WASHINGTON STATE UNIVERSITY

September 9, 2022

To all IVS and PLAR Users:

In an effort to improve our Rodent Animal Colony Health Surveillance Program by reducing live sentinel animals, increasing result sensitivity and accuracy, reducing labor and costs, and reducing emotional fatigue on our animal care staff, we will be implementing a "hybrid" system (live animal and animal free-environmental) of health surveillance in all of our rodent facilities.

We currently use a trimester testing period for collection of colony animal dirty bedding and soiled bedding sentinels (SBS) for surveillance of pathogens. In 2021 we piloted an Exhaust Air Duct collection system in our Pullman BioLife Vivarium. We are now planning to expand the animal-free refinements to our entire program for our next trimester in 2022. We will continue to use live sentinels in our program for trimesters 1 & 2 and have environmental sampling in our 3rd trimester.

Environmental health monitoring (EHM) is supported by >25 peer-reviewed publications and is used widely among many institutions, including the University of Washington that moved to 100% EHM in 2016.

Due to the nature of the testing which is identification of DNA, this method is very sensitive, and we may experience positive results in colonies that have been historically negative with SBS. These positive results may be false positives or positives of low-level prevalence that we have not detected previously. If positive results are found, we will follow up with extensive sampling to ensure the validatory of the results. If we do verify positive results, we will work closely with the PI, vivarium users and IVS/PLAR staff to develop a case-by case outbreak plan.

An additional resource for you, we have a PowerPoint presentation that will go into more details of our plan and the background of Environmental Health Monitoring. Please let us know if you have any questions or concerns. We look forward to the implementation of these methods to help us work toward the 3Rs (replacement, reduction and refinement) in animal research.

Sincerely,

Nina Woodford

NINA WOODFORD
DIRECTOR & ATTENDING VETERINARIAN
Office of the Campus Veterinarian
Washington State University
Office: 509-335-6246
Email: nwoodford@wsu.edu