ZIRC Nursery Instructions

General Nursery Procedures

The purpose of the nursery is to provide specialized care for zebrafish starting from 0 day (fertilization) through 21-25 days, when they are able to thrive in an aquarium. The main concerns of the nursery are to provide the correct amounts of food at the appropriate times to achieve optimum growth and to do this while maintaining good water quality. During their time in the nursery, the fish are fed a combination of live a powdered food twice a day. The first food the fish receive are paramecia. Zeigler Larval Diet and brine shrimp and added to the diet as the fish grow larger. These instructions will explain how and what to feed the baby fish, how the clean their containers, the schedule which determines at what age the fish receive which foods and when to transfer them from one container to another.

Feeding:

- 4-9 day old fish are fed concentrated paramecia (link to para recipe)
- 10-12 day old fish are fed concentrated paramecia and Zeigler larval diet (link to powdered food recipe)
- 13-21 day old fish are fed Zeigler larval diet and brine shrimp

Transferring:

- 0-4 day fish are housed in Petri dishes within an incubator
- 4-9 day old fish are moved into mouse cages and filled 1/4 full
  -any rectangular container with a volume of approximately 1000mls will work
- 10-21 day old fish are kept in cages, filled with water, until they are large enough to be transferred into adult tanks

Detailed Procedures for Maintaining and Feeding Fish in the Nursery

Day 0-4:

- Fish are kept in Petri dishes at a density of 50 fish per dish.
- They are stored in a light cycle incubator at 28.5 degrees Fahrenheit.

Day 4:

- Fish are transferred to a cage (mouse cage or similar container), with a small amount of fish water. Each cage is filled with an inch of water, measured from the front side of the cage.
- Fish are fed 40mls concentrated paramecia, 2x per day.

Day 5-9:

- During this time fish are kept in cages without cleaning.
- If there are ammonia levels present, change water until no ammonia is present, otherwise cleaning is not necessary.
- Fish are fed 40mls concentrated paramecia, 2x per day.

Day 10:

- A new food is added to the feeding regimen. In addition to the 40mls concentrated paramecia, the fish are given Zeigler nursery mix. Feed each cage 5mls Zeigler nursery mix..
- Once Zeigler is added to the diet, each cage is cleaned using a siphon. Siphon out 75% of the water. Be sure to siphon up all of the excess food and debris from the bottom of the cage.
- Refill the cages with clean water.
- From this day on, the cages are checked for ammonia, siphoned and fed 2x per day.
- Ammonia testing becomes more important on this day because of the additional food being added. Excess food can foul the water, spiking ammonia levels, and damaging baby fish. Because of this, if any ammonia is detected during the pre-siphoning test, the ammonia levels must be re-tested after the cages are filled with fresh water. If there is any ammonia still present, all the cages must be siphoned again until no ammonia is detected. Once the cages are ammonia free they can be fed.

Day 11:

- Fish are fed 40mls concentrated paramecia and 5mls Zeigler 2x per day
- The cages continue to be tested for ammonia, siphoned and fed 2x per day.

Day 12:

- On this day, brine shrimp is added to the diet. Each cage is fed a 5ml portion of brine shrimp, 2x per day.
- Paramecia is removed from the diet.
- Zeigler remains in the diet and cages continue to be cleaned 2x per day.

Day 13-20:

- Fish are fed brine shrimp, Zeigler nursery mix, and cleaned 2x per day

Day 21:

- Fish ready to be removed from the nursery and put into adult fish aquariums.
- If fish are not large enough, continue caring for them in the same manner until they are big enough to be transferred out of the nursery.