

## Zebrafish Screening Survey - 2

In 2016 the National Toxicology Program (NTP) Division within the National Institute of Environmental Health Sciences established a multi-pronged, multi-year program for the systematic evaluation of the application of zebrafish in toxicology (SEAZIT) studies. The goal of this project is to better understand sources of variability in tests involving the use of zebrafish, with a primary interest in chemical screening using zebrafish embryos. One of the exercises conducted by SEAZIT was a meeting on zebrafish screening data and the variability in scoring approaches and terminology used. As part of this work we are setting up a small online exercise to score phenotypes in a set of 24 images of early life stage zebrafish. The purpose of this exercise is to examine the variability in phenotype descriptions when a collection of labs score identical zebrafish images. This is the second in a series of two surveys. In the first survey, participants were asked to score images of zebrafish embryos using free text. In this survey, participants will be given a controlled vocabulary. The results of the surveys will be compared. Your answers and your contact information will be captured using a Google Form. We will not make your scoring public; however, we would be more than happy to include interested participants in follow-up discussions once the scoring is done and has been reviewed.

What is your name?

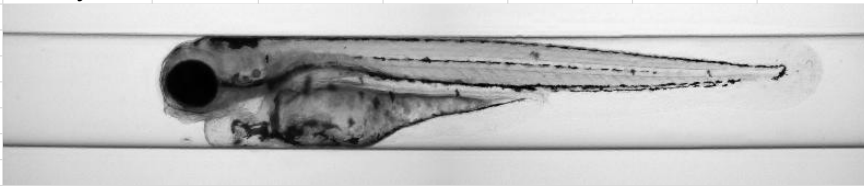
What is the name of your lab?

What is your email?

### Instructions

Please score the following images with the abnormal phenotypes you observe using the provided controlled vocabulary. Choose the general category of abnormal phenotype by using the checkbox in the green column, then pick the most specific term you are comfortable with in the orange column. Click on the orange arrow on the far right of the cell to see the options. Some phenotypes may have multiple dropdown menus. This is so you can pick multiple terms, if you like. A more specific term is not required, if a general term is preferred. To reset a cell, use the delete key. If the exact term you desire is not available, choose the appropriate general term and add the missing term to the blue cell at the end. There can be more than one abnormal phenotype per embryo. If you think the embryo has no abnormal phenotypes, score the image as normal.

### Embryo 1



- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | normal: no abnormalities visible                             |
| <input type="checkbox"/> | abnormal jaw: abnormal morphology of ventral mandibular arch |
| <input type="checkbox"/> | abnormal axis  |
| <input type="checkbox"/> | abnormal tail: abnormal morphology of tail bud               |
| <input type="checkbox"/> | abnormal body length: abnormal length of whole organism      |
| <input type="checkbox"/> | abnormal trunk: abnormal morphology of trunk                 |
| <input type="checkbox"/> | abnormal swim bladder  |
| <input type="checkbox"/> | abnormal head: abnormal morphology of head                   |
| <input type="checkbox"/> | abnormal brain: abnormal morphology of the brain             |
| <input type="checkbox"/> | abnormal snout: malformed snout                              |
| <input type="checkbox"/> | abnormal eye: abnormal morphology of the eye                 |
| <input type="checkbox"/> | abnormal heart: abnormal morphology of the heart             |
| <input type="checkbox"/> | abnormal otic vesicle: abnormal morphology of otic vesicle   |
| <input type="checkbox"/> | abnormal yolk: abnormal morphology of yolk                   |
| <input type="checkbox"/> | abnormal pectoral fin: abnormal morphology of pectoral fin   |
| <input type="checkbox"/> | abnormal gut morphology                                      |
| <input type="checkbox"/> | abnormal pigmentation  |
| <input type="checkbox"/> | abnormal notochord: abnormal morphology of notochord         |
| <input type="checkbox"/> | dead: death of whole organism                                |
| <input type="checkbox"/> | necrotic: multiple parts of embryo                           |
| <input type="checkbox"/> | I do not see all the terms I need                            |

### Embryo 2



- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | normal: no abnormalities visible                             |
| <input type="checkbox"/> | abnormal jaw: abnormal morphology of ventral mandibular arch |



