing Google Docs that we share. We have all been 17 talking to each other a lot over the last year as we've put this together, so it's been a really nice collaboration. 18 DAVID MACK: Thank you. STEVE LIBBY: Doesn't Rocky Mountain Labs got 19 a big process like this? And also, Texas A&M University has got a big insectary arbovirus program 20 there. I mean, theirs are huge. I know of like three labs down there doing that. 21 MARION PEPPER: Yeah. And in England. 22 They're popping up all over, yeah. STEVE LIBBY: Sorry I'm late. I got sucked 23 into a Coxiella problem, so --JANE SULLIVAN: Any other questions? Okay. 24 Thank you so much. MARION PEPPER: Thank you for listening. 25 KIM STOCKING: Thank you. Appreciate it. JANE SULLIVAN: Next, we will move on to

approval of our June meeting minutes, and I will just 1 ask, does anybody have any comments, changes, 2 suggestions before we take a vote? Okay. I will make a motion that we approve the minutes as written, and 3 I'm going to remind you all, IACUC members, have your video turned on, raise your hand so we can see it, say your vote, and also raise your blue hand at the 4 appropriate time so that Tony can accurately calculate 5 the votes. So I will make a motion to approve the 6 minutes as written. Can I get a second? FARREL (RIC) ROBINSON: Second. 7 JANE SULLIVAN: Thank you. All in favor, say "aye." 8 BOARD MEMBERS: Aye. FARREL (RIC) ROBINSON: Where does one find 9 the blue hand? JANE SULLIVAN: Go on "Participants." Click on "Participants," and then it's at the bottom of the 10 "Participants" screen. 11 Tony, can I just ask you for confirmation? Do you have everybody's vote registered? 12 TONY NGUYEN: Yes. JANE SULLIVAN: Okay. So if you raised your hand before, click it again so it comes down. I want 13 to ask if anybody's opposed to the meeting minutes, and is anybody going to abstain because they did not attend 14 last month's meeting? 15 Okay. With that, we will move on to the attending veterinarian's report. KIM STOCKING: All right. So I always like 16 to start out with a bit of good news. So for 17 adoptions, we had one ferret that was adopted out in the last month. So it went to a nice home. 18 Training program updates. The revised Introduction to Rodent Surgery online course is now live. So this is a revision of the online content that 19 was done by our instructional designer. He did a 20 fantastic job making it more engaging and hopefully just a better sort of online learning experience for So if anyone on the IACUC is at all interested 21 folks. in taking a look a that, we certainly can send you a link out to the learning management system, and you're 22 welcome to take a look. Feedback is most definitely welcome, so take a look if you get an opportunity. 23 IACUC metrics, I encourage you to see the meeting documents for that. 24 I think I mentioned this at the last meeting, 25 but I'll remind you again. So we're going to have a Hoverboard upgrade coming in mid-September. So we're

1 going to be going to Version 9.2, which I think -- even though there's a bit of a learning curve associated 2 with this change, I think people are really going to like it. So we are planning on starting training in 3 mid-August, and the plan is to start with OAW and OAW staff as well as IACUC members being in that first 4 group of training.

So be on the lookout for some training opportunities coming up in August, and I encourage you 5 to take advantage of it. I know the team is working on 6 all kinds of different types of learning documents, you know, just ways of sort of saying here's how it is now, 7 here's what it's going to look like in the future. So they'll be Zoom, webinar, all kinds of different things. They're doing quite the job in trying to come 8 up with plenty of learning materials, not only for us, 9 but also for the researchers because we're obviously going to have to roll it out to them as well. So be on 10 the lookout for that.

Just a brief mention about COVID impacts. 11 Basically, there really hasn't been anything now that's really come up. I mean, animal care and veterinary 12 staffing has continued to be adequate, and therefore, we haven't had to make any modifications to husbandry 13 practice at this point. So again, kudos to the animal care and veterinary staff for continuing to do a really 14 great job day in and day out taking care of animals.

So I wanted to talk, give an update on the implementation of the new rodent CO2 euthanasia flow rate. So as people will probably remember, the AVMA changed the flow rate, their recommendation for the flow rate, and OLAW has indicated that they expect institutions to make the changes in the flow rate by no later than October 1st of this year.

So unfortunately, COVID has had a little bit of an impact as far as our rolling out of this change because we've had to do some equipment changes and some other things. But DCM is very busy working on this now in the DCM-managed spaces to get the equipment upgraded, and they plan to have the upgrade completed in August. So they are very busily working on that.

And I saw a notice, I think it was yesterday, that the Brotman facility has now been switched over. So the plan is to start at South Lake Union and then work their way up on to main campus. So researchers will be notified as those changes are made via a Listserv.

And so, again, just a reminder to site 25 visitors to, when you're visiting the lab procedural spaces -- and I'm not talking about the DCM vivarium

1 spaces. I know people have gone into the vivarium spaces, and we're aware that those changes have not 2 been made yet. So you don't need to note those changes as you're going through a DCM space, but rather I would 3 ask that you guys focus on the outside procedural lab spaces where they're doing CO2 and verify whether they 4 have made the equipment changes, the flow rate change, as well as any signage that needs to be updated. And if you don't see that, remind them of it, make a note 5 of it, and then I'm asking the OAW liaisons to follow 6 up directly with those groups. So just a reminder that would be very helpful for us if people are out in those 7 labs looking. Any questions on any of that? Okay. So facility issues, there are none to report 8 this month. Protocol monitoring, we continue to have 21 9 total protocols. Again, due to coronavirus impacts, minimal activity really going on on a lot of these protocols. But for those that are doing procedures, 10 the animals have been doing very well, so I don't have 11 anything really adverse event-related to report out on that. 12 I was reminded last month when we were talking about the semiannual program review that there is an outstanding pilot study involving CHIMERA in 13 So this is a traumatic brain injury model ferrets. that we had asked the group to do a pilot study on. 14 And it is under vet monitoring, and I circled back with 15 the group to find out if they have finished their data-crunching yet. And apparently they have not quite completed their data analysis yet, but I reminded them 16 that they are supposed to come back to the IACUC and report out their results. So I will continue to circle 17 back with that group and make sure that they do come to the IACUC and make that presentation. They also 18 indicated to me that they still have no plans to do additional experiments with this model at this time. 19 So for adverse events, I don't have any to 20 report for Seattle. I did want to talk about one noncompliance from the last month. This involves 4290-01. Five mice 21 were tail-tipped for genotyping at six weeks of age, 22 and one mouse was reported to vet services for a complication from that procedure. Upon investigation, 23 it was determined that the protocol doesn't include tail-tipping in mice older than 28 days. The group 24 also did not use anesthesia or analgesia for tail-tipping these older mice as outlined in our IACUC 25 policy on genotyping in laboratory mice. The OAW liaison met with the PI to discuss

1 this incident, and they reviewed both the IACUC policy on genotyping as well as the genotyping information 2 currently provided or approved on their protocol. The group does have ear-punch as an approved 3 tissue-collection method, and that is the method they plan on using in the future if mice are older than 28 4 days when they need to be genotyped. So they are not planning on adding tail-tipping to this protocol. Ιt 5 is recommended that all personnel in that lab review the genotyping methods that are approved on that 6 protocol as well as to review the genotyping in laboratory mice policy, and this was reported to OLAW. 7 So given the fact that there was a protocol noncompliance as well as a noncompliance related to an 8 IACUC policy, I would like to move that a letter of counsel be sent to the PI with a response back as to 9 how they will prevent this from happening again. JANE SULLIVAN: Can I get a second? Or does 10 anybody want to have a discussion before we have a second? We'll definitely have a discussion. 11 STEVE LIBBY: I'll second that one. JANE SULLIVAN: Okay. Now let's open it up 12 for discussion, then. Anybody have any concerns about this being a letter of counsel versus something more or 13 less? FARREL (RIC) ROBINSON: A letter of counsel 14 seems appropriate to me, but I'm just curious why this happened. Did they just forget that there was an age 15 limit on their tail-tipping, or what was the failure? KIM STOCKING: The failure related to the 16 fact that they had had a turnover in lab personnel, and I think it was also somewhat coronavirus-related as well. So the person who ordinarily would have been 17 genotyping, I think there was a delay in getting that done. And so -- and the person who did end up doing it 18 was not the typical person who was ordinarily doing 19 that procedure, and so they just didn't know. STEVE LIBBY: Except that, Kim, you know as 20 well as I do the date of birth is right on the cage Alls you got to do is count. card. 21 KIM STOCKING: Yeah. JANE SULLIVAN: Well, hence the letter of 22 counsel. KIM STOCKING: Yes. 23 JANE SULLIVAN: Any other comments? Okay. Let's vote. So again, turn on your video, turn on your 24 sound, throw up your hand, and raise your blue hand if you approve. 25 BOARD MEMBERS: "Ave." Do you have the vote, Tony? JANE SULLIVAN:

1 TONY NGUYEN: Yes, I do. JANE SULLIVAN: Okay. So you can lower your 2 Any opposed? Any abstaining? Okay. hands. Thank you. 3 KIM STOCKING: All right. So then from Arizona, I will report that there are no facility items 4 to report this month. There is one adverse event from down in Arizona, and I will let the interim director of 5 the primate center talk about that particular incident. JANE SULLIVAN: So Sally Thompson-Irtani has 6 come before us, as promised, to update us on a number of issues related to the primate center. Thank you, 7 Sally. SALLY THOMPSON-IRTANI: Yeah, definitely. Can everyone hear me okay? Great. Okay. 8 So thank you again for having me join you at 9 the IACUC meeting today. It's really important, and I'm always available to come and talk to the committee. I'm the interim director of the primate center here at 10 University of Washington, and I do appreciate this opportunity to address the committee. 11 I know that the previous director spoke to 12 the committee a few years ago, so some of you may remember his comments. But to start off, I would really like to give some background and context for the 13 new members of the committee and some general updates on some changes at the primate center. And I will 14 conclude with updates on some of the recently reported 15 adverse events and report out on the new adverse event that was just mentioned by the attending veterinarian. 16 So the primate center, just to give you context, is one of seven national primate research centers, with a mission to improve human health by 17 providing high-quality research support and a stable supply of nonhuman primates to support health-related 18 research. The primate center has a commitment to supporting animal welfare and compliance for 19 scientifically and ethically justified use of nonhuman primates in biomedical research. 20 We have an active outreach and global program with our center for global field studies which has the 21 mission to facilitate and provide field-based educational research and outreach service learning 22 opportunities for students and professionals from the 23 University of Washington and from partnering institutions around the world in areas related to 24 global health and the environment at the human-environment interface. 25 The primate center is currently in its 59th year of NIH funding support and has been housed in and

supported by the University of Washington for its duration. The primate center has had several transition points throughout its history, and with recent financial challenges, there was a task force put in place in December of 2018 by the University of Washington provost to review the status of the center. The primate center task force completed its analysis, and the provost's office is reviewing the recommendations for our future sustainability and support. The task force identified an opportunity to shift the supporting reporting structure of the director/interim director -- me right now -- to the office of research to more appropriately align with other University of Washington reporting relationships and align with the structure of the other seven primate centers. In addition, the task force identified that it was time to rotate the PI for our P51 grant, which is our major source of funding, and we are rotating this now between the health sciences deans. So effective May of this year, the primate center reports directly into the office of research for University of Washington support, and the director of the primate center reports to the vice provost, and the PI for the P51 grant is the dean of the school of pharmacy. So the primate center staff include personnel involved in daily animal care, behavioral enrichment, clinical care, research support, and administrative support staff. They have a common goal of maintaining animal welfare and supporting important biomedical Personally, I am continually inspired and research. impressed with the dedication and commitment that each of the employees bring to their job every day to ensure that they are doing their best. Unfortunately, despite everyone's efforts, there are adverse events that happen, and we feel it is our responsibility to alert the IACUC when these happen. I do want to be clear: When these incidents are reported, it is because we have a commitment to openness and transparency. What I don't report to you is all the things the staff are doing right, and I don't want that to get lost in the communication. Every day our staff are coming to work and doing an amazing job taking care of these animals. They come in all sorts of weather. Throughout this pandemic, these people have shown up to work every day and proven their dedication to the animals in their care. We are all committed, and we

all realize that there are opportunities for us to



not able to gain any more information. But we cannot report out on confidential personnel actions.

Are there any other questions on that? Okay. And then, as mentioned previously, I do have a new incident to report to the committee today that occurred in our breeding colony in Arizona. The facility in Arizona has pens where the animals are group-housed. One of the pens was under repair, and all of the locks were removed from the enclosure to complete the repairs. After completion of the repairs, the locks were put back on. The animals were moved back into the enclosure.

There was a lock inadvertently left off of the feeder box which goes on the front of the pen, and the animals were able to remove the feeder box from the front of the cage. This left a small hole at the front of the pen, and one of the juvenile animals was able to crawl out and climb the mesh of the adjacent cage. The animal crossed the facility and climbed towards the top of the other enclosure where the breeder male pulled his arm through the enclosure mesh. The juvenile sustained nonlife-threatening injuries to multiple digits and his left harm.

The husbandry technicians were able to separate the two animals and called the veterinary staff immediately. All injuries received prompt veterinary attention with appropriate analgesia. Due to the extent of the injuries sustained to the arm, which were not immediately apparent and worsened over time, there was concern about recovery of the digits, and the veterinary staff made the choice to amputate the arm two days later.

The animal is recovering well and will be reintroduced to its social group in stages. They're planning to move that animal into a larger cage over the next week to work on its balance and its rehabilitation.

To mitigate future instances of missing locks, whenever a cage is empty, locks will remain in place on the enclosure doors and feeders. Management and staff will review protocols and procedures. They actually have reviewed protocols and procedures to ensure all steps are taken to check locks and be reminded to check all locks every time they enter or exit an enclosure. Extra locks are also available in the anteroom.

Are there any specific questions regarding that incident?

So I do want to continue follow-up to let you know that the primate center is currently working to

improve our incident response and follow-up plan. We have historically worked hard to establish a strong program of training and responsibility. Our plan is to do a more thorough follow-up with root cause analysis and incident tracking, similar to what we worked on, seeing other primate centers representing, and do a united approach that will be across all of the centers. This is really so we can identify areas for improvement with onboarding and continued training and awareness. We are working with the attending veterinarian and our HR colleagues to ensure that whatever processes and procedures we do put in place are in compliance and respectful of our staff and colleagues. So I want to emphasize that we are all committed to animal welfare, biomedical support, and compliance, and we are also open to suggestions and appreciate being able to work with the IACUC to identify opportunities for us to make improvements. I think it's it. I am available to answer any questions or comments and anything that people would like to ask in terms of constructive improvements that we can do. JANE SULLIVAN: Thank you, Sally. Are there any comments, questions, concerns that any members would like to raise? Okay. It seems like you have done a good job of addressing all of the areas where we had concerns, Sally, and I appreciate you coming in and meeting with us. SALLY THOMPSON-IRTANI: I am always available, and I definitely will provide an update on our incident response tracking. I think we have a really good opportunity to make some big improvements there that I think we'll all feel better about. So thank you to all of you for giving me some time here, and I really do appreciate it. JANE SULLIVAN: Just let us know how we can help with the incident response project. SALLY THOMPSON-IRTANI: I definitely will. Like I said, I really appreciate everyone offering their help. JANE SULLIVAN: Okay. Then I think we can move on to what I believe is our final item of business, the semiannual program review, finalizing Bob, can you take us through the final steps. that.

BOB ENNES: I'm more than happy to. First of all, I want to thank everyone on the committee for helping my first effort to get the semiannual report done, especially Jane and Kim, who did a great job of editing the product.

So you should have all seen it and have it

available for review. It follows the same format that has been followed in the past with Laurie, with kind of one minor exception in that we realized that the last time we did the review, there's almost always a few facilities issues that are outstanding at the time of that review. So we wanted to provide a table in this one to let you know what the status of some incomplete ones were as of the last one. So in the Appendix B, you will see that table.

So next steps are for really any comments from you, the committee, on additions, changes to the report. We can certainly have that discussion some today if you'd like or you can email me privately as well. The other issue would be if there are any minority views, it's really, really important that you represent those to me or to the group, and I will include those in the report to the institutional official, Dave Anderson.

10 So at this point -- and then at the end of it, hopefully, we'll have the opportunity to provide 11 concurrence. And I know that Jane had a great plan for how we were going to do that.

12 Tony, do you happen to have the -- oh, that Tony. He's on it.

So this is something that Jane came up with as an example of what we would need from you related to the rules around this. Assuming that there is a concurrence, you could just send something like this to me, and I will include that in the report to the institutional official. So that would be really great. So if there's any comments or questions you would like to discuss now, it would be great; otherwise, feel free to send something to me individually.

JANE SULLIVAN: And you'll prompt us, also, 18 with an email when you want those concurrences, correct?

BOB ENNES: Yeah, I will. I would like
everything to be completed by the end of next week.
It's due to Dr. Anderson on July 30th, the end of the month, and that would give me a few days. But I'll
remind everyone.

JANE SULLIVAN: Thanks. Is there anything 22 else that anybody needs to talk about?

Okay. With that, then, I will close the meeting and ask if any members of the public who are on our Zoom would like to make a two-minute statement. And I'll let guys unmute yourselves. There you go, Rachel. Great. 25 PUBLIC COMMENT: Does anybody else want to

PUBLIC COMMENT: Does anybody else want to talk? Otherwise, I'll just go.

1 So I heard your song and dance and all about the no full committee review and all that kind of 2 I just want to take an opportunity to remind stuff. the IACUC of what your job is. 3 From the NIH, the IACUC is responsible for the oversight of animal care and use program and its 4 components as described in the Public Health Service policy on humane care in the use of laboratory animals and the quide for the care and use of laboratory 5 animals. Its oversight functions include an ongoing 6 assessment of animal care and use. And then there's a whole bullet point of what 7 the IACUC responsibilities include, and a lot of it is oversight of the animal care, but none of that includes praising researchers, having them on to talk about 8 things that sound nice, making them sound great. 9 You're there to do oversight for how the animals are treated, yet I continually hear basically propping up 10 the researchers that you are charged with overseeing. I feel silly, honestly, reminding you of what your job is considering that you are on this committee that is 11 supposed to be overseeing the health and welfare of 12 animals, yet you seem way more concerned with talking about how wonderful animal researchers are. 13 And I'm also disappointed that there was no detail about how long that male primate has been kept in solitary confinement, and there seems to be no 14 resolution on the issue with the Western facility. You 15 know, I quess nothing's going to be done, but it seems like you have a real problem at that facility if none of the staff are willing to talk to you. That's it. 16 JANE SULLIVAN: Thank you. Would anybody else like to make a statement? 17 PUBLIC COMMENT: My name is Wayne Johnson. 18 I'd like to make a statement. JANE SULLIVAN: Go ahead, Wayne. 19 PUBLIC COMMENT: Thank you. For any number of years, all across the country, I have spent hours 20 and hours and hours meeting with researchers in various facilities, including yours. One of the things that 21 always strikes me -- actually, two. First, generally, it's a good conversation. You're nice people, and you 22 make a good dinner companion. But secondly, many of you have animals. 23 Now, I'd like to ask you this. Take what Dr. Sullivan said seriously. Imagine yourself as a 24 little mouse. If you're a little mouse, would you really like to have infection from malaria? If you're 25 a little mouse, would you like to have that bite go straight into your blood?

