Danio rerio ("Zebrafish")

✓ Friends

About

Hello! I am a *Danio rerio.* Most people call me a "zebrafish". I am a model organism used by Duke University to research the impacts of exposure to chemicals such as pesticides and flame retardants.

Frequently Asked Questions

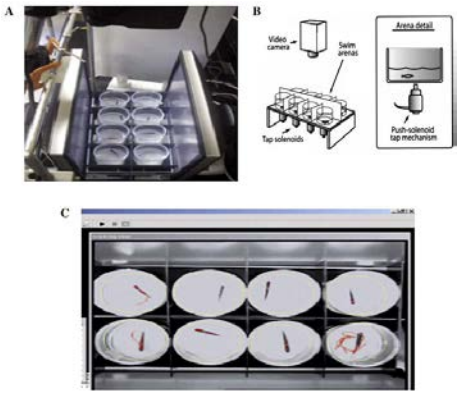
1. Why are you such a great model?
   - Visible embryonic development
   - Rapid development
   - Mapped genome
   - Short generation time
   - High fertility
   - Easy to maintain in the lab
   - Possess same organs as other vertebrates

2. What types of research are you used for?
   - Toxicology
   - Neurodevelopment
   - Behavior/Learning
   - Pharmacology
   - Early development

3. Are you half zebra, half fish?
   No.

Check out this cool video for more information!

Startle Test



The startle/tap test is used to assess anxiety in fish. A little hammer taps the bottom of the fish plate. Over time the fish should get used to the tapping and become less anxious. Scientists are looking at the ability of a fish exposed to chemicals to habituate, or get used to the tapping.

Eddins et al. Zebrafish provide a sensitive model of persisting neurobehavioral effects of developmental chlorpyrifos exposure: comparison with nicotine and pilocarpine effects and relationship to dopamine deficits, Neurotoxicology and Teratology, Vol. 32, Issue 1. 2010. P. 99-108.

Living

Kathmandu, Nepal
Hometown

Durham, North Carolina
Current City

Basic Information

Sex	Male
Birthday	March 22
Favorite Food	Insects, zooplankton
Lifespan	3-5 years
Size	6 cm max.
Habitat	Freshwater systems

Employment

Dr. Ed Levin's lab

Dr. Heather Stapleton's lab

Contact Information

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