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• SANTA BARBARA • SANTA CRUZ

MUTANT MOUSE RESOURCE AND RESEARCH CENTER (MMRRC)

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January 15th, 2021

Dear Valued Customer,

As a valued customer of our M3 Mouse Barrier Facility, I am contacting you to inform you we have recently identified an excluded bacteria during our standard rodent surveillance screening process.

We identified and confirmed *Pseudomonas aeruginosa* from a single microbiological culture of the gastrointestinal tract of an embryo transfer dam and from fresh feces in several of her offspring. At the time of submission, the mouse was in good health and was eating and drinking normally. These results were confirmed by PCR of her banked fecal sample.

Pseudomonas aeruginosa is an opportunistic organisms that can be found in the environment, plants, and animals and tends to live in moist environments. This bacterium typically does not cause disease in healthy immunocompetent mice. Our very strict biosecurity practices when handling animal cages include diligent disinfection of holding rooms and animal cage change stations that greatly prevent risk of cross contamination between cages and rooms. Fortunately, sentinel animals submitted from her room and all other vivarium rooms in the building, as well as animal water and environmental samples, all tested negative for this bacterium, indicating an isolated incident that has not spread beyond the cage or room.

Through our investigation of this situation, we have thoroughly assessed the following: 1) adherence to SOPs by not only the vivarium staff but also the pathology laboratory performing the screening, 2) proper functioning of the building's autoclave and HydroPac water system, 3) facility malfunctions or concerns, 4) abnormalities in animal health and 5) atypical events resulting in an increased risk of pathogen exposure. Through our assessments we have determined that all vivarium staff have been following SOPs appropriately, there have been no significant issues with our HydroPac machine or facility (*e.g.* HVAC system), nor any issues in animal health. However, we have identified an issue with inconsistent sterilization of some of our cages which resulted in persistent moisture in cages after sterilization. This is the likely cause of this isolated contamination.

We have aggressively addressed this situation and optimized our autoclaving procedures to prevent this breach in sterilization from occurring in the future. While our standard QA/QC does involve having sterilization indicators in every load, we are increasing the number of indicators at different regions of the load as well as not using any loads with excessive moisture even in situations where indicators confirm the absence of microorganisms. Additionally, we have increased QA/QC screening surveillance for pathogens in additional environmental and water samples.

We pride ourselves in operating at the highest level to provide mice to you with superior care. We apologize for this breach in pathogen security and want to assure our customers that we have done and continue to do everything necessary to prevent this from occurring again. We are available to answer any questions regarding

our normal surveillance results and our vivarium husbandry practices. Our aim is to ensure you that we give the highest priority to using best practices of management, testing, and surveillance throughout our facility.

As the veterinarian overseeing the M3 Mouse Barrier Facility and all Mouse Biology Program vivaria and veterinary care, I want to personally thank you in advance for your understanding and provide you with my personal office number and email below for if you have any questions. You may also reach out to our customer service team at any time as well. Please let us know if you have any questions you need clarified.

Best Regards,

Kristin Grimsrud, DVM, PhD

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