Implementation of Zebrafish Ontologies for Toxicology Screening

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NTP's Systematic Evaluation of the Application of Zebrafish in Toxicology (SEAZIT) program was created in part to facilitate development of standardized screening approaches for the use of zebrafish in hazard identification and risk assessment. Through interviews with zebrafish researchers, SEAZIT cataloged current zebrafish screening practices and determined that the data collected and analysis procedures are highly variable. An April 2017 workshop reviewed the state of the science for zebrafish screening data analytics. Workshop sessions covered standardized nomenclature (ontology) and the advantages and limitations of available ontological approaches and software. The workshop outlined best practices for data production and analysis and identified needs to advance the application of the zebrafish model in toxicology. This effort was funded with U.S. Federal funds from the NIEHS/NIH/HHS under Contract HHSN27320140003C.