

Members Present: AB GS JS MS
AP GL KG SP
CC JFI MB SRH
DT JPVH MK

Members Absent: AW
DM
ES
MRB
MRK

Opening Business

- The Floor was opened for public comment at 2:32 pm.
- The IACUC Chair called the meeting to order at 2:41 pm.

Confirmation of a Quorum and Announcement

- Quorum was confirmed by BE.

Approval of the IACUC Meeting Minutes

- The IACUC Chair called for the approval of the January 19, 2023 meeting minutes.

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

Further Discussion: *none*

Vote: Approved with 12 members voting in favor, 0 against and 0 abstentions.

Benefit Story

This month's benefit story is about a little green frog that can make itself invisible when it sleeps. Although I usually like to pick my stories from local labs, this one comes from researchers at Duke University who wanted to figure out how glassfrogs have evolved to evade detection by predators by becoming temporarily translucent. It turns out the sleeping glassfrogs do this by packing about 90% of their red blood cells into their liver, which is coated in a light-reflecting membrane, leaving most of the animal translucent and well-camouflaged on its leafy bed.

The benefits of this research go beyond identifying the mechanism behind a superpower. It turns out there might also be the inspiration for a medical breakthrough because, usually, when red blood cells are packed together at high density they form a clot. Blood clots are responsible for several common, serious health problems including heart attacks and strokes. But they aren't a problem

for glassfrogs, whose circulation is restored once they wake up and need to move around. If scientists can figure out how the glassfrogs prevent clotting of red blood cells that are tightly packed into their livers, it can form the basis of new treatments that can prevent clots from becoming a problem in humans and other animals.

As a basic scientist myself, I love this story because it shows that you never know where things will go and highlights the intrinsic value of the pursuit of knowledge.

Taboada et al. ‘Glassfrogs conceal blood in their liver to maintain transparency’ *Science* 378 (2022).

Attending Veterinarian’s Report – CC

- I have checked with the leadership at all sites and have no reportable facility or animal events for the committee at this time.
- Update on Protocol Monitoring: We have a total of 26 protocols with ongoing enhanced monitoring. Of these 26 protocols, 9 protocols are actively (or soon to be) performing the procedure for which they are on monitoring.
- I have an update for the committee regarding the Cage Staging pilot we did last year in one of our satellite facilities. In summary, the results of the pilot suggest that pre-filling the cages with food prior to staging may be correlated with reduced incidence of animals being found without food. However, we have very low numbers of this in all of our facilities so a true cause and effect is difficult to prove. There are some disadvantages as well – such as higher risk of animals getting incorrect chow which could compromise both animal health and study validity, decreased staff efficiency, and increased food waste. At this time, we will continue this practice in this facility, and we are evaluating the feasibility of implementing this in our other facilities.
- I wanted to quickly remind everyone about the site visit training room. Last I checked, we’ve had only one person (and Jane) use that space. I encourage you all to try and find some time to check it out. Our hope is to keep that space as-is for the next few months and then once most members have had a chance to use it, we will modify it for another type of site visit or to highlight different site visit findings.

OAW Director’s Report – JFI

- **IACUC Metrics** – The metrics are posted under Supporting Documents in the meeting folder.
- **Training Updates** – No new lessons to update on, our training team has been hard at work as usual providing training to our researchers and updating current courses and signage.

- **Other Updates** – Reminder that if any IACUC members are interested in attending the NWABR conference next week, please reach out to OAW.
- **Responses to Letters & Other Follow up** - None to report

- **Noncompliance** –

- **4470-01**

This protocol uses mice to evaluate the effects of therapeutic nanoparticles on tumor size reduction. Two studies involving a total of 40 nude mice were initiated in October 2022, and reached their planned experimental endpoints on 12/6/22 and 12/23/22. However, the mice were not euthanized as planned at the endpoints. This in itself is not noncompliant with the protocol since the protocol allows for longer survival times. However, there is no documentation of monitoring after those dates. Additionally, the group failed to perform body condition scoring as described in their protocol for the duration of these studies.

Three mice were found dead by DCM staff on 1/1/23. This was reported to the group. All remaining animals were reported to vet services on 1/4/23 for evaluation due to observation of large tumors. On examination, there were 33 mice remaining in 9 cages, 4 mice had tumor ulcerations, 1 mouse had a BCS <2, and at least 4 mice had tumor size exceeding 10% of body weight. These are all humane endpoint criteria per IACUC Policy and this IACUC protocol. The group was contacted and all remaining mice were euthanized the same day.

Upon being alerted to the non-compliance, the PI immediately began an investigation of the incident and self-reported the incident to OAW, including a thorough summary of the event, copies of monitoring records, and a description of several self-initiated corrective actions, which include the following:

- The PI has reviewed the protocol with all personnel involved in animal work.
- All personnel have reviewed the associated IACUC policy and the body condition scoring procedure.
- All studies will now be supervised by the trained IPD In Vivo Core representative.
- All personnel have been instructed to consult with vet staff if there are any questions about endpoint criteria or observed clinical signs.
- The group has instituted a standardized excel sheet for monitoring that will automatically identify tumor size as % of body mass, and include sections for BCS, observations, and scheduled euthanasia date.
- The group has provided an updated contact list and contact tree in housing rooms for vet staff.

The individual that performed the animal work for these studies is no longer on the protocol.

This event has been reported to OLAW.

DISCUSSION: There was discussion about what kind of letter to send. Due to the serious nature of this incident, a letter of reprimand was thought to be most appropriate.

Motion was made and seconded: to send a letter of reprimand.

Further Discussion: none

Vote: Approved with 13 members voting in favor, 0 against, 0 abstentions.

- **4368-01**

Two mice were found dead by husbandry staff on 1/7/23. These two mice, along with 14 other mice in the colony, were advanced in age (2.5-3yrs old; DOB 1/2020 - 7/2020). All mice were colony animals and had not undergone any experimental procedures. The related IACUC protocol specified that, for general colony maintenance, mice were to be monitored once a week by research staff, and mice older than 8 months of age would be euthanized. The research team did not monitor nor euthanize the mice as described in the protocol. The mice were monitored daily by husbandry staff. The PI opted to donate the 14 remaining mice to another lab on campus that studies aging, and all mice were euthanized on 1/20/23. This event has been reported to OLAW.

DISCUSSION: Group needs to be reminded of the importance of following their protocol. The serious nature of this incident, along with a prior incident in 2018 involving aged animals, led to a recommendation to send a letter of reprimand. The group will be asked to provide a robust monitoring plan to prevent this occurring in the future. It was noted that this would be a good topic for the OAW newsletter and post-approval monitoring conversations between OAW liaisons and researchers.;

Motion was made and seconded: to send a letter of reprimand.

Further Discussion: *none*

Vote: Approved with 15 members voting in favor, 0 against, 0 abstentions.

Protocol Review

- NHP Reassignment Policy– CC
 - Changes made to the policy were as follows:
 - reorganized it a bit so it flows more logically
 - delegated a subset of reassignments to the AV, rather than the IACUC (note that the IACUC will reviewing all re-assignments during the semi-annual review)
 - added one new instance requiring AV review (repeat tether studies)
 - removed the requirement for IACUC to review the "NHP List of Procedures and Pain Categories"

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

Further Discussion: *none*

Vote: Approved with 13 members voting in favor, 0 against, 2 abstentions.

IACUC Training on Species-Specific Environmental Enrichment - CC

- After the presentation, there was discussion about how environmental enrichment is documented and where IACUC site visitors can find this information.

Closing Business:

The Meeting was brought to a close at 3:46 pm.