<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain			
<input type="checkbox"/>	abnormal snout: malformed snout			
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye			
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart			
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle			
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk			
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin			
<input type="checkbox"/>	abnormal gut morphology			
<input type="checkbox"/>	abnormal pigmentation			
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord			
<input type="checkbox"/>	dead: death of whole organism			
<input type="checkbox"/>	necrotic: multiple parts of embryo			
<input type="checkbox"/>	I do not see all the terms I need			

Embryo 3



<input type="checkbox"/>	normal: no abnormalities visible			
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch			
<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain			
<input type="checkbox"/>	abnormal snout: malformed snout			
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye			
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart			
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle			
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk			
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin			
<input type="checkbox"/>	abnormal gut morphology			
<input type="checkbox"/>	abnormal pigmentation			
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord			
<input type="checkbox"/>	dead: death of whole organism			
<input type="checkbox"/>	necrotic: multiple parts of embryo			
<input type="checkbox"/>	I do not see all the terms I need			

Embryo 4

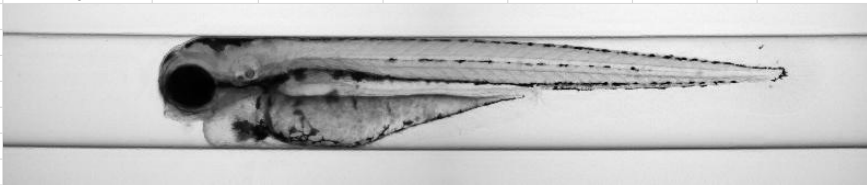


<input type="checkbox"/>	normal: no abnormalities visible			
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch			
<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			



<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain			
<input type="checkbox"/>	abnormal snout: malformed snout			
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye			
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart			
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle			
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk			
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin			
<input type="checkbox"/>	abnormal gut morphology			
<input type="checkbox"/>	abnormal pigmentation			
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord			
<input type="checkbox"/>	dead: death of whole organism			
<input type="checkbox"/>	necrotic: multiple parts of embryo			
<input type="checkbox"/>	I do not see all the terms I need			

Embryo 5



<input type="checkbox"/>	normal: no abnormalities visible			
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch			
<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain			
<input type="checkbox"/>	abnormal snout: malformed snout			
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye			
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart			
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle			
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk			
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin			
<input type="checkbox"/>	abnormal gut morphology			
<input type="checkbox"/>	abnormal pigmentation			
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord			
<input type="checkbox"/>	dead: death of whole organism			
<input type="checkbox"/>	necrotic: multiple parts of embryo			
<input type="checkbox"/>	I do not see all the terms I need			


Embryo 6



<input type="checkbox"/>	normal: no abnormalities visible			
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch			
<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			

A black and white photograph of a fossilized skull fragment, likely from a prehistoric bird or dinosaur. The specimen shows a large, circular eye socket on the left side and a long, slender, and slightly curved beak extending towards the right. The bone surface appears textured and somewhat irregular, typical of fossilized remains. The skull is positioned horizontally against a light background.

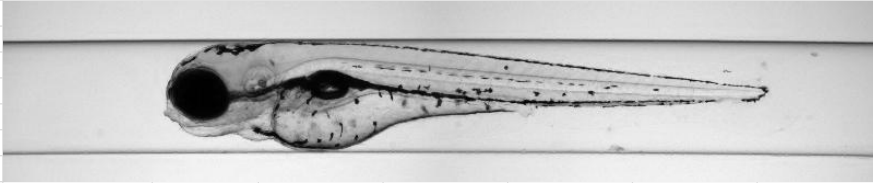
- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | normal: no abnormalities visible                             |
| <input type="checkbox"/> | abnormal jaw: abnormal morphology of ventral mandibular arch |
| <input type="checkbox"/> | abnormal axis  |
| <input type="checkbox"/> | abnormal tail: abnormal morphology of tail bud               |
| <input type="checkbox"/> | abnormal body length: abnormal length of whole organism      |
| <input type="checkbox"/> | abnormal trunk: abnormal morphology of trunk                 |
| <input type="checkbox"/> | abnormal swim bladder  |
| <input type="checkbox"/> | abnormal head: abnormal morphology of head                   |
| <input type="checkbox"/> | abnormal brain: abnormal morphology of the brain             |
| <input type="checkbox"/> | abnormal snout: malformed snout                              |
| <input type="checkbox"/> | abnormal eye: abnormal morphology of the eye                 |
| <input type="checkbox"/> | abnormal heart: abnormal morphology of the heart             |
| <input type="checkbox"/> | abnormal otic vesicle: abnormal morphology of otic vesicle   |
| <input type="checkbox"/> | abnormal yolk: abnormal morphology of yolk                   |
| <input type="checkbox"/> | abnormal pectoral fin: abnormal morphology of pectoral fin   |
| <input type="checkbox"/> | abnormal gut morphology                                      |
| <input type="checkbox"/> | abnormal pigmentation  |
| <input type="checkbox"/> | abnormal notochord: abnormal morphology of notochord         |
| <input type="checkbox"/> | dead: death of whole organism                                |
| <input type="checkbox"/> | necrotic: multiple parts of embryo                           |
| <input type="checkbox"/> | I do not see all the terms I need                            |



- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | normal: no abnormalities visible                             |
| <input type="checkbox"/> | abnormal jaw: abnormal morphology of ventral mandibular arch |
| <input type="checkbox"/> | abnormal axis  |
| <input type="checkbox"/> | abnormal tail: abnormal morphology of tail bud               |
| <input type="checkbox"/> | abnormal body length: abnormal length of whole organism      |
| <input type="checkbox"/> | abnormal trunk: abnormal morphology of trunk                 |
| <input type="checkbox"/> | abnormal swim bladder  |
| <input type="checkbox"/> | abnormal head: abnormal morphology of head                   |
| <input type="checkbox"/> | abnormal brain: abnormal morphology of the brain             |
| <input type="checkbox"/> | abnormal snout: malformed snout                              |
| <input type="checkbox"/> | abnormal eye: abnormal morphology of the eye                 |
| <input type="checkbox"/> | abnormal heart: abnormal morphology of the heart             |

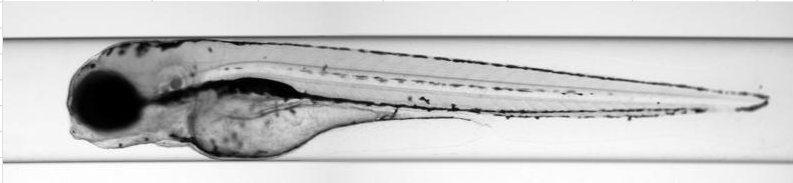
	<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle
	<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk
	<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin
	<input type="checkbox"/>	abnormal gut morphology
	<input type="checkbox"/>	abnormal pigmentation
	<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord
	<input type="checkbox"/>	dead: death of whole organism
	<input type="checkbox"/>	necrotic: multiple parts of embryo
	<input type="checkbox"/>	I do not see all the terms I need

Embryo 11



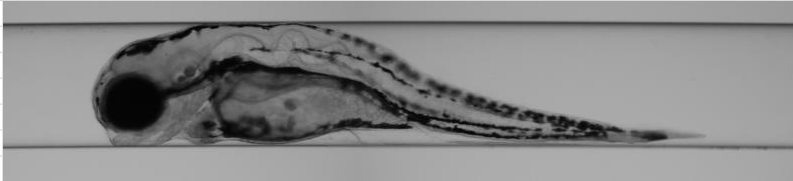
	<input type="checkbox"/>	normal: no abnormalities visible
	<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch
	<input type="checkbox"/>	abnormal axis
	<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud
	<input type="checkbox"/>	abnormal body length: abnormal length of whole organism
	<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk
	<input type="checkbox"/>	abnormal swim bladder
	<input type="checkbox"/>	abnormal head: abnormal morphology of head
	<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain
	<input type="checkbox"/>	abnormal snout: malformed snout
	<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye
	<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart
	<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle
	<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk
	<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin
	<input type="checkbox"/>	abnormal gut morphology
	<input type="checkbox"/>	abnormal pigmentation
	<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord
	<input type="checkbox"/>	dead: death of whole organism
	<input type="checkbox"/>	necrotic: multiple parts of embryo
	<input type="checkbox"/>	I do not see all the terms I need

