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Development of Zebrafish Lines Highly Sensitive to Neoplasia

The zebrafish (*Danio rerio*) is now the pre-eminent vertebrate model system for clarification of the roles of specific genes and signaling pathways in development. The zebrafish genome will be completely sequenced within the next 1-2 years. Together with the substantial historical database regarding basic developmental biology, toxicology and gene transfer, the rich foundation of molecular genetic and genomic data makes zebrafish a powerful model system for clarifying mechanisms in toxicity. In contrast to the highly advanced knowledge base on molecular developmental genetics in zebrafish, our database regarding infectious diseases and noninfectious diseases and pathologic lesions in zebrafish lags far behind the information available on most other domestic mammalian and avian species, particularly rodents. Currently, minimal data are available regarding spontaneous neoplasm rates in any of the commonly used wild-type or mutant lines of zebrafish. Very little information is available on spontaneous aging lesions in any of the countless zebrafish lines. Therefore, to fully utilize the potential of zebrafish as animal models for understanding human development, disease, and toxicology we must greatly advance our knowledge base on zebrafish diseases and pathology.



Date: Friday, 18 Oct 2002
Time: 4 -5 pm
Venue: LT 20
Host: A/P Gong Zhiyuan

All are welcome

