

**MUTANT MOUSE RESOURCE AND RESEARCH CENTER (MMRRC)**

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August 23, 2019

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 *Pseudomonas fluorescens* in an isolated situation in a single dam and some of her pups. The female was used for an embryo transfer and as part of our standard procedures, she was submitted for comprehensive pathology screening following weaning of her pups. We were informed that a single culture sample from her gastrointestinal track was positive for this bacterium. Upon notification of these results, we submitted her offspring as well as offspring from another female that she was cohoused with during her post-operative period, although the cohoused female had negative test results from her pathology screening. We received results from gastrointestinal cultures confirming this same bacterium in some of the offspring from the positive female, while none of the offspring from the cohoused female tested positive. Additionally, we have evaluated the results of sentinel animals that have recently been submitted from her room and all other vivarium rooms in the building, as well as animal water and environmental samples, all which have been negative for this bacterium. We have confirmed that all other females that have received embryo transfers have been negative for this bacterium. We have performed random sampling of feces from approximately 10% of all the cages in the building and confirmed in duplicates submitted to two separate laboratories that all samples were negative for this bacterium. Thus, based on these combined results we have determined this to be an isolated situation.

Pseudomonas fluorescens is normally found in the environment on soil, plants and in water and is a nonpathogenic saprophyte. This is not a bacterium that is of concern for causing disease in mice and is likely simply an environmental contaminant. All animals that tested positive for this bacterium appeared to be healthy at the time of euthanasia. We do practice very strict biosecurity practices when handling animal cages and are diligent in our disinfection of the room and animal cage change stations to prevent risk of cross contamination from one cage to another. This situation demonstrates that our biosecurity practices appropriately worked and resulted in this being isolated to this single female and her offspring.

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 staff have been following SOPs appropriately, there have been no issues with our autoclave, HydroPac machine or facility (e.g. HVAC system), nor any issues in animal health. We have identified that we have had persons performing facility maintenance in the building during this period to prepare for our AAALAC accreditation inspection and perform certification testing on our biosafety cabinets. We do ensure that all persons entering the building follow our building SOPs. We also identified that the female mouse was provided an analgesic medication that comes in a medical grade gel formulation after her embryo transfer surgery. This medication was abruptly discontinued by the manufacture during this timeframe, with the reason being "it has been a challenge to meet the complete complement of the FDA's regulatory compliance requirements that would allow us to continue their commercialization." We do not know the details of the

reason behind this statement and if any pathogen contamination was involved, but we do take this into consideration when trying to identify any potential breaches in our facility, especially given that these gels cannot be autoclaved and we are trusting the manufacture to providing a clean product. Unfortunately, because we had already discarded all remaining stock supplies of the analgesic gel, we had none available for pathogen testing. Nevertheless, we feel that this gel product is high on our suspect list for the source of contamination. Given the recent events we are increasing the pathology screening surveillance we perform to ensure we continue to maintain our vivarium at the highest of standards. In addition to our standard screening we are now routinely submitting additional water and environmental samples. We will continue to openly communicate results of our screening to our customers in a timely fashion. Further, 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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