Embryo 12



	<input type="checkbox"/>	normal: no abnormalities visible
	<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch
	<input type="checkbox"/>	abnormal axis
	<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud
	<input type="checkbox"/>	abnormal body length: abnormal length of whole organism
	<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk
	<input type="checkbox"/>	abnormal swim bladder
	<input type="checkbox"/>	abnormal head: abnormal morphology of head
	<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain
	<input type="checkbox"/>	abnormal snout: malformed snout
	<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye
	<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart
	<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle
	<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk
	<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin
	<input type="checkbox"/>	abnormal gut morphology

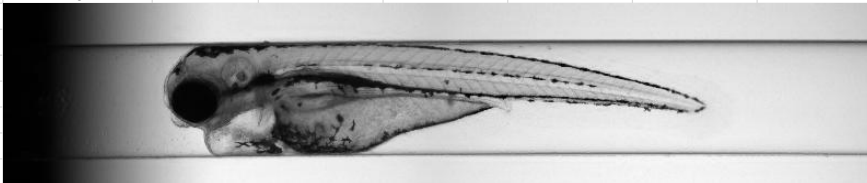
Embryo 13



<input type="checkbox"/>	abnormal pigmentation	
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord	
<input type="checkbox"/>	dead: death of whole organism	
<input type="checkbox"/>	necrotic: multiple parts of embryo	
<input type="checkbox"/>	I do not see all the terms I need	

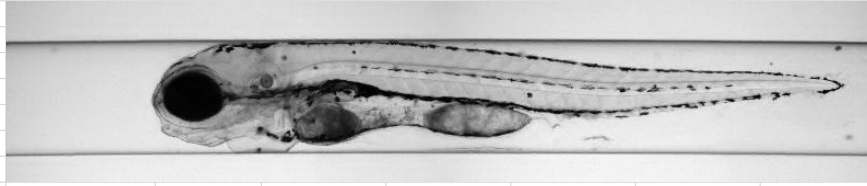
<input type="checkbox"/>	normal: no abnormalities visible	
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch	
<input type="checkbox"/>	abnormal axis	
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud	
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism	
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk	
<input type="checkbox"/>	abnormal swim bladder	
<input type="checkbox"/>	abnormal head: abnormal morphology of head	
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain	
<input type="checkbox"/>	abnormal snout: malformed snout	
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye	
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart	
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle	
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk	
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin	
<input type="checkbox"/>	abnormal gut morphology	
<input type="checkbox"/>	abnormal pigmentation	
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord	
<input type="checkbox"/>	dead: death of whole organism	
<input type="checkbox"/>	necrotic: multiple parts of embryo	
<input type="checkbox"/>	I do not see all the terms I need	

Embryo 14



<input type="checkbox"/>	normal: no abnormalities visible	
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch	
<input type="checkbox"/>	abnormal axis	
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud	
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism	
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk	
<input type="checkbox"/>	abnormal swim bladder	
<input type="checkbox"/>	abnormal head: abnormal morphology of head	
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain	
<input type="checkbox"/>	abnormal snout: malformed snout	
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye	
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart	
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle	
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk	
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin	
<input type="checkbox"/>	abnormal gut morphology	
<input type="checkbox"/>	abnormal pigmentation	
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord	
<input type="checkbox"/>	dead: death of whole organism	
<input type="checkbox"/>	necrotic: multiple parts of embryo	

Embryo 15



☐ I do not see all the terms I need

- ☐ normal: no abnormalities visible
- ☐ abnormal jaw: abnormal morphology of ventral mandibular arch
- ☐ abnormal axis
- ☐ abnormal tail: abnormal morphology of tail bud
- ☐ abnormal body length: abnormal length of whole organism
- ☐ abnormal trunk: abnormal morphology of trunk
- ☐ abnormal swim bladder
- ☐ abnormal head: abnormal morphology of head
- ☐ abnormal brain: abnormal morphology of the brain
- ☐ abnormal snout: malformed snout
- ☐ abnormal eye: abnormal morphology of the eye
- ☐ abnormal heart: abnormal morphology of the heart
- ☐ abnormal otic vesicle: abnormal morphology of otic vesicle
- ☐ abnormal yolk: abnormal morphology of yolk
- ☐ abnormal pectoral fin: abnormal morphology of pectoral fin
- ☐ abnormal gut morphology
- ☐ abnormal pigmentation
- ☐ abnormal notochord: abnormal morphology of notochord
- ☐ dead: death of whole organism
- ☐ necrotic: multiple parts of embryo

