



Society for Integrative and  
Comparative Biology

2009 Annual Meeting

## Meeting Abstract

**WKS1.** Monday, Jan. 5 **Workshop on Evolution and Ontologies** VISION, SMITH, WESTERFIELD, MABEE, DAHDUL, BALHOFF, DEANS, MIDFORD, MAGLIA, LEWIS;

Interoperability of evolutionary and organismal databases with genetic and phenotypic databases is key to addressing many cutting edge research questions. The focus of this workshop will be on the utility of ontologies for evolutionary and organismal biologists in bridging these data. Ontologies and their structures, relationships and best practices will be introduced and speakers will provide examples of the types of interdisciplinary queries that can be made using ontologies. The utility of ontologies in integrating evolutionary and organismal biology with genetics, development, and model organism phenotypes will be emphasized.



This "Evolutionary Biology and Ontologies" workshop is being held by National Evolutionary Synthesis Center (NESCent) in collaboration with the National Center for Biomedical Ontologies (NCBO). This workshop is a joint outreach and educational workshop to promote integration of evolutionary biology with genetic, genomic, and developmental data through ontologies and is funded by a grant from NSF-DBI to Paula Mabee, Todd Vision, and Monte Westerfield.

- 8:00-8:05 **Todd Vision** (University of North Carolina, National Evolutionary Synthesis Center) *Workshop Introduction*
- 8:05-8:35 **Barry Smith** (University of Buffalo): *Introduction to Ontologies*
- 8:35-9:00 **Monte Westerfield** (Zebrafish Information Service, zfin.org; University of Oregon): *Linking Animal Models and Human Diseases*
- 9:00-9:20 **Paula Mabee** (University of South Dakota) *The Phenoscape system for Devo-Evo Data Mining*
- 9:20-9:40 **Wasila Dahdul** (University of South Dakota; National Evolutionary Synthesis Center): *Challenges in Developing Multi-species Anatomy Ontologies*
- 9:40-10:00 **James Balhoff** (National Evolutionary Synthesis Center): *Phenex: A Curatorial Tool for Comparative Evolutionary Data*
- 10:00-10:20 Coffee Break
- 10:20-10:50 **Andy Deans** (North Carolina State University): *Developing a Hymenopteran ontology*
- 10:50-11:20 **Peter Midford** (University of Kansas): *Comparative Analysis of Behavior using Ontologies*
- 11:20-11:50 **Anne Maglia** (Missouri University of Science and Technology): *Developing an Amphibian Ontology*
- 11:50-12:00 **Suzanna Lewis** (Berkeley Bioinformatics and Ontology Project): *Wrap-up*