Importing Fish or Embryos, Quarantine, and Exporting Fish

Importing fish or embryos must be done with caution to minimize the risk of importing new diseases. Currently the CZAR colony is endemically infected with *Pseudoloma neurophilia*, *Myxidium streisingeri*, *Mycobacterium cheloneae*, *Mycobacterium fortuitum*, and *Mycobacterium abscessus*. *Pseudoloma neurophilia* is transmitted within infected eggs/embryos. To reduce the transmission of this pathogen, please do not propagate or ship eggs that have dark cloudy areas within the chorion.

1. All users must follow the CZAR SOP for “Shipping Fish/Embryos to the CZAR”, AND must contact Maurine at mhobbs@cores.utah.edu at least two weeks prior to requesting shipment of any fish or embryos from any source. Please provide Maurine with the following information:
   a. the genetics of line of fish requested,
   b. whether the request is for fish or embryos,
   c. the contact information for the facility manager that houses the fish of interest.
   This information will be used to request the annual pathology testing information from the facility in question and prepare a plan for import based on the pathogens identified.

2. The steps above must be completed (along with material transfer agreements, if needed) in advance of arrival of the fish or embryos. Fish or embryos that arrive by surprise will be iced.

3. All adult fish not originating in the CZAR facility will be housed upon arrival in the quarantine room (QX). Under no circumstance should any fish be placed directly into the CZAR or the QX without advance approval from CZAR management. Please confirm with Maurine at least two weeks ahead of time that there is space in the QX for the fish that will be arriving.

4. Sanitized embryos from some sources may still need to go into the QX to be raised, depending upon the pathology report. Advance approval from CZAR management must be obtained before embryos originating from outside labs may be placed in the nursery incubator.

5. The QX is kept locked and is accessible only to users who have completed training for working in the QX. Trained users may may borrow the key to conduct their work. The door must be relocked when the room is not occupied.

6. The owners of imported lines are responsible for their final removal from quarantine space, generally by euthanasia, after sanitized embryos have been moved into the CZAR. In most cases, fish should remain in quarantine no longer than 4-6 months. Users will be asked to euthanize fish residing in the QX longer than six months. Fish that linger and develop issues due to inattention from the laboratory staff may be euthanized by facility staff.

7. Embryos from fish mated in the QX can ONLY be housed in the CZAR incubators after they are Bleach AND Ovadine-treated using the approved CZAR protocols. If it is necessary to work with untreated embryos from quarantine in any other CZAR procedural
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space, please inform CZAR staff in advance so that we know to perform appropriate decontamination of the areas used afterwards.

8. When working in quarantine, always discard PPE (personal protective equipment, i.e. gloves, booties, etc.) before leaving the suite or entering the facility.

9. Please work in the quarantine facility after completing your work in the main facility for the day.

10. Do not transfer equipment, tools, tanks, supplies, etc. from the quarantine to the main facility. Please consult in advance with CZAR personnel if you have an item that you need to bring into or out of the quarantine room.

EXPORTING FISH:

1. An investigator wishing to export fish or embryos from the CZAR must also provide Maurine with the same info as found in step 1 above. This is to allow time to inform the receiving facility of the pathogens known to be present in the CZAR so they can institute the appropriate quarantine measures on their end as well. The completed info should be submitted at least 2 weeks before fish are to be exported.

2. Currently the CZAR colony is endemically infected with *Pseudoloma neurophilia*, *Myxidium streisingeri*, *Mycobacterium chelonae*, *Mycobacterium fortuitum*, and *Mycobacterium abscessus*. *Pseudoloma neurophilia* is transmitted within infected eggs/embryos. To reduce the transmission of this pathogen, please do not propagate or ship eggs that have dark spots within the chorion.

FISH TRANSFERS BETWEEN CZAR LABORATORIES

1. To share fish with another investigator, please confirm with the PI that the transfer is approved. Please also transfer the fish to a clean new tank, and change the inventory label to correspond to the color used for the new lab.

2. Please do not use fish that are not yours without permission from their owner. Please also notify fish facility staff (note, email, personal conversation, etc.) when you have permission from an investigator to use their fish. In general, personnel regularly using another's fish should be added to the applicable protocol.