☐ I do not see all the terms I need

Embryo 16

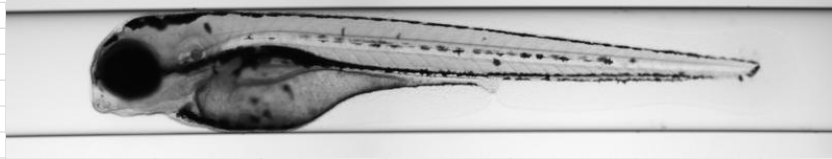


- ☐ normal: no abnormalities visible
- ☐ abnormal jaw: abnormal morphology of ventral mandibular arch
- ☐ abnormal axis
- ☐ abnormal tail: abnormal morphology of tail bud
- ☐ abnormal body length: abnormal length of whole organism
- ☐ abnormal trunk: abnormal morphology of trunk
- ☐ abnormal swim bladder
- ☐ abnormal head: abnormal morphology of head
- ☐ abnormal brain: abnormal morphology of the brain
- ☐ abnormal snout: malformed snout
- ☐ abnormal eye: abnormal morphology of the eye
- ☐ abnormal heart: abnormal morphology of the heart
- ☐ abnormal otic vesicle: abnormal morphology of otic vesicle
- ☐ abnormal yolk: abnormal morphology of yolk
- ☐ abnormal pectoral fin: abnormal morphology of pectoral fin
- ☐ abnormal gut morphology
- ☐ abnormal pigmentation
- ☐ abnormal notochord: abnormal morphology of notochord
- ☐ dead: death of whole organism
- ☐ necrotic: multiple parts of embryo

☐ I do not see all the terms I need

Embryo 17

- ☐ normal: no abnormalities visible



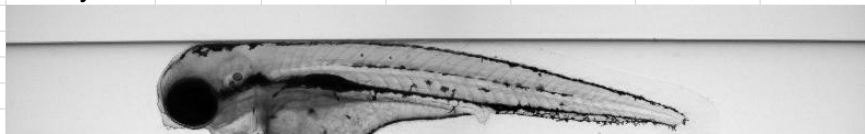
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch			
<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain			
<input type="checkbox"/>	abnormal snout: malformed snout			
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye			
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart			
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle			
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk			
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin			
<input type="checkbox"/>	abnormal gut morphology			
<input type="checkbox"/>	abnormal pigmentation			
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord			
<input type="checkbox"/>	dead: death of whole organism			
<input type="checkbox"/>	necrotic: multiple parts of embryo			
<input type="checkbox"/>	I do not see all the terms I need			

Embryo 18



<input type="checkbox"/>	normal: no abnormalities visible			
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch			
<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain			
<input type="checkbox"/>	abnormal snout: malformed snout			
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye			
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart			
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle			
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk			
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin			
<input type="checkbox"/>	abnormal gut morphology			
<input type="checkbox"/>	abnormal pigmentation			
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord			
<input type="checkbox"/>	dead: death of whole organism			
<input type="checkbox"/>	necrotic: multiple parts of embryo			
<input type="checkbox"/>	I do not see all the terms I need			

Embryo 19

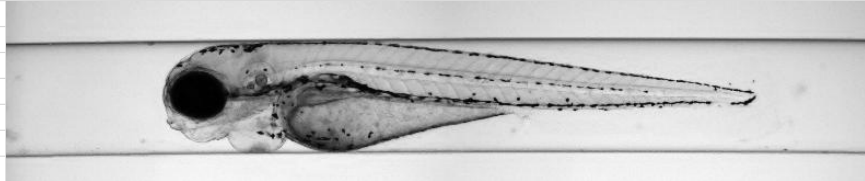


<input type="checkbox"/>	normal: no abnormalities visible			
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch			
<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			

