

## Zebrafish International Resource Center Health Services



1307 Franklin Blvd.  
 5274 University of Oregon,  
 Eugene, Oregon 97403-5274  
 (541) 346-6028 ext. 14,  
 Fax: (541) 346-6151  
 Email: fish\_health@zfin.org

**FOR LAB USE ONLY**

Case No.: \_\_\_\_\_

Date Received: \_\_\_\_\_

Cond. Rec'd: \_\_\_\_\_

**REQUEST FOR LABORATORY EXAMINATION: Please complete this form and submit with samples.  
 Pathology Submission Form (Page 1 of 2)**

<p><b>Contact Information</b></p> <p>Name: _____</p> <p>PI Name: _____</p> <p>Address: _____</p> <p>_____</p> <p>Telephone: _____ FAX: _____</p> <p>Email: _____</p> <p>Alternative contact name: _____</p> <p>Alternative email: _____</p>	<p><b>Billing Information P.O. #</b> _____</p> <p><b>Credit Card Payment:</b> <input type="checkbox"/> VISA, <input type="checkbox"/> Master Card, <input type="checkbox"/> Discover</p> <p><b>Billing Name:</b> _____</p> <p><b>Billing Address:</b> _____</p> <p>_____</p> <p>_____</p> <p>Telephone: _____ FAX: _____</p> <p><b>Funding</b> <input type="checkbox"/> NIH Funded, NIH Grant # _____</p> <p><b>Source:</b> <input type="checkbox"/> Other academic <input type="checkbox"/> Commercial</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><b>Facility Water and Environmental Parameters</b></p> <p>Water System(s):</p> <p><input type="checkbox"/> Flow through system</p> <p><input type="checkbox"/> Static aquariums</p> <p style="padding-left: 20px;">Filtration? _____</p> <p><input type="checkbox"/> Recirculating, multiple tank system</p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;"><input type="checkbox"/> AHAB Benchtop</td> <td style="border: none;"><input type="checkbox"/> AHAB Z-Plex</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Allentown-AQUAneering</td> <td style="border: none;"><input type="checkbox"/> Aqua Schwarz</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Marine BioTech Z-Mod</td> <td style="border: none;"><input type="checkbox"/> Pharmacal</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> Tecniplast ZebTEC</td> <td style="border: none;"><input type="checkbox"/> Thoren Aquatics</td> </tr> <tr> <td colspan="2" style="border: none;"><input type="checkbox"/> Other _____</td> </tr> </table> <p>Number of separate water systems: _____</p> <p>Total water volume of each system: _____</p> <p>Volume of water exchanged per day: _____</p> <p>Number of tanks in facility: _____</p> <p>Approx. number of fish in facility: _____</p> <p>Water source:</p> <p><input type="checkbox"/> Chemical dechlorinated tap water</p> <p><input type="checkbox"/> Carbon dechlorinated tap water</p> <p><input type="checkbox"/> Distilled/deionized water</p> <p><input type="checkbox"/> Reverse osmosis (RO)</p> <p><input type="checkbox"/> Other _____</p> <p>Water additives and dosing method (i.e. by hand, automated)</p> <p><input type="checkbox"/> Salts _____</p> <p>_____</p> <p><input type="checkbox"/> Buffers _____</p> <p>_____</p> <p><input type="checkbox"/> Other Additives _____</p> <p>_____</p> <p>Water Sterilization Method:</p> <p><input type="checkbox"/> UV irradiation <input type="checkbox"/> Submicron Filtration</p> <p><input type="checkbox"/> None <input type="checkbox"/> Other: _____</p> <p>Source(s) of fish in facility (mark all that apply):</p> <p><input type="checkbox"/> ZIRC/ZFIN</p> <p><input type="checkbox"/> Other Labs/Researchers</p> <p><input type="checkbox"/> Scientific supplier</p> <p><input type="checkbox"/> Pet store or fish farm</p> <p><input type="checkbox"/> Other _____</p>	<input type="checkbox"/> AHAB Benchtop	<input type="checkbox"/> AHAB Z-Plex	<input type="checkbox"/> Allentown-AQUAneering	<input type="checkbox"/> Aqua Schwarz	<input type="checkbox"/> Marine BioTech Z-Mod	<input type="checkbox"/> Pharmacal	<input type="checkbox"/> Tecniplast ZebTEC	<input type="checkbox"/> Thoren Aquatics	<input type="checkbox"/> Other _____		<p>Do you raise fish from embryos <input type="checkbox"/> Yes, <input type="checkbox"/> No</p> <p>Quarantine Procedures:</p> <p><input type="checkbox"/> Sanitized embryos only <input type="checkbox"/> Isolation &amp; observation</p> <p><input type="checkbox"/> None <input type="checkbox"/> Other: _____</p> <p>_____</p> <p>Stocking density (# fish/liter): _____</p> <p>History of disease or adverse water quality <input type="checkbox"/> Yes, <input type="checkbox"/> No</p> <p>If yes, describe _____</p> <p>_____</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="text-align: left;">Parameter</th> <th>Value</th> <th>Meter</th> <th>Test Kit</th> <th>Brand</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">Water temperature:</td> <td>_____</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td style="text-align: left;">pH:</td> <td>_____</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td style="text-align: left;">Dissolved Oxygen:</td> <td>_____</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td style="text-align: left;">Ammonia:</td> <td>_____</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td style="text-align: left;">Nitrites:</td> <td>_____</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td style="text-align: left;">Nitrates:</td> <td>_____</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td style="text-align: left;">Carbonate Hardness:</td> <td>_____</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>_____</td> </tr> <tr> <td style="text-align: