RUTGERS UNIVERSITY Office for Research	RUAC STANDARD OPERATING PROCEDURE	
TITLE: Disease Monitoring Program of Satellite Fish Facilities		
SOP Category: Aquatics	**RUAC SOP #: 5.09**	**Page: 1 of 3**
Effective Date: 09/27/2024	**Approval:**	
Revisions:		

SCOPE:

This document describes the procedures for the fish health monitoring program of satellite fish facilities. This SOP applies to all Animal Care Staff (ACS), ACS Supervisors (ACSS), Veterinary Staff (VS), and Research Staff members (RS) at the Rutgers University facilities.

OBJECTIVE: To monitor the health status of the Principal Investigator-operated satellite fish facilities. A satellite facility will submit an annual sample (Table 1). Frozen fish and environmental samples are submitted to Charles River Laboratory Services or other diagnostic labs for PCR screening of potential pathogens (Table 2). Additional panels or histopathology can be added as advised by Veterinarian. Result reports are collected in the Aquatic Core folder on SharePoint.

Table 1.

	First Test Period (April)	Second Test Period (October)
Satellite Zebrafish Facility	N/A	Basic Panel - frozen fish
Other Fish Species Satellite	N/A	Mycobacterium Panel - swabs

Table 2.

Charles River Laboratories Panels		
Test Name	**Includes**	**Sample Unit**
Basic Panel	Mycobacterium panel, *Aeromonas hydrophila, Pseudocapillaria tomentosa, Pseudoloma neurophila*	per pool of up to 5 fish
Mycobacterium Panel	*Mycobacterium abscessus, M.chelonae, M. fortuitum, M. haemophilum, M.marinum, M. peregrinum, M. gordonae*	per pool of up to 5 fish; environmental swab (pool of up to 10 swabs)

PROCEDURE:

A. Five fish in 50mL conical tube.

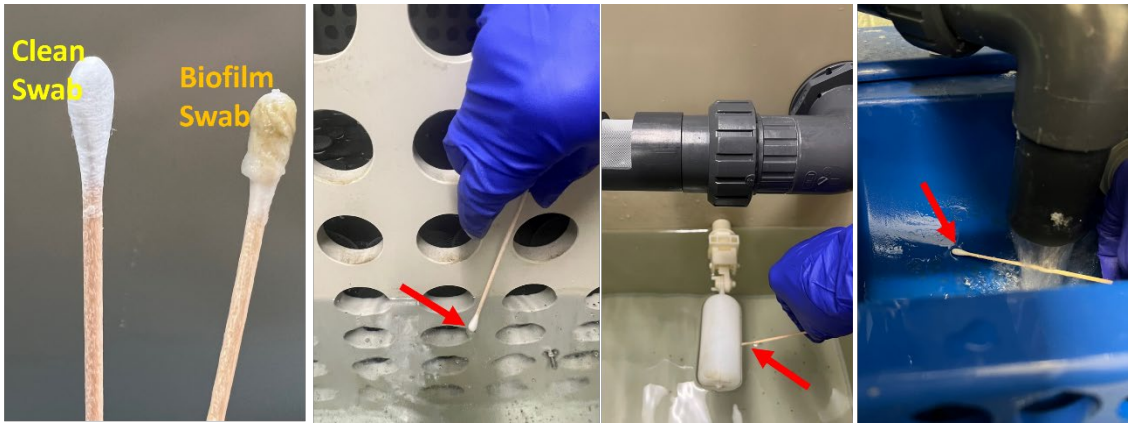
I. Satellite Zebrafish Facility:

1. Veterinary Technician will coordinate with the lab members to identify older (1-2 years) fish that can be used for sample submission.
2. Identify 5 fish per facility location.
3. Euthanize fish per IACUC-approved method (See Rapid Cooling Euthanasia for Zebrafish SOP).
4. Collect 5 euthanized fish into a 50mL conical tube (Picture A), label the tube with room and filtration system number, then place the tube into a freezer.

II. Other Fish Species Satellite:

1. For the second test period, perform environmental swab as follows:
    A. Identify fish system areas that collect debris and biofilm (such as filter intake, outflow pipe, or sump reservoir).
    B. Open a pack of sterile cotton swabs (Picture B).

B. Package of sterile cotton-tipped swabs.



C. Examples of swabbing the side of a reservoir, under the float switch, and inside the sump (red arrows).

    C. Roll the swab over the selected tank or filter area, ensuring all sides of the swab are exposed to biofilm/debris (Picture C).
    D. Place the swab into a clean 50mL conical tube.
    E. Repeat until 10 swabs are collected (Picture D), label the tube with room and filtration system number, and place the tube in a refrigerator.

F. Submit samples to CRL or other diagnostic labs in an insulated shipper bag with ice packs for the Mycobacterium panel.

D. Pool of 10 swabs in a 50mL conical tube.