More so, imagine, yourself, you're one of 1 Dr. Sullivan's cats, Sally and Thea. What if somebody 2 came to your house and said Sally and Thea are going straight into spinal-cut research? Cutting the spinal 3 cords of cats is a very, very frequent and common protocol, including formally, at least, at the 4 University of Washington. What would you do? Dr. Sullivan, you would bar the door. You wouldn't allow people to subject Sally and Thea to that. 5 Dr. Kim and Dr. Kate -- and welcome, 6 Dr. Kate -- said the following words, and I quote: "Τ solemnly swear to use my scientific knowledge and 7 skills for the benefit of society through the protection of animal health and welfare, the prevention and relief of animal suffering." They said those 8 words. 9 How can you preside over a facility like the regional primate center and say that you're for the best interests of animals? Which of these animals that 10 you own do you pet, and which of them do you subject to 11 traumatic brain injury, as those ferrets were subjected to with your approval? Which of the animals do you pet, and which of them do you keep in jail? 12 I have been to Auschwitz. I have been to 13 Birkenau. I have been to Dachau. And the University of Washington primate center has more in common than 14 differences with those facilities. Are you serious that you allow a veterinarian to come on here and --15 JANE SULLIVAN: Wayne, I'm very sorry, but you're significantly over your two-minute limit. But I do appreciate your comments. Thank you for attending 16 and for sharing your thoughts with us. I'll ask if any other members of the public 17 would like to make a two-minute statement. 18 PUBLIC COMMENT: Yes. This is Margaret. JANE SULLIVAN: Hi, Margaret. 19 PUBLIC COMMENT: Hi, Jane. I'm very sorry. JANE SULLIVAN: Oh, you're muted Margaret. 20 PUBLIC COMMENT: There you go. Thank you. Ι had in mind it started at 3:30, so I've missed the 21 whole thing and I'm very sorry. But my position is always we should find 22 alternatives for animal use as soon as possible. Ι won't get the time wrong next time. 23 JANE SULLIVAN: Thanks, Margaret. I'll go. Can you hear me? PUBLIC COMMENT: 24 JANE SULLIVAN: I can. PUBLIC COMMENT: All right. I'm glad Dr. Johnson brought up your cats, Jane. It does sound 25 like you are an animal lover, and after attending these meetings for several months, you seem like a very nice person. And I have the same question about how you can be okay with the torture inflicted on animals when you have your own at home that you appear to care about. The malaria researchers that were on --

Dr. Pepper, who sullies the name of the drink -- they said they had been working on this for ten years at that lab. So why haven't they cured malaria yet if those tests on animals are so effective? If they've subjected thousands and thousands of mice to malaria, why haven't they made progress that I've read about anywhere?

7 I'd also like to talk about, with those mosquito bites, both Ken Gordon and Ric Robinson said that they didn't even want to think about how painful 8 it would be to be bitten by that many mosquitoes. And 9 yet you're taking mice who don't have any chance to fend for themselves and forcing them to endure that, 10 saying that that's creating a natural environment and a natural way diseases are spread. I don't know how many 11 people that have malaria get it by being drugged unconscious and then placed where mosquitoes are intentionally forced to bite them. 12

With the nonhuman primates and the continued neglect, including an arm severed off of one, and the consistent refusal to hold anyone accountable, it sounds to me like Sally has got to go. The problem is when someone in oversight isn't communicating effectively to their staff, isn't training properly, isn't laying down the protocols. That's where the problem is.

You say, Sally, that you can't figure out who's accountable. You are accountable. You are the interim director, and you need to take some responsibility.

I am deeply troubled that not one of you who is charged with overseeing the care of animals in your institution had a single question about a primate having his arm ripped off in your care. Each one of you is failing in your responsibilities. You can continue to shake your head down there in the corner --I see you -- but this is your responsibility. This is your livelihood, and you seem to take it as a joke. Thank you.

23 JANE SULLIVAN: Thank you for your comments. Are there any other members of the public
24 who'd like to make a two-minute statement? PUBLIC COMMENT: Good afternoon, Jane. I

25 would ask that the other IACUC members check to see or actually ask Sally if the primate center workers have

been regularly tested for SARS-CoV-2. And if so, are they continually? What's the status of their tests? That's all. JANE SULLIVAN: Thanks. Are there any other members of the public who would like to make a statement? Okay. With that, I will sign off and hope that you all have a wonderful weekend, and I will see you next month. Take care. (Meeting adjourned at 3:29 p.m.)

1	CERTIFICATE
2	STATE OF WASHINGTON)
3	COUNTY OF KING)
4	
5	I, a Reporter and Washington Certified Court
6	Reporter, hereby certify that the foregoing public
7	meeting was taken stenographically before me on
8	July 16, 2020, and transcribed under my direction;
9	That the transcript of the proceedings is a
10	full, true and correct transcript to the best of my
11	ability; that I am neither attorney for nor a relative
12	or employee of any of the parties to the action nor
13	financially interested in its outcome.
14	IN WITNESS WHEREOF, I have hereunto set my
15	hand this 24th day of August, 2020.
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November 15, 2018 -

Senior Management Team

Monday, November 15, 2018 | 9:00 am – 11:00 am

Welcome back, Mike!

Attendees: Vanessa Quiroz-Hotz, Mark Clarke, Gail Ellingson, Sally Thompson-Iritani Mike Mustari, Jane Elliott Jim Murphy (out of office)

SMT, November 19, 2018





USDA visit update from last week – *Sally* – Visited last week, focused inspection to look at three complaints from OLAW letters – chain incident, reported a litsit that was unhooked overnight (animal was fine – but do not know if more than 12 hours), did a double dose of a drug. Did cite us for the chain incident, but not the other two. Not appeal due to modification of the device.

Update on AZ incident – animal down, human in surgery.

The other incident – Western had a tech doing a cage change out and one animal went to cage wash, but was found.



Members Present:	AB AS CG CH FRR JE	JM JS KL KS LJE ML	MS SH SL TH (remote)
Members Absent:	JB	JPVH	

Opening Business

• The IACUC Chair called the meeting to order at 2:32 pm.

Confirmation of a Quorum and Announcement

• Quorum was confirmed.

IACUC Training

- Kidney-on-a-Chip EK
 - EK presented on their work, "Kidneys-on-a-chip".
 - Can help reduce the number of animals needed
 - Can refine animal use via targeted toxicity testing
 - Cannot replace animal use just yet.

Protocol Review

- AMEND201801394 (4167-01) LJE
 - LJE concerns: number of craniotomies; is there room for three on a monkey skull?
 - Researcher response:
 - Showed a skull and chamber
 - Diameter of chamber is small compared to skull
 - Previous craniotomies heal relatively quickly and healing confirmed prior to placing subsequent chambers
 - Discussion
 - Time for regrowth of bone
 - History of this animal's craniotomies

Motion was made and seconded: To approve the amendment as written.

Discussion: None

Vote: Approved with 14 members voting in favor, 0 against, 2 abstentions.

- PROTO201800085 (2448-12) LJE
 - LJE concerns: Why recapitulate a study done elsewhere; why squirrel monkeys?
 - Researcher response:

- Squirrel monkeys because group has extensive experience, relevant to this gene transfer model, with the species. Integration of the altered gene into the retina has been demonstrated in this species, not in others. Other species would require full development and proving gene integration, thus many more animals and time.
- Recapitulate because funder asking for demonstrated reproducibility at multiple sites/groups. UW will learn techniques from the other site, they will learn techniques from us.
- LJE concern: Lab is hoping to use PRT (positive reinforcement training) to avoid sedation events, but wants approval of sedation/anesthesia in case this is not successful. Does the lab and WaNPRC have the commitment to PRT, and resources to accomplish it?
- Researcher response:
 - KM from WaNPRC showed the training approach to be taken; progressive steps; equal focus on training the trainer as on training the animals; Goal is to give the animal "choice and control", so they chose voluntarily to present for the testing.
 - Current PRT training is going well.
 - Group has key person dedicated to learn and use PRT
 - Because collaborating institution has developed the model, UW will need to conduct fewer aversive tests to show efficacy, making PRT easier to accomplish

Motion was made: To approve the protocol as written.

 Point of order – there are two other outstanding questions from the committee that will require editing of the protocol, so would recommend sending the protocol to designated member review rather than approving as written.

<u>New Motion was made and seconded:</u> To send the protocol to DMR for approval <u>Discussion: None</u>

<u>Vote</u>: Approved with 16 members voting in favor, 0 against, 0 abstentions.

Discussion ensued about making concerns related to FCR items clear to all members ahead of time.

- They should be in the history as comments in HoverBoard. All members should review ahead of time.
- Member presenting the item at the meeting should enumerate concerns why and what -- up front in their presentation.

Approval of the IACUC Meeting Minutes

- The IACUC Chair called for the approval of the October 18, 2018 meeting minutes.
 - LJE said she felt they did not reflect the tenor of some discussion. No other changes.

Motion was made and seconded: To approve the minutes as written. Discussion: *None* Vote: Approved with 11 members voting in favor, 1 against and 4 abstentions.