left;">General Hardness: (Ca<sup>2+</sup>, Mg<sup>2+</sup>)</td> <td>_____</td> <td colspan="3"> <input type="checkbox"/> Soft (0-75 ppm as CaCO<sub>3</sub>)  <input type="checkbox"/> Mod. Hard (75-150 ppm as CaCO<sub>3</sub>)  <input type="checkbox"/> Hard (150-300 ppm as CaCO<sub>3</sub>)  <input type="checkbox"/> Very Hard (300+ ppm as CaCO<sub>3</sub>)                 </td> </tr> </tbody> </table> <p>Conductivity: _____</p> <p>Flow rate (tank turnovers/hour or day): _____</p> <p>Lighting schedule (hours lights on/lights off): _____ / _____</p> <p>Aeration: In Tanks <input type="checkbox"/> Sump <input type="checkbox"/> <input type="checkbox"/> None</p> <p>Diet: _____</p> <p>_____</p> <p>Number of feedings/day _____</p> <p><b>Equipment Cleaning Procedures:</b></p> <p>Check all that apply:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th></th> <th style="text-align: center;">Tanks</th> <th style="text-align: center;">Nets</th> <th style="text-align: center;">Other</th> </tr> </thead> <tbody> <tr> <td>Autoclave</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Bleach</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Hot water wash</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>None</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td>Other chemical wash/soak</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table> <p>If other, describe: _____</p> <p>_____</p>	Parameter	Value	Meter	Test Kit	Brand	Water temperature:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	pH:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	Dissolved Oxygen:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	Ammonia:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	Nitrites:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	Nitrates:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	Carbonate Hardness:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	General Hardness: (Ca <sup>2+</sup> , Mg <sup>2+</sup> )	_____	<input type="checkbox"/> Soft (0-75 ppm as CaCO <sub>3</sub> ) <input type="checkbox"/> Mod. Hard (75-150 ppm as CaCO <sub>3</sub> ) <input type="checkbox"/> Hard (150-300 ppm as CaCO <sub>3</sub> ) <input type="checkbox"/> Very Hard (300+ ppm as CaCO <sub>3</sub> )				Tanks	Nets	Other	Autoclave	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bleach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hot water wash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other chemical wash/soak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> AHAB Benchtop	<input type="checkbox"/> AHAB Z-Plex																																																																															
<input type="checkbox"/> Allentown-AQUAneering	<input type="checkbox"/> Aqua Schwarz																																																																															
<input type="checkbox"/> Marine BioTech Z-Mod	<input type="checkbox"/> Pharmacal																																																																															
<input type="checkbox"/> Tecniplast ZebTEC	<input type="checkbox"/> Thoren Aquatics																																																																															
<input type="checkbox"/> Other _____																																																																																
Parameter	Value	Meter	Test Kit	Brand																																																																												
Water temperature:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____																																																																												
pH:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____																																																																												
Dissolved Oxygen:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____																																																																												
Ammonia:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____																																																																												
Nitrites:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____																																																																												
Nitrates:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____																																																																												
Carbonate Hardness:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____																																																																												
General Hardness: (Ca <sup>2+</sup> , Mg <sup>2+</sup> )	_____	<input type="checkbox"/> Soft (0-75 ppm as CaCO <sub>3</sub> ) <input type="checkbox"/> Mod. Hard (75-150 ppm as CaCO <sub>3</sub> ) <input type="checkbox"/> Hard (150-300 ppm as CaCO <sub>3</sub> ) <input type="checkbox"/> Very Hard (300+ ppm as CaCO <sub>3</sub> )																																																																														
	Tanks	Nets	Other																																																																													
Autoclave	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																													
Bleach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																													
Hot water wash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																													
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																													
Other chemical wash/soak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																																																													

