

Gene Ontology Consortium

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Research Areas



Tool Development

Standard



Basic Research

At a Glance

- Status: **Active Consortium**
- Year Launched: **1999**
- Initiating Organization: **National Human Genome Research Institute**
- Initiator Type: **Government**

Abstract

The Gene Ontology (GO) consortium is a major bioinformatics initiative to develop a computational representation of our evolving knowledge of how genes encode biological functions at the molecular, cellular, and tissue system levels. Biological systems are so complex that we need to rely on computers to represent this knowledge. The project has developed formal ontologies that represent more than 40,000 biological concepts and are constantly being revised to reflect new discoveries. To date, these concepts have been used to “annotate” gene functions based on experiments reported in more than 100,000 peer-reviewed scientific papers.

Structure & Governance

The GO consortium is co-directed by (in alphabetical order):

Judith Blake, Jackson Laboratory (mouse gene annotation, ontology development)

J. Michael Cherry, Stanford University (yeast gene annotation, data production processes)

Suzanna Lewis, Lawrence Berkeley National Laboratory (GO software development, ontology development)

Paul Sternberg, Caltech (C. elegans gene annotation, Common Annotation Framework development)

Paul Thomas, University of Southern California (phylogenetic annotation, ontology development)

The GO Council consists of the heads of major participating groups (in alphabetical order):

Alex Bateman, UniProt, European Bioinformatics Institute (gene annotation)

Nick Brown, FlyBase, University of Cambridge (Drosophila gene annotation)

Rex Chisholm, DictyBase, Northwestern University (Dictyostelium gene annotation)

James Hu, Texas A&M (gene annotation)

Eva Huala, The Arabidopsis Information Resource, Carnegie Institution for Science (Arabidopsis gene annotation)

Claire O'Donovan, UniProt, European Bioinformatics Institute (gene annotation)

Helen Parkinson, Ontologies Team lead, European Bioinformatics Institute (ontology development)

Monte Westerfield, University of Oregon (zebrafish gene annotation)

Financing

Direct support for the GO consortium is provided by an R01 grant from the National Human Genome Research Institute (grant HG02273).

Intellectual Property

To reference the Gene Ontology consortium, cite this paper: The Gene Ontology Consortium. Gene ontology: tool for the unification of biology. Nat Genet. May 2000;25(1):25-9. Online at Nature Genetics.

Data Sharing

To cite data provided by the Gene Ontology consortium, either from AmiGO or the files downloaded from the GO website, state the release date and/or version number of the data. Both annotation and ontology data may change over time, and to reproduce the results of an analysis, it is important that the same initial GO data is used.

Links/Social Media Feed

Homepage	http://geneontology.org/
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