Benefits Story

• This month's benefit story is on the development of a vaccine that protects against breast cancer, and it comes from Dr. Mary Disis' lab in the UW Center for Translational Medicine in Women's Health.

Triple-negative breast cancers are among the most aggressive, and are associated with high relapse rates and low overall survival. The best outcomes have been seen in patients whose own immune systems have kicked in, sending out tumor-infiltrating lymphocytes to target the cancer. Unfortunately, only a small number of triple-negative breast cancer patients end up making enough of these lymphocytes to successfully fight the disease.

The Disis lab is working to develop vaccines that are specifically directed against proteins made by these breast cancers, in order to boost the natural immune response and drive antigen-specific lymphocytes to the tumor.

Using a mouse model, the research team found that vaccines directed against a protein called HIF- 1α significantly enhanced the influx of lymphocytes, and inhibited tumor growth by 83%. Importantly, there was no evidence that the vaccine triggered autoimmune toxicity.

The HIF-1 α protein is expressed at high levels in the vast majority of triple-negative breast cancers. The anti-HIF-1 α vaccine has the potential to be a powerful weapon in our anti-breast cancer arsenal. Building on the success of research in animals, phase I clinical trials will be the next step for bringing this treatment to patients.

Cecil, Slota, O'Meara, Curtis, Gad, Dang, Herendeen, Rastetter, & Disis 'Immunization against HIF-1α Inhibits the Growth of Basal Mammary Tumors and Targets Mammary Stem Cells In Vivo' Clinical Cancer Research <u>23</u>: 3396-3404, 2017.

Attending Veterinarian's Report/OAW Director's Report - KS

• Facility issues:

Humidity: No items to report Temperature and lights: On 10/29/2018 ARCE

On 10/29/2018, ARCF, B148D lights did not turn on as scheduled. Issues was resolved that day.

• Protocol Monitoring:

Twenty-one total protocols. Of the protocols, 12 involve surgery, two restraint (and surgery), one conscious restraint, 2 tumor modeling, 4 miscellaneous (tape skirt, infection, water quality). Seven are inactive right now. 1 protocol has been removed from monitoring due to departure of the PI.

Follow up on Protocol 4417-01 last updated at September 2018 meeting: This protocol was added to protocol monitoring at the request of an IACUC member due to conscious restraint during an echocardiograph procedure. It has been previously reported that during the 5-minute procedure, certain strains of mice appear to tolerate the procedure well (no struggling); however, other strains (FVB) do not. FVB are a more aggressive strain in general and their struggling during this procedure may not be purely a sign of distress. The group has put in a significant change to the IACUC to provide scientific justification to perform it without anesthesia or sedation. The

amendment also clarifies this echocardiography procedure including a description of some acclimation procedures, release of the mice if struggling and return to vivarium until the following day and placing imaged mice in a separate cage so they don't update mice that are still to be imaged. Vet Services will continue to monitor during this procedure including use of an ultrasonic vocalization (USV) detector to see if mice vocalize during this procedure which may or may not be an indicator of distress. That said, one UW PI has used this detector and couldn't detect any USV during fear conditioning. The amendment is currently in committee review.

• Question re: 4417-01 on Vet Monitoring: Is there PRT for mice?

 Member answers: ML stated that PRT can be challenging in mice compared to other species and that rats are more amendable to it than mice.

- No Harm Benefit Subcommittee meeting this month.
- Submitted Concern:

A question was submitted to the Concerns email regarding the make-up of the IACUC members. The Chair responded with information that our IACUC meets regulatory requirements, is properly constituted and membership is voluntary.

• Adverse Events:

#1 - On the morning of October 17th approximately 33 sablefish (100% mortality) and 60 coho salmon (85% mortality) died due to a power failure that effected both the seawater and the oxygen supply to the tank water at the NOAA marine station. The likely cause was due to a fault in one of the main breaker panels for the pumps resulting in a power failure. This power failure lead to no circulating water in the tank and no oxygen supplied to the water. A low flow alarm call went out to 4 people, however they either did not get the actual alerts on their phones (due to the power failure) or failed to acknowledge the alerts until hours later. This is the first such incident involving the alarm system. Corrective and prevention measures taken:

1. The pump power leads and breaker have been replaced as well as new pumps installed.

The air blower system (that supplies added air to the tanks) will be transferred to a separate breaker from the pumps, so oxygen will be supplied if water is temporarily cut off.
 More responders have been added to the alarm call list and retrained on how the current alarm system works and how to acknowledge the alarms.

4. Install a redundant alarm system in the facility (on a different breaker panel) that will monitor water flow as well as water temperature.

5. Alarm systems will be tested to ensure functionality

This will be reported to OLAW.

• Questions and discussion re: fish deaths when pumps failed

- Will there be retraining, reevaluation of procedures to ensure response when an alarm is received?
 - Not a UW facility, so power of UW IACUC unclear
- *IACUC* would like more detail on how the alarm works and responsibilities to respond

• IACUC should be cognizant of these issues if use of this facility is proposed in the future

#2 - Flooding of 71 cages at SLU 3.1 on 10/27/18 due to issues with the Automatic Watering System (AWS) resulting in deaths of 1 adult and several litters of mouse pups. At this location, Facilities Management is provided by a vendor under contract with the School of Medicine. On 10/22 there was a low water level alarm and when that issue was addressed a small leak was noted in 1 of the 2 AWS pumps. On the afternoon of Friday, 10/26, without notification to any DCM staff or the vendor supervisor, a vendor Engineer shut off the water supply and the water outlet valves to Pump # 1 when Pump # 2 was running. Shortly after that, the AWS automatically switched to Pump #1 causing a large drop in system pressure and the system alarmed out to both DCM and the Engineers. The Engineers were not familiar with the alarm in question and erroneously checked a different system but did not contact DCM to question the alarm. 12 hours later when the system switched back to Pump #2, the 12 hour pressure loss resulted in leakage through some of the rodent cage water valves, randomly flooding 71 cages. Pump #1 valves were later reopened after their closure was discovered while investigating the cause of the cage floods. The vendor Engineers have been instructed on the importance of informing DCM about all AWS issues and to get approval before any system modifications are made. DCM is in the process of re-evaluating alarming of and alarm response to this system as well as looking into improvements in the specificity of RO system alarms to prevent misinterpretation in the future.

This will be reported to OLAW.

- Questions and discussion re: flooded cages at SLU 3.1
 - Timing of when leaks were discovered
 - Clarified was per expectation, when next Animal tech crew arrived in the morning
 - IACUC wants to register its deep concern about the contracted engineering support at this leased facility
 - UW School of Medicine is the lessee; Should start with the SOM facilities head
 - IACUC chair and AV to follow up
- PI follow-up to adverse event reported at the October IACUC meeting
- In response to the IACUC's Letter of Reprimand for improper euthanasia, the PI responded with a list of corrective actions that have been taken to prevent reoccurrence. The actions include a discussion of the issue with every member of the laboratory; a review of lab personnel training records to ensure that all are fully compliant and current with training requirements; the individual involved has undergone retraining in euthanasia procedures by AUTS; decided that all lab members will now use cervical dislocation as the secondary method for euthanizing mice; and the lab will review their euthanasia procedures annually at a laboratory meeting and maintain a record of attendees.
 - 0 No further action on response to previous letter of reprimand
WaNPRC ABC Supervisory Veterinarian's Report - TH

- Facilities items: No items to report.
- Adverse events:

On November 9, 2018 at 6:55 am veterinary services was notified that a 2 year old, female pigtail macaque had her right arm woven through the metal mesh of an indoor enclosure. The animal was promptly sedated and the mesh was cut to free the arm. Radiographs revealed a fracture of the humerus at the location of the proximal growth plate. The animal was started on non-steroid anti-inflammatories, opioid pain relievers, and the arm placed in a sling. The animal moved to a single animal cage and kept under video monitoring and ongoing pain management and supportive care until consultations with other veterinarians and an assessment of the response to anti-inflammatories. The arm remained in a sling with no change in swelling noted on subsequent exams and no movement of the fingers on the affected side occurred.

After discussions with the AV, the assistant director, and clinical veterinarians, euthanasia was considered the most humane option and performed the morning of the 11/13.

The incident has been reported to OLAW and USDA.

Standard Operation Procedures / Policies / Guidelines – KS

- Training VVC Designee SOP
- Review and Approval of Protocol Amendments
- Monoclonal Antibody Production via Ascites in Mice
- Permissible Weight Loss in Research Animals
 - This policy needs work. Withdraw from slate.
- Use of Complete Freund's Adjuvant (CFA) and other Adjuvants in Research Animals
 - Rename to add back in "Polyclonal Antibody Production"
- Genotyping of Laboratory Mice
- Tumor Growth Monitoring and Endpoint Criteria in Research Animals
- Radio or Audiovisual Use in Animal Rooms
- Rodent Cage Sanitation Frequency

Motion was made and seconded: To approve all as written except as noted above.

Discussion: None

<u>Vote</u>: Approved with 16 members voting in favor, 0 against, 0 abstentions.

Other Business

- Semi-Annual Report LI
 - LI will post in December meeting documents the suggestions made in the previous semiannual report. Please review. Let LI know any data or other information you need to evaluate progress on the suggestions. IACUC will discuss progress at the December meeting, and any new suggestions.

• Neuroscience NHP Repair Implant Longevity Subcommittee Report – FRR

- Subcommittee has decided initial focus is eye coils. They have identified desired information and are identifying potential data sources for that. Students may be available to do data analysis.
 - FRR trained the IACUC on how an eye coil works and is implanted.