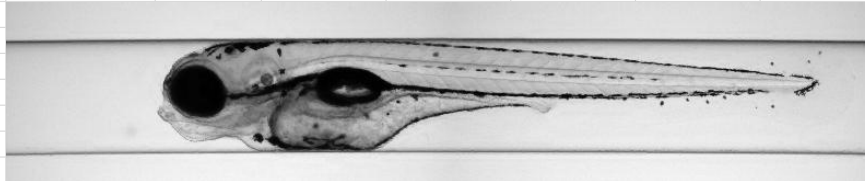




Embryo 20



Embryo 21



<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain			
<input type="checkbox"/>	abnormal snout: malformed snout			
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye			
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart			
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle			
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk			
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin			
<input type="checkbox"/>	abnormal gut morphology			
<input type="checkbox"/>	abnormal pigmentation			
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord			
<input type="checkbox"/>	dead: death of whole organism			
<input type="checkbox"/>	necrotic: multiple parts of embryo			
<input type="checkbox"/>	I do not see all the terms I need			

<input type="checkbox"/>	normal: no abnormalities visible			
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch			
<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain			
<input type="checkbox"/>	abnormal snout: malformed snout			
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye			
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart			
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle			
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk			
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin			
<input type="checkbox"/>	abnormal gut morphology			
<input type="checkbox"/>	abnormal pigmentation			
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord			
<input type="checkbox"/>	dead: death of whole organism			
<input type="checkbox"/>	necrotic: multiple parts of embryo			
<input type="checkbox"/>	I do not see all the terms I need			

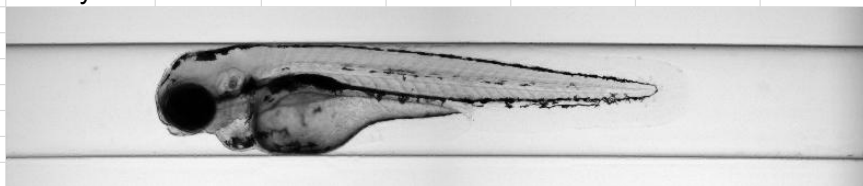
<input type="checkbox"/>	normal: no abnormalities visible			
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch			
<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain			

Embryo 22



<input type="checkbox"/>	abnormal snout: malformed snout	
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye	
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart	
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle	
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk	
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin	
<input type="checkbox"/>	abnormal gut morphology	
<input type="checkbox"/>	abnormal pigmentation	
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord	
<input type="checkbox"/>	dead: death of whole organism	
<input type="checkbox"/>	necrotic: multiple parts of embryo	
<input type="checkbox"/>	I do not see all the terms I need	

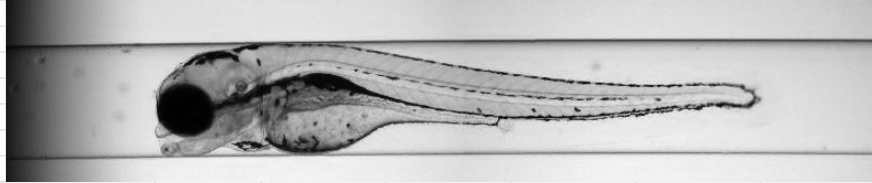
Embryo 23



<input type="checkbox"/>	normal: no abnormalities visible	
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch	
<input type="checkbox"/>	abnormal axis	
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud	
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism	
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk	
<input type="checkbox"/>	abnormal swim bladder	
<input type="checkbox"/>	abnormal head: abnormal morphology of head	
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain	
<input type="checkbox"/>	abnormal snout: malformed snout	
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye	
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart	
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle	
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk	
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin	
<input type="checkbox"/>	abnormal gut morphology	
<input type="checkbox"/>	abnormal pigmentation	
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord	
<input type="checkbox"/>	dead: death of whole organism	
<input type="checkbox"/>	necrotic: multiple parts of embryo	
<input type="checkbox"/>	I do not see all the terms I need	

<input type="checkbox"/>	normal: no abnormalities visible	
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch	
<input type="checkbox"/>	abnormal axis	
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud	
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism	
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk	
<input type="checkbox"/>	abnormal swim bladder	
<input type="checkbox"/>	abnormal head: abnormal morphology of head	
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain	
<input type="checkbox"/>	abnormal snout: malformed snout	
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye	
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart	
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle	

