Educational Resources

This page hosts links to external websites, not maintained by ZFIN, with resources for students and educators.

Select movies demonstrating cell division and development will be made available on this page. We hope this collection will continue to grow over time. Suggestions for inclusion are welcome and can be sent to Jonathan Knight.

Zebrafish Educational Websites

Fish For Science - Learn about how zebrafish can help us understand human diseases and how to develop treatments for them.

At the MRC Centre for Developmental and Biomedical Genetics (CDBG) at the University of Sheffield, biologists and hospital doctors have teamed up to use zebrafish embryos to learn more about human disease. The Fish For Science website introduces visitors to the model organism zebrafish and explains how the genetically modified fish with fluorescent cells and organs is an essential part of research in discovering new treatments for disease.

Project BioEYES - A unique, interactive site designed for students to learn about the fields of science and medicine by becoming scientists in their own classrooms.

Project BioEYES is a K-12 science education program that provides classroom- and outdoor-based learning opportunities through the use of live zebrafish. Project BioEYES is designed to incorporate teacher empowerment and provides professional development seminars and a co-teaching experience with trained university science consultants, called outreach educators. BioEYES has several locations throughout the U.S. and Australia. For more information, please visit bioeyes.org.

Zebrafish K-12 - Facts and information about “zebrafish”, the organism, and “zebrafish (Danio rerio)”, the popular model used for developmental and genetics research.

This site contains facts and information on zebrafish and zebrafish research, images of the developmental stages of the zebrafish and links to other online resources, including commercial suppliers and other K-12 sites. In addition, the site contains an online manual, Zebrafish ABZs, designed for those interested in using zebrafish for teaching scientific research or for simple projects.
Zebrafish In The Classroom - Designed to be a resource for teachers and students who are using zebrafish in undergraduate courses.

This site contains protocols for techniques ranging from the raising and maintenance of zebrafish, to fixing embryos for microscopy, to molecular techniques used for the visualization of RNA and proteins. In addition, there are experimental protocols for the classroom and virtual experiments that can be carried out online when a laboratory setting is not available.

Publications For Zebrafish In Education


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In this paper, we present one of the approaches to knowledge dissemination, namely the independent educational project, which has a more flexible formula, and may give more benefits than science festivals. Based on our experience in implementing educational projects connected with biology, we provide examples of the workflow of such a project and some useful tips.

Zebrafish Movies

The Zebrafish Flipbook Movie
http://homepages.wmich.edu/~dkane1/flipbook/index.html

Flipbook: Zebrafish Development
http://exploratorium.edu/imaging_station/activities/flipbooks/flipbooks_zebrafish.php

Zebrafish: A model for heart development
http://exploratorium.edu/imaging_station/research/zebrafish/story_zebrafish1.php

The zebrafish digital embryo
http://www.embl-heidelberg.de/digitalembryo/

YouTube videos
http://www.youtube.com/results?search_query=zebrafish+embryo
http://www.youtube.com/user/CarolineZebrafish