• Feedback on Daily Packets – AS

- AS reviewed that to use the new 'in review' reports, you must already be logged into HoverBoard.
- Discussion: Some members have seen the daily packets as more work
 - OAW will review to ensure no one member is receiving an unfair share of assigned reviews, considering full protocols versus annual renewals and amendments.
- Members like the new reports.
- Daily packets are good for the researchers.

The Chair reminded members to send any suggested items for an IACUC meeting to OAW no later than 2:30 pm the preceding Thursday. Include details of what and why. The planning group can then properly assess the proposed items.

Closing Business:

The Meeting was brought to a close at 4:49 pm. The floor was opened to public comment.

December 3, 2018 -

Senior Management Team

Monday, December 3, 2018 | 9:00 am - 11:18 am

Attendees: Vanessa Quiroz-Hotz, Mark Clarke, Sally Thompson-Iritani, Mike Mustari, Jane Elliott (via GoToMeeting), Jim Murphy (via GoToMeeting) Gail Ellingson (out of office)



Our of Cage Incidents – Ben/Sally

There are currently six different styles of cages, it is not in the best interests of the staff and animals. There have been a number of "out of cage" incidents. Last week, there were a lot of incidents with the Seattle-style cages in the ARCF. The Seattle-style was designed by the WaNPRC in the 1980s, they have been useful, but they are separate from the racks, they were designed to be in racks. They are about 110 lbs just for the cage. All the newer cages have a vertical capability. The Seattle style cages need to be lifted and moved and each requires about four locks. Newer cages are easier to clean, move, etc. There is some resistance to getting rid of certain styles of cages. Sally would like SMT to discuss the needs of the cages. We have enough cages, we do not have to order new ones right away, but we need to get rid of the Seattle-Style. We do have to get more Group 5 cages.

No need or plan to currently replace all Seattle-style, but we can sell them for scrap metal as we may not have interested buyers.

Though, there are some who prefer this cage.

Jim – Group 4, Seattle-style is the group horse in AZ. They have modified them to fit the AZ usage. New building has standard style doors and can use them. AZ shortened the frame to fit their needs. There are multiple styles – Seattle, Allentown, Suburban Surgical, Primate Products, Lab Products. Courtney is tracking whether there are funding opportunities available for new caging. Also keep in mind we must have a change-out cage for each cage.



Members Present:	AS	JM (entered at 2:38)	KS
	CH	JPVH	LJE (remote)
	FRR	JS	ML
	JB (entered at 2:38)	KL	TH (remote)
Members Absent:	AB SL	JE CG	MS

Opening Business

• The IACUC Chair called the meeting to order at 2:32 pm.

Confirmation of a Quorum and Announcement

• Quorum was confirmed by KC.

IACUC Training

- IO report to the IACUC **DA**
 - The IO began by thanking the IACUC members and support staff for their work and for the work going into the AAALAC site visit this summer. He then discussed best practices for committee functioning that were created by a UW advisory panel he was involved with. These will be implemented throughout HSA, including the IACUC and IBC.
 - The Chair asked if there is anything specific that the IO would like to receive regarding the Semi-Annual Report.
 - The IO does not want the amount of work preparing the Semi-Annual Report to be more than it needs to be.

Protocol Review

- 4316-01 A15381 Repair Surgery **KSH**
 - Reason for repair request:
 - This request is for one "banked repair" as the current banked repair is scheduled to be used on 01-23-19 to replace the failed micro-drive.
 - Justification for repair surgery:
 - This animal is actively being recorded from with a semi-chronic implant and continued data collection from this animal is necessary for completion of the current study. This animal is highly trained on multiple behavioral tasks that have been learned over the span of several years, and an aged animal, making her extremely valuable and difficult to replace.
 - Surgical History:
 - Previous surgeries include one headpost placement, one chamber placement (2 chambers), one Craniotomy (hippocampal chamber), one drive placement (hippocampal chamber). She also previously had a repair surgery to remove and replace a failed drive on the hippocampal chamber.

- The animal currently has two recording chambers, one housing a semi-chronic drive implant and a titanium headpost.
- Additional information:
 - A15381 is a 20.7 year old female weighing ~9kg with age appropriate muscle condition and activity. This animal has alopecia. She is currently singly-housed due to a permanent veterinary exemption. BMS has recommended standard environmental enrichment (EE) 7 days a week as well as extra enrichment an additional 3 days per week, weekly TV enrichment and daily audio enrichment.
- Questions and discussion included the health of the animal, housing status, what the planned surgery entailed including possible increased risk of infection. The committee also questioned the failure rate for the Microdrive implantation. This is one of four animals with similar microdrives; the other three have had no problems.
- The group has determined that, if the implant fails, there will be no further attempts on this animal. The animal could then provide limited, but still useful, data.

Motion was made and seconded: to approve the repair with the change of the wording from chamber to micro-drive.

Discussion: None

Vote: Approved with 11 in favor, 0 opposed, 1 abstaining.

Other Business

- Clinical Records Discussion KS
 - A single IACUC member had requested full clinical records for the animal repair surgery discussed above. It is not typical for clinical records to be provided to an IACUC, especially for NHP's, due to their often long length and complexity. Currently, veterinary staff come prepared to discuss clinical history of animals, and if committee members want to see full clinical records, there are two opportunities available; either at the Annual WaNPRC Records Review, or in a one on one sit down with a vet. Surgical history is relevant to repair surgeries brought to the IACUC and these are provided.
 - Questions and discussion on the topic of providing full, rather than summarized, clinical records available to the IACUC included the amount of work going into preparation of the current record provided to the IACUC, the ease of access to the records, and what information that IACUC really needs to know in order to make informed decisions.

<u>Motion was made and seconded:</u> to not provide general clinical records on animals that are involved in IACUC discussions, but that vets are prepared to discuss and explain at the meetings. <u>Discussion</u>: *None*

Vote on the Motion: Failed, 6 in favor, 3 opposed, 3 abstaining

The Chair called for a revote, reminding members that they should generally only abstain from voting when they have a conflict of interest:

<u>Re-vote on the Motion</u>: Failed, 6 in favor, 5 opposed, 1 abstaining **Clinical records will be provided.**

Approval of the IACUC Meeting Minutes

• The IACUC Chair called for the approval of the November 15, 2018 meeting minutes. <u>Motion was made and seconded</u>: to approve the minutes as written.

<u>Discussion</u>: *None* <u>Vote</u>: Approved, 10 in favor, 0 opposed, 2 abstentions.

Attending Veterinarian's/OAW Director's Report - KS

- Announcements:
 - Adoption program has had some successes!
 - 2 gerbils
 - 2 ferrets
 - 5 puppies

JB left at 3:25

- o AAALAC Site Visit June 3-7, 2019
 - Visitors will want to meet with the IACUC. More information to come.

JB returned at 3:29

- PRIM&R being held in Bellevue. If you are interested in attending, please contact OAW. More information to come.
- Facility issues:
 - o Humidity: No issues
 - Temperature and lights: Lighting issue in 1 animal holding room at SLU 3.1 on a reverse light cycle (7 pm on, 7 am off) where lights were off continuously from 12/14/18 through 12/17/18 (weekend). Network adapter that controls the light relays failed and was replaced. No issues noted since that time.
 - Water leak was noted in an ARCF service area (not housing). The cold water line to the sink had a fitting that was not completely sealed. Repaired on 12/4/18.
- Protocol Monitoring:
 - Twenty-one total protocols on veterinary monitoring. Of the protocols, 13 involve surgery, two restraint (and sx), one conscious restraint, 1 tumor modeling, 4 miscellaneous (tape skirt, infection, water quality). Seven are inactive right now. 1 protocol has been removed due to group no longer doing the procedure that prompted the monitoring. 1 protocol was added that includes a new surgery to cannulate the rat thoracic duct and collect samples.
- Adverse Events:
 - Follow-up to the previous incident at Mukilteo marine station: The circuit that failed controlled the water flow system, air pump, alarms and the back-up generator. So there was no back-up power to any of the systems. As part of the prevention plan, all the systems will be on separate circuits and a redundant alarm is being installed to send out a head tank level alarm as well as a flow stoppage alarm. When there is alarm call-out or text message, everybody on the call list receives them and all are expected to respond to all alarms. There will be annual testing on the alarm system.
 - The facility is not UW, but the UW's animals are housed there. The IACUC will look into seeing if there is an MOU with the facility. If so, it will be brought back to the IACUC for further discussion.

- Follow up to cage floods at SLU 3.1: DCM immediately met with the Engineers and developed a revised SOP as to how to respond to such alarms in the future as well as how to respond to failures with the animal watering system pump (including who needs to be notified if there are pump issues). DCM believes this incident was the result of honest errors and not indicative of a larger issue with the vendor.
- Non-compliances
 - A researcher was seen returning to a holding room rack a cage of anesthetized mice that had not fully recovered from injectable anesthesia. The mice had undergone an intranasal substance administration procedure and recovered without issues but the researcher was not following the best practice, nor the instruction included on that specific procedure in the protocol, of monitoring mice until anesthetic recovery. PI took responsibility for the incident and informed OAW.

Corrective action: The PI has instructed all lab members that anesthetized mice must be monitored until awake.

Motion was made and seconded: to send a letter of counsel to the PI. Discussion: None Vote: Approved, 12 in favor, 0 opposed, 0 abstaining

A lab member performed an unsupervised rat surgery prior to obtaining surgical certification. The lab member was trained and had experience in performing surgeries of this nature but had not completed the certification process. There was no animal welfare issue directly related to the surgery itself but the rat was euthanized a month later for clinical reasons and infection was noted at the surgery site. The PI submitted a written report to OAW describing the non-compliance. The PI also advocated that the infection could have been the result of inadequate sterilization of hardware due to faulty centralized sterilization equipment as other groups using that sterilization service have seen some infection issues.

