

University of Washington  
January 19, 2023 IACUC Meeting Minutes

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

Members Absent: AW MRK  
ES SRH  
MK  
MRB

**Opening Business**

- The Floor was opened for public comment at 2:31 pm.
- The IACUC Chair called the meeting to order at 2:34 pm.

**Confirmation of a Quorum and Announcement**

- Quorum was confirmed by ZR.

**Approval of the IACUC Meeting Minutes**

- The IACUC Chair called for the approval of the December 15, 2022 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 1 abstention.

**January Benefit Story – JS**

This month's benefit story is about developing a cure for blindness caused by glaucoma.

One of the biggest challenges to the development of treatments for neurodegenerative diseases like glaucoma is that neurons do not regenerate in adult mammals. Unlike skin cells, for example, which can multiply and replenish themselves after an injury, when one of our neurons dies it cannot be replaced. For patients with glaucoma, a special type of neuron called a retinal ganglion cell dies and is lost forever, leading to blindness.

In contrast to adult mammals, some animals, including fish, are able to replace damaged neurons by converting non-neuronal cells into neurons at times of need. The key lies in turning on and off

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genes that tell cells to behave like neurons. Scientists here at UW have been working collaboratively to identify the precise set of genes that can convert a common dividing cell into a neuron that can send signals from the eye into the visual processing centers in the brain to restore sight.

Several years ago, this research team had a breakthrough that allowed them to convert dividing cells in the adult mouse retina into neuronal precursor cells, but they couldn't control exactly what kind of neurons the precursors would develop into. This turns out to be important for the treatment of neurodegenerative diseases like glaucoma which kill off specific subtypes of neurons. The latest development refines the approach and selectively regenerates the retinal ganglion neurons that are lost in glaucoma.

Building on a large body of knowledge about which genes turn on and off during normal development, the UW team identified likely candidates for directing the generation of retinal ganglion cells. They systematically tested them in an adult mouse model to find 4 that work together to reliably convert dividing cells in the retina into retinal ganglion neurons. Hurdles remain, including figuring out how to coax the new retinal ganglion neurons to extend their axonal processes and connect up with visual circuits in the brain. In spite of these challenges, this new discovery represents an important step forward to restore vision in glaucoma patients.

Todd et al. 'Reprogramming Müller glia to regenerate ganglion-like cells in adult mouse retina with developmental transcription factors' *Science Advances* **8**, eabq7219 (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
  - There has been no change for veterinary monitoring of protocols over the past month. We continue to have a total of 25 protocols with ongoing enhanced monitoring. Of these 25 studies, we have 6 protocols actively performing the procedure for which they are on monitoring and there are no active concerns about those procedures.
  
- Announcements
  - At the last meeting, I announced the roll-out of the mock site visit room. This was our first attempt at interfacing a physical self-guided space with a virtual experience, and there was a bit of a learning curve. We did run into a few glitches

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with how the technology was working – our virtual host was not cooperating so we had to re-do some of it. We got that e-learning portion sorted out and solicited a few specific individuals to go through the space and provide some feedback last week and earlier this week and, as of today, those changes are ready to go so the room is officially available for your exploration! You can stop by OAW to pick up a key to the space; there should be someone there most working days between the hours of 8:00 and 5:00.

**IACUC MS joined as Panelist at 2:41PM**

**OAW Director's Report – JFI**

- IACUC metrics – The metrics are posted under Supporting Documents in the meeting folder.
- Training Updates – None
- Other updates – Reminder that the NWABR IACUC Conference is coming up on March 2nd and 3rd. If any IACUC members are interested in attending, please contact OAW and our office will assist with registration.
- Responses to Letters & Other Follow up
  - A response was received regarding a letter of counsel sent by the IACUC following an incident in which a non-human primate on water regulation did not receive his daily ration of water on one day. In their response, the PI expressed regret for the oversight, and confirmed the corrective actions that have been instituted, including the following: a log is now posted on the door of the animal rooms indicating the provision of fluid each day; reminder notices are posted through the lab and on all exit doors; contact information and a phone tree has been provided to husbandry staff should there be any questions about provision of fluid; and if nobody can be contacted, husbandry is instructed to provide fluid.

Noncompliance – None to report

**Standard Operation Procedures / Policies / Guidelines**

- Standard Procedures – AS
  - *There are 16 procedures that are up for review.*
  - *They are all NHP procedures – 12 have changes, 4 do not have changes*
  - *Please see the Supporting Meeting Documents for more detail.*

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

Further Discussion: *none*

Vote: Approved with 13 members voting in favor, 0 against, 1 abstention.

**Semiannual Program Review – BE**

**Closing Business:**

The Meeting was brought to a close at 2:46pm.