



Evolutionary Biology & Ontologies Workshop

June 20, 2008

Focus

This meeting is focused on the application of ontologies to studies in evolutionary biology and related disciplines, with a particular emphasis on studies of the phenotype.

Goals

- (1) Introducing what ontologies are, how they should be built, what makes an ontology useful, and how ontologies help people collaborate across disciplines;
- (2) Giving illustrations of ontologies actually being used to address problems of interest to evolutionary biologists;
- (3) Networking and planning: what do we do next in order to advance ontology-based information integration in evolutionary biology?

Registration

Registration is open to attendees of the Evolution 2008 conference at no additional cost.

EBO Workshop Organized by:

Barry Smith (Buffalo), Paula Mabee (South Dakota), Todd Vision (North Carolina), Monte Westerfield (Oregon)

Further information, see:

http://www.bioontology.org/wiki/index.php/Evolutionary_Biology_and_Ontologies

This workshop is organized under the auspices of the National Center for Biomedical Ontologies (NCBO, <http://www.bioontology.org/>) in collaboration with the National Evolutionary Synthesis Center (NESCent, <http://www.nescent.org/>). Organized in conjunction with the Evolution 2008 meeting (<http://www.cce.umn.edu/conferences/evolution/>).



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TENTATIVE PROGRAM

- 9:00am – 10:00am **Tutorial: An Introduction to Ontology for Evolutionary Biology**
Barry Smith (Center of Excellence in Bioinformatics and Life Sciences, University at Buffalo; Lead Scientist of the National Center for Biomedical Ontology)
- 10:00am – 10:30am Morning Break
- 10:30am – 11:00am **An Introduction to the PATO Phenotype Ontology**
Chris Mungall (University of California, Berkeley)
- 11:00am – 11:30am **Using Ontologies in the NCBO Project to Link Fish and Fly Mutants to Human Diseases**
Monte Westerfield (Director, Zebrafish Information Network and Institute of Neuroscience, Eugene)
- 11:30am – 12:00pm **An Introduction to the Use of Ontologies in Linking Evolutionary Phenotypes to Genetics**
Paula Mabee (University of South Dakota)
- 12:00pm – 1:00pm Lunch
- 1:00pm – 1:45pm **An Introduction to the CARO Anatomy Reference Ontology: Multispecies Ontologies**
Melissa Haendel (Anatomy Curator, Zebrafish Information Network, Eugene, Oregon)
- 1:45pm – 2:15pm **Developing an Ontology for Amphibians using NLP**
Anne Maglia (University of Missouri–Rolla)
- 2:15pm – 2:45pm Afternoon Break
- 2:45pm – 3:15pm **Ontologies, Image Databases, and Evolutionary Biology**
Martin Ramirez (Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Buenos Aires, Argentina)
- 3:15pm – 3:45pm **An Introduction to the Use of Anatomy Ontologies for the Identification of Genes Underlying Complex Traits**
Todd Vision (Assistant Director, National Evolutionary Synthesis Center and Department of Biology, University of North Carolina)
- 3:45pm – 4:45pm Roundtable & Discussion
- 4:45pm – 5:00pm **Wrap-Up Session: Next Steps**
Suzanna Lewis and Paula Mabee