Corrective action: Vet Services has reviewed aseptic technique with the group. The lab member will become certified for solo surgeries prior to any additional surgical work. Lab will consult with their colleagues using the new bench top sterilizer to assess its performance and plan on purchasing one of their own.

Motion was made and seconded: to send a letter of counsel to the PI.

<u>Discussion</u>: The lab should know if the autoclave that they are using to sterilize the instruments is properly sterilizing the equipment. There is variability in who has been ensuring that packs are properly sterilized.

ML left at 3:50

<u>Vote</u>: Approved with 11 in favor, 0 opposed, 0 abstaining *KS will follow up on the autoclave issues and bring information to the next IACUC meeting.*

ML returned at 3:53

• Vet Services noted a bird researcher was food restricting wild caught birds for up to 24 hours to get them to take treats/rewards for a behavioral test. The behavioral testing with food restriction was not included on the protocol and the experiment they were conducting

was not fully described. No animal welfare issue was noted with the food restriction. They have halted the training on this behavioral test until an amendment including this work has been reviewed and approved. Additionally they were transporting birds from the wild to campus in a vehicle that had not been inspected by the IACUC.

Corrective Action: The vehicle has been inspected and approved for transport of wild caught birds. The protocol has been amended to include a complete description of the experiment, the behavioral test with description of the food restriction and the monitoring during that food restriction. It is in committee review.

This will be reported to OLAW.

Motion was made and seconded: to send a letter of counsel to the PI and the graduate student. <u>Discussion</u>: There were multiple non-compliances that occurred which seems to require more a letter of reprimand than a letter of counsel. The issues were found by vet services. The behavioral experiments have been occurring for only a few weeks and animals will be going back to the wild in a matter of weeks. A letter of reprimand would go to the Department Chair in addition to the PI and grad student.

Vote: Failed with 3 in favor, 9 opposed, and 0 abstaining.

Motion was made and seconded: to send a letter of reprimand to PI and grad student. Vote: Approved with 12 in favor, 0 opposed, 0 abstaining.

- From Arizona
 - Facilities items: No items to report.
 - Adverse events: No adverse events to report.
- USDA inspection on 11/15/2018
 - 2 USDA VMOs conducted a focused inspection and also reviewed our last semi-annual report and the IACUC meeting minutes since their routine inspection in March 2018. We also reported to them the November 9, 2018 incident at the Arizona facility. They had no concerns with our meeting minutes or semi-annual report and issued one noncompliant item that is listed on the inspection report. STI discussed this finding as well as the institution's recent history of USDA inspections and noncompliant items, if any. All inspection reports are publicly available on the USDA website
 - *Question: how do noncompliant items relate to fines?*
 - A noncompliant item is noted on the inspection report and then this finding is sent to the enforcement agency within the USDA where it is determined if an institution is fined for the finding.
 - *The IACUC is ultimately responsible for non-compliances that occur.*

Standard Operation Procedures / Policies / Guidelines

- Permissible Weight Loss in Research Animals KS
 - Narrowed focus of this policy to an upper limit of 20%. More than 20% requires scientific justification and monitoring must be described.

Motion was made and seconded: to approve the policy as written.

<u>Discussion</u>: *None* <u>Vote</u>: Approved 12 in favor, 0 opposed, 0 abstaining.

- Analgesia in Research Animals KS
 - No substantial changes. Was moved to formal template, definitions were added, and redundant information was removed. Added a couple procedures to the list of categories.
 - Agreed to Remove Avertin from the examples. Change title of Appendix 4 to Analgesia References.

<u>Motion was made and seconded</u>: to approve the policy with 2 modifications stated above. <u>Discussion</u>: *None* <u>Vote</u>: Approved 12 in favor, 0 opposed, 0 abstaining

- Non-Pharmaceutical Grade Substances in Laboratory Animals KS
 - Pharmaceutical grade substances should be used when possible. Definitions added to the top. Background was made more readable. For clinical purposes, substances should always be pharmaceutical grade.
 - Added note about investigational new compounds are considered non-pharmaceutical grade.
 - Avertin should be limited to non-survival procedures and if it must be used for survival procedures, there must be scientific justification and IACUC approval.
 - Work on transitioning groups away from using Avertin for survival procedures.
 - Change the listing for Diamondback to say that it requires a veterinary prescription.

<u>Motion was made and seconded</u>: to approve the policy with one correction noted above. Discussion: *None*

<u>Vote</u>: Approved with 12 in favor, 0 opposed, 0 abstaining

Other Business

- What information are IACUC members looking to capture in the response to the protocol form question "Will administering this procedure cause any more than momentary pain and distress?" There is a lot of heterogeneity in the responses to this question on different protocols, and currently no clear guidance on how to decide if yes or no is 'correct'. **JS**
 - Discussion on this included many member's personal preferences, what would warrant a 'yes' versus a 'no', the benefits of check 'yes' to the question (by clicking 'yes' on this question, the procedure auto-populates to the alternatives page where the alternatives search is documented), and the negatives of checking 'yes' based on very conservative criteria, the appropriate place to ask for refinement of procedures in HoverBoard, and the consideration of levels or grades of distress/pain.
 - Some members stated that it would be helpful to have a better idea of what distress means by having IACUC training on 'What is distress?'
 - This question will be posted on the Developer of HoverBoard list serve to get input from other institutions.

JPVH returned at 4:48 pm

- Semi-annual report LI
 - Copies of the draft report will be provided prior to the January meeting. Next meeting the IACUC will go over additional suggestions they may want to make. Send comments to LI before the January meeting.
 - Disaster planning and emergency preparedness all spaces have some in place, but they are not currently accessible.
 - Look into getting access to Husky Ready or access to the plans.
 - The plans are reviewed regularly have someone come and report on the review of these plans
 - There are annual trainings and drills

Closing Business:

The Meeting was brought to a close at 5:08 pm. The floor was opened to public comment.

Name of Member	member	Degree/Credentials	Position Title	PHS Policy Membership Role
J.S. (Jane)	Jane Sullivan	PhD	Associate Professor	Chair
A.B. (Andrew)	A.B.	DVM, MS, DACLAM, CPIA	Veterinarian (non-UW institution)	Veterinarian
A.W. (Aaron)	A.W.	PhD	Associate Professor	Scientist
C.H. (Charlotte)	С.Н.	DVM, MS, PhD, DACLAM	Veterinarian Supervisor	Veterinarian
C.M. (Carolyn)	C.M.	MS, DVM, CMAR, CPIA, DACLAM	Senior Veterinarian	Veterinarian
D.M. (David)	D.M.	PhD	Associate Professor	Member
F.R.R. (Ric)	F.R.R.	PhD	Professor	Member
G.S. (Garret)	G.S.	PhD	Professor	Scientist
J.B. (Jacqui)	J.B.	MS	Senior EHS Specialist (non-UW institution)	Unaffiliated
J.M. (Jeanot)	J.M.	AS, CMAR	Research Scientist	Scientist
J.P.V.H. (Preston)	J.P.V.H.	BS	Review Scientist & Compliance Manager	Member
K.G. (Ken)	K.G.	BS, GDipBS, PGDPP	Executive Director	Non-Scientist
K.S. (Kim)	K.S.	DVM, DACLAM	Attending Veterinarian, Director	Attending Veterinarian
M.B. (Michelle)	M.B.	PhD	Review Scientist	Member
M.K. (Michael)	M.K.	ВА	Business owner	Unaffiliated, Non-Scientist
M.L. (Molly)	M.L.	MS, DVM	Senior Veterinarian	Veterinarian
S.J.H. (Sarah)	S.J.H.	MS, MS	Program Coordinator	Member
S.L. (Steve)	S.L.	PhD	Research Associate Professor	Scientist
S.R.H. (Scott)	S.R.H.	DVM, MPVM, PhD	Adjunct Professor (non-UW institution)	Unaffiliated

University of Washington IACUC 21 February 2020

WINSTITUTIONAL BIOSAFETY COMMITTEE UNIVERSITY of WASHINGTON

Meeting Minutes

Date: Time:	Wednesday, October 15, 2014 10:00 AM – 12:00 PM		
Location:	Health Sciences Building T-269		
Members Present:	 Michael Agy, Washington National Primate Research Center Thea Brabb, Comparative Medicine Lesley Colby, Comparative Medicine Elizabeth Corwin, Community Member Jean Haulman, UW Travel Clinic Stephen Libby, Laboratory Medicine Scott Meschke, Environmental & Occupational Health Sciences Jeanot Muster, Pharmacology Eric Stefansson, Environmental Health & Safety 		
Members Absent:	 H.D. "Toby" Bradshaw, Biology Matthew R. Parsek, Microbiology Mei Y. Speer, Bioengineering Paul Swenson, Community Member, Seattle-King Co. Dept of Public Health Valerie Yerkes, Community Member 		
Guests	1. David Anderson, Executive Director, Health Sciences Administration		

Present:

- 1. David Anderson, Executive Director, Health Sciences Administration
- 2. Linda Arnesen, Biosafety Officer, EH&S Research & Occupational Safety
 - 3. Andrea Badger, IBC/Research Coordinator, EH&S Research & Occupational Safety
 - 4. Jacqui Bales, Biosafety Officer, EH&S Research & Occupational Safety
 - 5. Tony Han, Biosafety Officer, EH&S Research & Occupational Safety
 - 6. Lauren Habenicht, Senior Fellow, Comparative Medicine
 - 7. Katia Harb, Assistant Director, EH&S Research & Occupational Safety
 - 8. Lesley Leggett, Biosafety Officer, EH&S Research & Occupational Safety
 - 9. Glenn McLean, Biosafety Officer, EH&S Research & Occupational Safety
 - 10. Angela Rasmussen, Research Assistant Professor, Microbiology

- 1. CALL TO ORDER: Steve Libby called the meeting to order at 10:01 a.m. A quorum was present.
- 2. **REMINDER:** Steve Libby reminded attendees that any notes that they retain are subject to public disclosure. A statement was also made about conflict of interest and voting on research proposals as described in the IBC Charter. This includes sharing a grant or a familial relationship.

