Abstract

Advantages of Zebrafish Models

- Vertebrate organisms with high genomic homology to man
- Inexpensive to obtain and maintain
- Short generation time, many offspring per mating
- External fertilization and embryonic development
- Rapid development of transport embryos
- A mosaic system
- Well established morpholinos, TALENs, and CRISPR technologies
- Especially useful for large scale drug and toxicology screens

Contributors

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Recirculating Aquaria System

- Zebrafish Embryos and Fry

Zebrafish Husbandry Education

The first comprehensive Zebrafish Husbandry Education Program offered in the world was initiated in 2014 as a collaboration between UAB, Galden State Community College, and the Zebrafish Husbandry Association (ZHA). The goal of this Program is to standardize and optimize husbandry practices at different laboratories and institutions internationally in order to minimize research variation. The curriculum was developed by leaders in zebrafish husbandry and has 3 parts: (1) an online semester-long course offered each spring and fall; (2) a 3-day hands-on Short Course offered annually at UAB. In addition, major aquatic products vendors donated housing systems and equipment for the hands-on sessions. The UAB ZRF is honored to have been involved in the development and implementation of this new and innovative training program that is providing intensive training on the husbandry of zebrafish to a national and international level. As of 2019, we have hosted 6 Short Courses with a total of 130 participants and 8 online courses with a total of 50 participants. Eighteen participants have taken both. Participants have joined us from 15 countries.

ZRF Procedural Laboratories

- 5 Embryo Manipulation & Injection Stations
- 2 Fluorescent Microscope Stations
- Lolloi Swim Tunnel and Respirometer

ZRF Staff Specialists

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UAB Webpage address:
http://www.uab.research/administration/offices/ARP/Pages/Zebrafish-Research-Facility.aspx