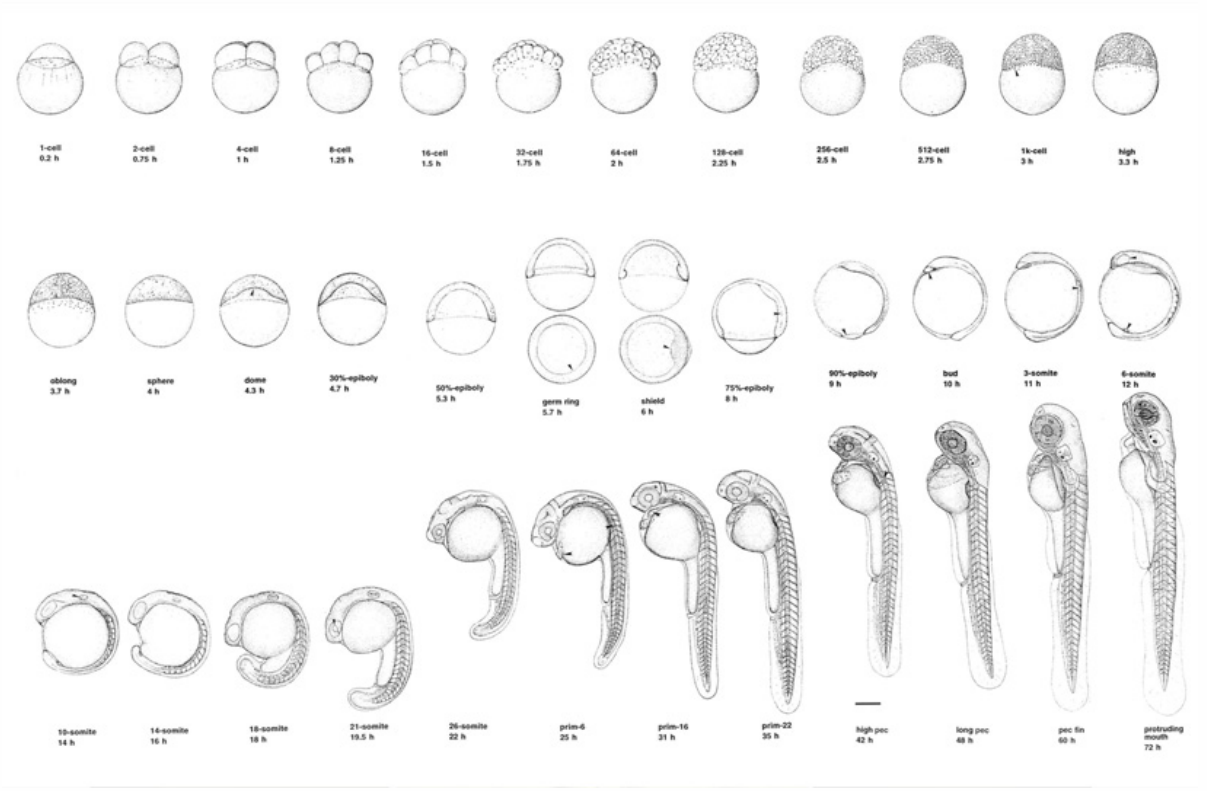
Why Zebrafish?

Zebrafish Facility

Why are zebrafish used for scientific research?



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Zebrafish has a number of characteristics that makes it a perfect model organism for a wide rage of biological research.

- Embryos are transparent allowing the visualization of all developmental stages with great clarity.
- Embryonic development is rapid. All common vertebrate specific body features can be seen within two days of development.
- The genome is sequenced and large scale forward and reverse genetic screens are feasible.
- Short generation time (2-4 months). Large progeny can be obtained which greatly facilitate genetic analyses.
- Easy manipulation for automated or visual screens.
- Drug administration directly to fish water or by microinjection.
- Relatively easy to handle and cheap in comparison to other vertebrate research models.

Research with the zebrafish has allowed great advances in the fields of developmental biology, cell biology, behavioral studies, drug screening, oncology, toxicology, reproductive

studies, genetics, neurobiology, environmental sciences, stem cell and regenerative medicine as well as evolutionary biology.