3. APPROVAL OF MINUTES:

- Steve Libby sought a motion to approve the minutes from the September 17, 2014 minutes meeting.
- Jeanot Muster made a motion to approve the September 17, 2014 minutes. Eric Stefansson seconded the motion.
- <u>The committee voted unanimously, with one abstention, to approve the September 17, 2014 meeting minutes.</u>
- **4. BIOSAFETY OFFICER (BSO) REPORTS**: The BSO reports are for project reviews involving infectious agents and for projects falling under Section III-E and III-F of the *NIH Guidelines*.
 - a. Biosafety Officer Report
 - A discussion occurred about the Covey bat research. All of the researchers, as well as any inspectors, are offered the rabies vaccine. The colony has existed for about ten years with no known cases of rabies.
 - A question was raised about Dr. Mizumori's project. She has previously been approved for adeno-associated virus (AAV) in mice and this approval is for AAV in rats.
 - A discussion occurred regarding Dr. Colby's Biological Use Authorization (BUA) letter. This is a core facility BUA letter for centralized ABSL-2 space in the Comparative Medicine vivarium. Any users of this space will also have their own BUA letter.
 - Steve Libby sought a motion to approve this month's Biosafety Officer Report.
 - Eric Stefansson made a motion to approve this month's Biosafety Officer Report. Michael Agy seconded the motion.
 - <u>The Committee voted unanimously, with two abstentions, to approve this month's</u> <u>Biosafety Officer Report.</u>

5. INDIVIDUAL PROJECT REVIEWS

- **1.** Barria, Andres, renewal, *Regulation of glutamatergic synapses*
 - Mei Speer served as the Primary Reviewer and Glenn McLean served as the Biosafety Officer Reviewer. On behalf of Mei Speer, Michael Agy presented the Primary Reviewer Report.
 - The lab studies the regulation of glutamatergic synapses in brain slices.
 - Biohazardous agents used on this protocol include Sindbis viral vectors and human cells.
 - A discussion of the Sindbis viral vector work occurred.
 - The lab inspection and training have both been completed.
 - The draft BUA letter was shown.
 - Michael Agy made a motion to approve the draft BUA for Dr. Barria. A second is not needed since he endorsed the Primary Reviewer.

- <u>The Committee voted unanimously to approve the draft BUA for Dr. Barria.</u>
- **2.** Fields, Stanley, renewal, *Genetic interaction profiling of p53 mutations in transcription and blood cancer; Functional analysis of mutant version of human genes*
 - Steve Libby served as the Primary Reviewer and Glenn McLean served as the Biosafety Officer Reviewer. Steve Libby presented the Primary Reviewer Report.
 - The lab aims to determine the effects of mutation on the function of human proteins.
 - Biohazardous agents used on this project include lentiviral vectors and human cells.
 - The investigator lists siRNA with three knocked-down tumor suppressor genes. siRNA is exempt from the NIH Guidelines, but it is not clear whether or not they will be doing the same tumor suppressor experiments in lentiviral vectors. The investigator will need to clarify this before the final approval is given.
 - The draft BUA letter was shown.
 - Steve Libby made a motion to approve the draft BUA for Dr. Fields. A second is not needed since he is the Primary Reviewer.
 - <u>The Committee voted unanimously to approve the draft BUA for Dr. Fields,</u> <u>contingent upon clarification of tumor suppressor experiments.</u>
- **3.** Fuller, Deborah, renewal, *Immunogenicity and efficacy of universal influenza DNA vaccine in nonhuman primates*
 - Thea Brabb served as the Primary Reviewer and Linda Arnesen served as the Biosafety Officer Reviewer. Thea Brabb presented the Primary Reviewer Report.
 - The goal of this project is to investigate the efficacy of a DNA vaccine against contemporary circulating strains of influenza A virus.
 - Biohazardous agents used on this protocol include human cells, lentiviral vectors, contemporary circulating strains of influenza, FluMist influenza vaccine, and plasmid DNA.
 - A discussion of Staphylococcal enterotoxin B (SEB) occurred. The biosafety officer performed the toxin consult during the lab inspection.
 - A question was raised about the use of "Lentiviral vectors, influenza HA pseudotyped" on the BUA letter. Normally, lentiviral vectors are only specified as 'HIV pseudotyped' or 'non-HIV pseudotyped.' The committee decided that the language on this BUA letter should state 'Lentiviral vectors, non-HIV pseudotyped.'
 - The draft BUA letter was shown.
 - Elizabeth Corwin entered the meeting at 10:30 a.m.
 - Thea Brabb made a motion to approve the draft BUA for Dr. Fuller. A second is not needed since she is the Primary Reviewer.
 - <u>The Committee voted unanimously, with one abstention, to approve the draft BUA</u> for Dr. Fuller, contingent upon editing the BUA letter to state 'Lentiviral vectors, <u>non-HIV pseudotyped.'</u>
- 4. Gordon, Sharona, renewal, Mechanisms of TRP Channel Modulation
 - Toby Bradshaw served as the Primary Reviewer and Glenn McLean served as the Biosafety Officer Reviewer. On behalf of Toby Bradshaw, Eric Stefansson presented the Primary Reviewer Report.

- The lab is interested in chronic pain conditions and studies the molecular basis for inflammatory pain-related hypersensitivity with the goal of identifying targets for future drug development.
- A discussion of baculovirus occurred. The recombinant baculovirus falls under section III-E because it is a risk group 1 virus. The letter currently states 'III-D', but should be amended to state III-E.
- A discussion of question 57a on the BUA application occurred. The investigator has marked BSL-1 and BSL-2, and ABSL-1, which is correct, because she is not doing any human cell work (or other BSL-2 work) in animals.
- Questions 25 and 26 on the BUA application should be completed.
- The draft BUA letter was shown.
- Eric Stefansson made a motion to approve the draft BUA for Dr. Gordon. A second is not needed since he endorsed the Primary Review.
- <u>The Committee voted unanimously to approve the draft BUA for Dr. Gordon,</u> <u>contingent upon completion of question 25 and 26, and correcting the letter to</u> <u>state III-E.</u>
- 5. Hellstrom, Karl, renewal, Tumor Vaccines
 - Lesley Colby served as the Primary Reviewer and Linda Arnesen served as the Biosafety Officer Reviewer. Lesley Colby presented the Primary Reviewer Report.
 - The lab seeks to develop more effective immunotherapy for several tumor types. Biohazardous agents used on this project include human cells, and several types of viral vectors.
 - A discussion of the project description occurred. Sometimes, project descriptions provided by PIs are too brief. EH&S and the chair will work more closely with the PI and ask them to add more information when it is needed.
 - The lab inspection has been completed, and training records are in place.
 - The draft BUA letter was shown.
 - Lesley Colby made a motion to approve the draft BUA for Dr. Hellstrom. A second is not needed since she is the Primary Reviewer.
 - The Committee voted unanimously to approve the draft BUA for Dr. Hellstrom.
- **6.** Hladik, Florian, renewal, *Mechanisms of HIV-1 Transmission in Genital Mucosa of Women* and the Role of Exosomes in Semen for HIV Infection in the Genital Mucosa of Women
 - Steve Libby served as the Primary Reviewer and Lesley Leggett served as the Biosafety Officer Reviewer. Steve Libby presented the Primary Reviewer Report.
 - The lab studies the mechanisms by which HIV gains entrance into the host.
 - Biohazardous agents used on this project include HIV and human source material.
 - The investigator stated on the application that his work with HIV falls under section III-F of the NIH Guidelines. HIV was previously listed under section III-D on his BUA letter. The committee discussed which section of the NIH Guidelines the HIV work falls under. The committee decided that III-D was more appropriate because there is a recombination event to make the HIV go into the cell.
 - The draft BUA letter was shown.
 - The lab inspection is scheduled for later in the week.
 - Steve Libby made a motion to approve the draft BUA for Dr. Hladik. A second is not needed since he is the Primary Reviewer.

