Beyond Ontologies

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WayCraft Biosoftware

ISCB Rocky ‘06
Metadata-driven Modeling

- Semi-structured, very flexible
- RDF, DAML-OIL, Frame-Slot
- Excellent for classification, and for cataloguing and describing concepts
- GO / OBO, UMLS, many others
“We need a theoretical framework in which to embed biological data so that the endless stream of data, filled with the flotsam and jetsam of evolution, can be sifted and abstracted.”

Sidney Brenner
The Scientist, 16[6]:12, Mar 18th, 2002
Implicit Objects and Relationships

A biologist writes:

... and implies:

Composition

Process

Generalization
Levels of Abstraction

Function

Mechanism

A

A

R

B

AB

ADP

ATP

R₀

Rₚ

B_f

RB

A

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Disease Cards Application