

Animal Trait Ontology (ATO)

An ATO is a standard way of trait description across species. The goal is to set up an ontology which will fulfil the needs of research as well as industry.

- To improve ontology relevant for host-pathogen interactions and immunology
- To bridge the 'language gap' between animal genomics and breeding industry terminology
- To share, compare and use information within and across species
- To link health and production related findings at the molecular and physiological level to relevant breeding terms in an automated way.

The ontology consists of:

- a dictionary (Fig. 1) explaining terms
- A thesaurus (Fig. 2) explaining and linking phenotypes within and across species.

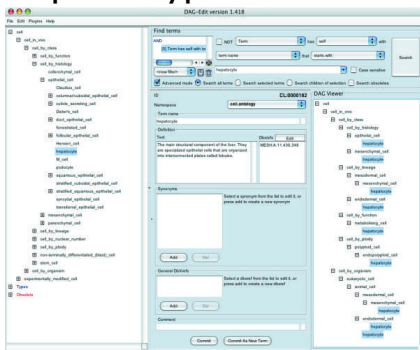


Fig. 1. Dictionary

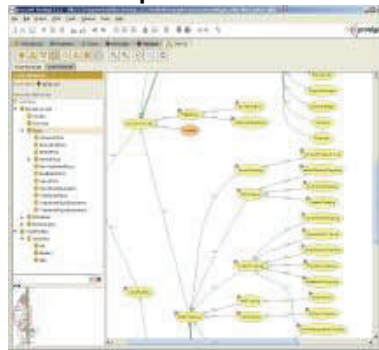
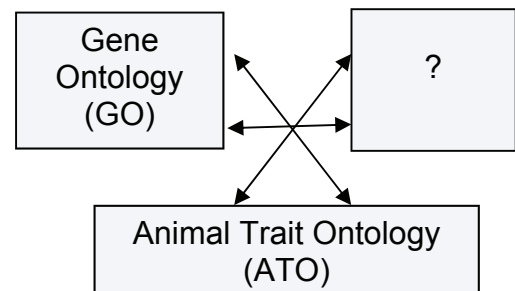


Fig. 2. Thesaurus

An animal trait ontology that involves multiple research groups across the world. Each group works on an ontology module for a particular species.



Links to other ontologies



Collaborations

IOWA STATE UNIVERSITY



StoneBridge Breeding Ltd
The Bridge from Genomics to Animal Breeding

Future Activities

- Develop ATO tool (Pig, Cattle, Chicken, Horse, Sheep, Salmon, Shrimp)
- Involve Animal Industry and Research Groups
- Integrate with other databases (Human, Rat and Mouse)
- Refine the COB (Collaborative Ontology Building) editor
- Develop ontology query tools
- Link information across databases

Interested in participating? Contact: Hein.vandersteen@stonebridgeg.com