- <u>The Committee voted unanimously to approve the draft BUA for Dr. Hladik, pending</u> <u>completion of the lab inspection.</u>
- 7. Hu, Shiu-Lok, change, Oral immunization against HIV/AIDS with prime-boost strategies
 - Michael Agy served as the Primary Reviewer and Jacqui Bales served as the Biosafety Officer Reviewer. Michael Agy presented the Primary Reviewer Report.
 - This change requests the addition of a DNA vaccine for use in macaques. The agent is called 'recombinant or synthetic DNA/RNA (non-viral)' on the BUA letter.
 - The draft BUA letter was shown.
 - The biosafety level for the recombinant DNA is listed as BSL-1 on the letter. The correct level is BSL-2 because macaques themselves necessitate BSL-2 containment because they are known to sometimes carry herpes B virus.
 - Michael Agy made a motion to approve the draft BUA for Dr. Hu. A second is not needed since he is the Primary Reviewer.
 - <u>The Committee voted unanimously to approve the draft BUA for Dr. Hu, contingent</u> <u>upon correction of the BUA letter.</u>
- 8. Katze, Michael, renewal, Gene expression analysis of SIV/HIV/SHIV infected cells and tissues
 - Matt Parsek served as the Primary Reviewer and Jacqui Bales served as the Biosafety Officer Reviewer. Matt Parsek presented the Primary Reviewer Report.
 - The overall goal of this project is to examine the transcriptomic and proteomic profiles of tissues and cell lines infected with HIV, SIV, SHIV, or HCV.
 - The lab processes body fluids, cells, and tissues from both uninfected animals and animals infected with SIV, HIV, SHIV, or HCV.
 - The lab has detailed protocols for handling samples. Many precautions and safeguards are in place.
 - The hepatitis C work is not currently taking place, but the studies will resume at some point in the future.
 - The draft BUA letter was shown.
 - Matt Parsek made a motion to approve the draft BUA for Dr. Katze. A second is not needed since he is the Primary Reviewer.
 - The Committee voted unanimously to approve the draft BUA for Dr. Katze.
- 9. Klatt, Nichole, change, Mucosal Immune Dysfunction After SIV Infection
 - Elizabeth Corwin served as the Primary Reviewer and Jacqui Bales served as the Biosafety Officer Reviewer. Elizabeth Corwin presented the Primary Reviewer Report.
 - The investigator is requesting the addition of three humanized monoclonal antibodies. These antibodies recognize Ebola and are contained in the ZMapp 'cocktail.'
 - No Ebola virus will be used. No DNA from the Ebola virus will be used. Although the investigator refers to "ZMapp vaccine" several times, ZMapp will not be used. Only the DNA encoding three humanized monoclonal antibodies will be worked with.
 - The goal of the project is not to create an immune response, but rather to create artificial antibodies.
 - The work will be conducted at ABSL-2.

- The committee discussed the wording used in the BUA change form. The investigator describes the agent as a vaccine, but a more appropriate term would be 'therapeutic treatment' or 'gene therapy.'
- The biosafety officer will work with the lab to ensure that the language is clear and that the scope of the requested change is clear.
- The DNA encoding the humanized monoclonal antibodies would be listed on the BUA letter as 'Recombinant or synthetic DNA/RNA, non-viral.' The PI already has this agent on her BUA letter, and so an updated BUA letter does not need to be issued.
- The draft BUA letter was shown.
- Elizabeth Corwin made a motion to approve the draft BUA for Dr. Klatt. A second is not needed since she is the Primary Reviewer.
- <u>The Committee voted unanimously to approve the draft BUA for Dr. Klatt,</u> <u>contingent upon revising the application to state 'gene therapy' instead of vaccine.</u>
- Lesley Colby exited the meeting.

10. Salipante, Stephen, new, Next-generation sequencing for clinical translation

- Steve Libby served as the Primary Reviewer and Lesley Leggett served as the Biosafety Officer Reviewer. Steve Libby presented the Primary Reviewer Report.
- The lab focuses on the clinical applications of next-generation DNA sequencing. The goal of the lab is to advance the capabilities of next- generation sequencing and to use it to advance the understanding of human genetics.
- Biohazardous agents used on this protocol include recombinant strains of *S. aureus* and *P. aeruginosa*, as well as human cells.
- Lesley Colby re-entered the meeting.
- The draft BUA letter was shown.
- Training has been completed.
- The lab inspection still needs to be completed.
- Steve Libby made a motion to approve the draft BUA for Dr. Salipante. A second is not needed since he is the Primary Reviewer.
- <u>The Committee voted unanimously, with one abstention, to approve the draft BUA</u> for Dr. Salipante, pending completion of the lab inspection.
- **11.** Stetson, Daniel, change, *Mechanisms and Consequences of Innate Immune Detection of Nucleic Acids*
 - Eric Stefansson served as the Primary Reviewer and Lesley Leggett served as the Biosafety Officer Reviewer. Eric Stefansson presented the Primary Reviewer Report.
 - The investigator is requesting to add the use of herpes strains that are thymidine kinase deficient.
 - The risk of an accidental parenteral exposure is reduced because the lab is not using sharps in the procedure. Instead, micropipettes with a blunted tip are used.
 - The lab was recently inspected in April 2014.
 - The draft BUA letter was shown.
 - Eric Stefansson made a motion to approve the draft BUA for Dr. Stetson. A second is not needed since he is the Primary Reviewer.
 - <u>The Committee voted unanimously to approve the draft BUA for Dr. Stetson.</u>

12. Zheng, Ying, renewal, *Microfluidic control of vascular growth and remodeling*

- Jeanot Muster served as the Primary Reviewer and Jacqui Bales served as the Biosafety Officer Reviewer. Jeanot Muster presented the Primary Reviewer Report.
- A discussion occurred regarding the genes Sox2 and Oct4. The IBC has previously decided that these are not causative oncogenes, but rather genes that are often observed as tumors develop. However, while reviewing this project, the reviewers found several 2014 papers that may indicate that the genes are actually oncogenic.
- The committee discussed oncogenes and gene inserts.
- It would be helpful to the committee if a representative from the FHCRC vector generation core facility would give a presentation at an upcoming IBC meeting. EH&S will work to schedule this.
- A discussion of whether or not the lentiviral vectors are third generation occurred. The committee decided that the documentation to show that the vectors are third generation was sufficient.
- The draft BUA letter was shown.
- Jeanot Muster made a motion to approve the draft BUA for Dr. Zheng. A second is not needed since he is the Primary Reviewer.
- The Committee voted unanimously to approve the draft BUA for Dr. Zheng.

SUBCOMMITTEE REPORTS:

- Michael Gale, new, Host Response to BSL3 Pathogens
 - The investigator has submitted a proposal to conduct research with highly pathogenic influenza.
 - There are many steps in the approval process. The application could be denied at any point.
 - If the work is eventually approved, it will be conducted at ABSL-3/BSL-3 facilities.
 - The committee is not being asked to approve any methodologies today.
 - The request presented to the committee is to grant the investigator permission to initiate the select agent approval process with the Centers for Disease Control (CDC) select agent program.
 - The IBC subcommittee has met several times and decided upon several requirements and recommendations. Many of the subcommittee's requirements and recommendations for approval overlap with select agent requirements.
 - The lab must obtain standard operating procedures (SOPs) from the CDC and USDA (United States Department of Agriculture). This will be a requirement to obtain IBC approval and is also a standard condition of the select agent program.
 - The lab must have a robust medical surveillance program. This will be a requirement to obtain IBC approval and is also a standard condition of the select agent program.
 - The lab must develop a stringent training plan for laboratory workers. This will be a requirement to obtain IBC approval and is also a standard condition of the select agent program.
 - The SOPs must describe how lab workers will be screened for seasonal influenza and how workers with influenza will be prevented from entering the facility.

- The SOPs must include a stringent no-bird contact. Lab workers cannot handle or interact with wild birds, poultry, or pet birds.
- The lab must work with only one strain of influenza at a time.
- The SOP must provide a plan for decontamination when changing work with one strain to another.
- Animal husbandry staff must be trained, educated, and offered vaccinations where applicable. This will be a requirement to obtain IBC approval and is also a standard condition of the select agent program.
- The lab must develop a very clear and robust post-exposure plan. This will be a requirement to obtain IBC approval and is also a standard condition of the select agent program.
- This project will require an inspection by the CDC, the USA, and the CDC Director's signature. The regulatory agencies can decline to approve this project at any point.
- The investigator would also be required to enroll and comply with all facets of the select agent program.
- Scott Meschke made a motion to allow Dr. Gale to move forward and start the formal application process. Eric Stefansson seconded the motion.
- <u>The Committee voted unanimously to allow Dr. Gale to move forward and start</u> <u>the formal application process.</u>

FOR YOUR INFORMATION:

- NIH OBA Reportable Event
 - Eric Stefansson reported an exposure event to the agent recombinant *Listeria* monocytogenes. Listeria from a syringe was accidentally splashed onto a research scientist's eyes and nose during a tail vein injection into a mouse. The researcher followed proper post-exposure protocols by washing his face for 15 minutes and consulting with the UW Employee Health Clinic. He was seen at the Employee Health Clinic and is being monitored. The event was reported to NIH.
 - When the accident occurred, he was performing a tail vein injection in a biosafety cabinet, but was looking under the sash. The tail vein injection is a delicate procedure and it can be difficult to see while working in a biosafety cabinet. The PI, Sean Murphy, has ordered face shields, which will be worn from now on to help prevent similar accidents.
 - The committee discussed the accident and decided that the lab worker should be retrained regarding how to perform tail vein injections safely.
- IBC Minutes on EH&S Website
 - The UW received an email asking for four months of IBC minutes, along with any NIH reportable incident reports occurring during this time.
 - Washington state law requires that those who wish to receive public records file a public records request with the UW Public Records Office. The information was not requested using this process.
 - EH&S has been working to make the records available, while also abiding by Washington state law and ensuring security is not compromised. The information has been posted online following guidance by the NIH.
 - The committee discussed the format of the minutes and the NIH expectations for the content. EH&S will form a subcommittee to review the IBC minutes template.

- DURC Policy
 - A federal policy regarding dual use research of concern (DURC) was recently unveiled. It takes effect next September.
 - UW is already following many steps listed in the new policy. Some action items may be to provide training to PIs, to appoint a DURC contact person, and to develop a risk mitigation plan.

MEETING ADJOURNED AT APPROXIMATELY 12:01.