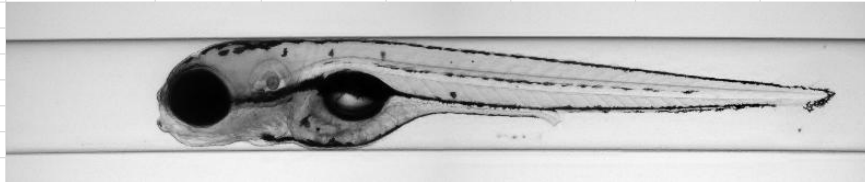
Embryo 24



<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk			
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin			
<input type="checkbox"/>	abnormal gut morphology			
<input type="checkbox"/>	abnormal pigmentation			
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord			
<input type="checkbox"/>	dead: death of whole organism			
<input type="checkbox"/>	necrotic: multiple parts of embryo			
<input type="checkbox"/>	I do not see all the terms I need			

<input type="checkbox"/>	normal: no abnormalities visible			
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch			
<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain			
<input type="checkbox"/>	abnormal snout: malformed snout			
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye			
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart			
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle			
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk			
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin			
<input type="checkbox"/>	abnormal gut morphology			
<input type="checkbox"/>	abnormal pigmentation			
<input type="checkbox"/>	abnormal notochord: abnormal morphology of notochord			
<input type="checkbox"/>	dead: death of whole organism			
<input type="checkbox"/>	necrotic: multiple parts of embryo			
<input type="checkbox"/>	I do not see all the terms I need			

Embryo 25



<input type="checkbox"/>	normal: no abnormalities visible			
<input type="checkbox"/>	abnormal jaw: abnormal morphology of ventral mandibular arch			
<input type="checkbox"/>	abnormal axis			
<input type="checkbox"/>	abnormal tail: abnormal morphology of tail bud			
<input type="checkbox"/>	abnormal body length: abnormal length of whole organism			
<input type="checkbox"/>	abnormal trunk: abnormal morphology of trunk			
<input type="checkbox"/>	abnormal swim bladder			
<input type="checkbox"/>	abnormal head: abnormal morphology of head			
<input type="checkbox"/>	abnormal brain: abnormal morphology of the brain			
<input type="checkbox"/>	abnormal snout: malformed snout			
<input type="checkbox"/>	abnormal eye: abnormal morphology of the eye			
<input type="checkbox"/>	abnormal heart: abnormal morphology of the heart			
<input type="checkbox"/>	abnormal otic vesicle: abnormal morphology of otic vesicle			
<input type="checkbox"/>	abnormal yolk: abnormal morphology of yolk			
<input type="checkbox"/>	abnormal pectoral fin: abnormal morphology of pectoral fin			
<input type="checkbox"/>	abnormal gut morphology			
<input type="checkbox"/>	abnormal pigmentation			

- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | normal: no abnormalities visible                             |
| <input type="checkbox"/> | abnormal jaw: abnormal morphology of ventral mandibular arch |
| <input type="checkbox"/> | abnormal axis  |
| <input type="checkbox"/> | abnormal tail: abnormal morphology of tail bud               |
| <input type="checkbox"/> | abnormal body length: abnormal length of whole organism      |
| <input type="checkbox"/> | abnormal trunk: abnormal morphology of trunk                 |
| <input type="checkbox"/> | abnormal swim bladder  |
| <input type="checkbox"/> | abnormal head: abnormal morphology of head                   |
| <input type="checkbox"/> | abnormal brain: abnormal morphology of the brain             |
| <input type="checkbox"/> | abnormal snout: malformed snout                              |
| <input type="checkbox"/> | abnormal eye: abnormal morphology of the eye                 |
| <input type="checkbox"/> | abnormal heart: abnormal morphology of the heart             |
| <input type="checkbox"/> | abnormal otic vesicle: abnormal morphology of otic vesicle   |
| <input type="checkbox"/> | abnormal yolk: abnormal morphology of yolk                   |
| <input type="checkbox"/> | abnormal pectoral fin: abnormal morphology of pectoral fin   |
| <input type="checkbox"/> | abnormal gut morphology                                      |
| <input type="checkbox"/> | abnormal pigmentation  |
| <input type="checkbox"/> | abnormal notochord: abnormal morphology of notochord         |
| <input type="checkbox"/> | dead: death of whole organism                                |
| <input type="checkbox"/> | necrotic: multiple parts of embryo                           |
| <input type="checkbox"/> | I do not see all the terms I need                            |

May we contact you to follow up if needed?

Thank you for participating in this survey!