# Zebrafish International Resource Center Health Services



1307 Franklin Blvd.  
 5274 University of Oregon,  
 Eugene, Oregon 97403-5274  
 (541) 346-6028 ext. 14, Fax: (541) 346-6151  
 Email: fish\_health@zfin.org

## Pathology Submission Form (Page 2 of 2) Duplicate as necessary

<b>Contact Name:</b> _____ <b>Date:</b> _____	<b>Service(s) Requested/ No. Fish Submitted:</b> _____ <input type="checkbox"/> <b>Histopathology</b> <input type="checkbox"/> <b>Necropsy</b> <input type="checkbox"/> <b>Bacteriology</b> Fixative used: <input type="checkbox"/> Dietrich's <input type="checkbox"/> Other
--------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<b>General Facility Clinical Information:</b> <input type="checkbox"/> Routine health check or <input type="checkbox"/> Current clinical problem If Facility problem, describe: _____ _____ _____ _____	Initial onset: _____ Percentage of tanks affected: _____ Number of sick fish /tank: _____ How many fish have died: _____ Over what time period: _____ Treatment history: _____ _____ _____
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<b>Fish Specific Information: Fish # (s)</b> _____ Fish ID: _____ Tank: _____ Strain: _____ Date fertilized <u>or</u> approx. age: _____ Date euthanized/died: _____ Assessment of stress on fish: <input type="checkbox"/> 1, <input type="checkbox"/> 2, <input type="checkbox"/> 3, <input type="checkbox"/> 4, <input type="checkbox"/> 5 low                                          high Describe fish specific problem(s) or check boxes below: _____ _____ _____ _____ <b>Behavioral Changes</b> <input type="checkbox"/> Fish at surface/near water inlet <input type="checkbox"/> Rapid breathing/operculum movements <input type="checkbox"/> Sluggish movements/lethargy <input type="checkbox"/> Flashing/rubbing on surfaces <input type="checkbox"/> Circling, twirling <input type="checkbox"/> Loss of equilibrium <b>External Changes</b> <input type="checkbox"/> Color change <input type="checkbox"/> Weight loss <input type="checkbox"/> Exophthalmia/pop-eyes <input type="checkbox"/> Distended abdomen <input type="checkbox"/> Skeletal deformity <input type="checkbox"/> Masses/swellings <input type="checkbox"/> Hemorrhage/redness <input type="checkbox"/> Gas bubbles <input type="checkbox"/> Protruding scales <input type="checkbox"/> Fin erosion or lesion <input type="checkbox"/> Skin ulceration or lesion <b>Location of lesion(s):</b> Check boxes or mark on diagram <input type="checkbox"/> L. lateral <input type="checkbox"/> R. lateral <input type="checkbox"/> Dorsal <input type="checkbox"/> Ventral	<b>Fish Specific Information: Fish # (s)</b> _____ Fish ID: _____ Tank: _____ Strain: _____ Date fertilized <u>or</u> approx. age: _____ Date euthanized/died: _____ Assessment of stress on fish: <input type="checkbox"/> 1, <input type="checkbox"/> 2, <input type="checkbox"/> 3, <input type="checkbox"/> 4, <input type="checkbox"/> 5 low                                          high Describe fish specific problem(s) or check boxes below: _____ _____ _____ _____ <b>Behavioral Changes</b> <input type="checkbox"/> Fish at surface/near water inlet <input type="checkbox"/> Rapid breathing/operculum movements <input type="checkbox"/> Sluggish movements/lethargy <input type="checkbox"/> Flashing/rubbing on surfaces <input type="checkbox"/> Circling, twirling <input type="checkbox"/> Loss of equilibrium <b>External Changes</b> <input type="checkbox"/> Color change <input type="checkbox"/> Weight loss <input type="checkbox"/> Exophthalmia/pop-eyes <input type="checkbox"/> Distended abdomen <input type="checkbox"/> Skeletal deformity <input type="checkbox"/> Masses/swellings <input type="checkbox"/> Hemorrhage/redness <input type="checkbox"/> Gas bubbles <input type="checkbox"/> Protruding scales <input type="checkbox"/> Fin erosion or lesion <input type="checkbox"/> Skin ulceration or lesion <b>Location of lesion(s):</b> Check boxes or mark on diagram <input type="checkbox"/> L. lateral <input type="checkbox"/> R. lateral <input type="checkbox"/> Dorsal <input type="checkbox"/> Ventral
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------