

GO Editorial Office Report — March 2006

1. GO Staff

Full-time staff unchanged: Midori Harris, Jane Lomax, Amelia Ireland, Jennifer Clark. From January–July 2006 we have a visiting student, Erika Feltrin (see below).

2. Annotation Progress

Not applicable

3. Methods of Annotation

Not applicable

4. Ontology development

Summary table:

| | March31, 2005 | March 23, 2006 | New | %change |
|------------------|--------------------------|---------------------------|------------|----------------|
| function | 6949 | 7399 | 450 | +6.5 |
| process | 9263 | 10517 | 1254 | +13.5 |
| component | 1484 | 1688 | 204 | +13.7 |
| total | 17696 | 19694 | 1908 | +10.8 |

Note: the table does not include obsolete terms (987 in March 2005; 1000 in March 2006), whereas reports at previous meetings have included obsoletes in the summary table.

Content highlights:

- Draft of cellular component ontology with complete is_a paths (see poster)
- Progress towards integrating cell type ontology (CL) terms into GO
 - changes to GO term names (as well as CL terms) to reconcile GO and CL
 - reviewing OBOL output of proposed cross-product terms
- New effort to improve transporter terms in molecular function (see poster)
- Content meeting in November 2005 led to proposals in immunology (with lots of work from Alex Diehl and the immunology experts who participated), self/

non-self processes, interaction between organisms, and cell death. All are under consideration; also see poster on two-taxon annotation.

- Many additions and changes to improve MetaCyc and GO consistency (includes metacyc2go mapping)
- Several development topics, e.g. neurogenesis, metamorphosis, embryonic morphogenesis, etc.
- Additions and changes in cellular component for consistency with MetaCyc component ontology

5. Publications/Tutorials/Presentations with substantial GO component

Publications

- Clark JI, Brooksbank C, Lomax J. 2005. It's all GO for plant scientists. *Plant Physiol.* **138**(3): 1268–1279.
- Harris MA, Lomax J, Ireland A, and Clark JI. 2005. The Gene Ontology project. In *Encyclopedia of Genetics, Genomics, Proteomics and Bioinformatics*, Part 4, Bioinformatics. S. Subramanian (section ed.), Wiley & Sons, Inc., New York.
- Lomax J, The Gene Ontology Consortium. 2005. Get ready to GO! A biologist's guide to the Gene Ontology. *Brief. Bioinform.* **6**: 298–304.
- The Gene Ontology Consortium. 2006. The Gene Ontology Project in 2006. *Nucleic Acids Res.* **34**: D322–D326.

Tutorials

- HGMP Microarray Workshop, Cambridge, UK. Jane Lomax & Amelia Ireland, March 2005
- One day course on GO Bioinformatics Masters, Instituto Gulbenkian de Ciencia, Lisbon, Portugal. Amelia Ireland, May 2005
- One-day workshop on GO, Plant & Animal Genomes XIV, San Diego, CA. Jen Clark, John Day-Richter, Harold Drabkin & Rama Balakrishnan; January 2006
- GO tutorial on annotation and microarray analysis at MUGEN course, Milan. Jane Lomax, February 2006
- Introduction to GO and AmiGO walkthrough. Computing Workshop, European Fission Yeast Meeting, Hinxton, UK. Midori harris & Jane Lomax, March 2006

Presentations

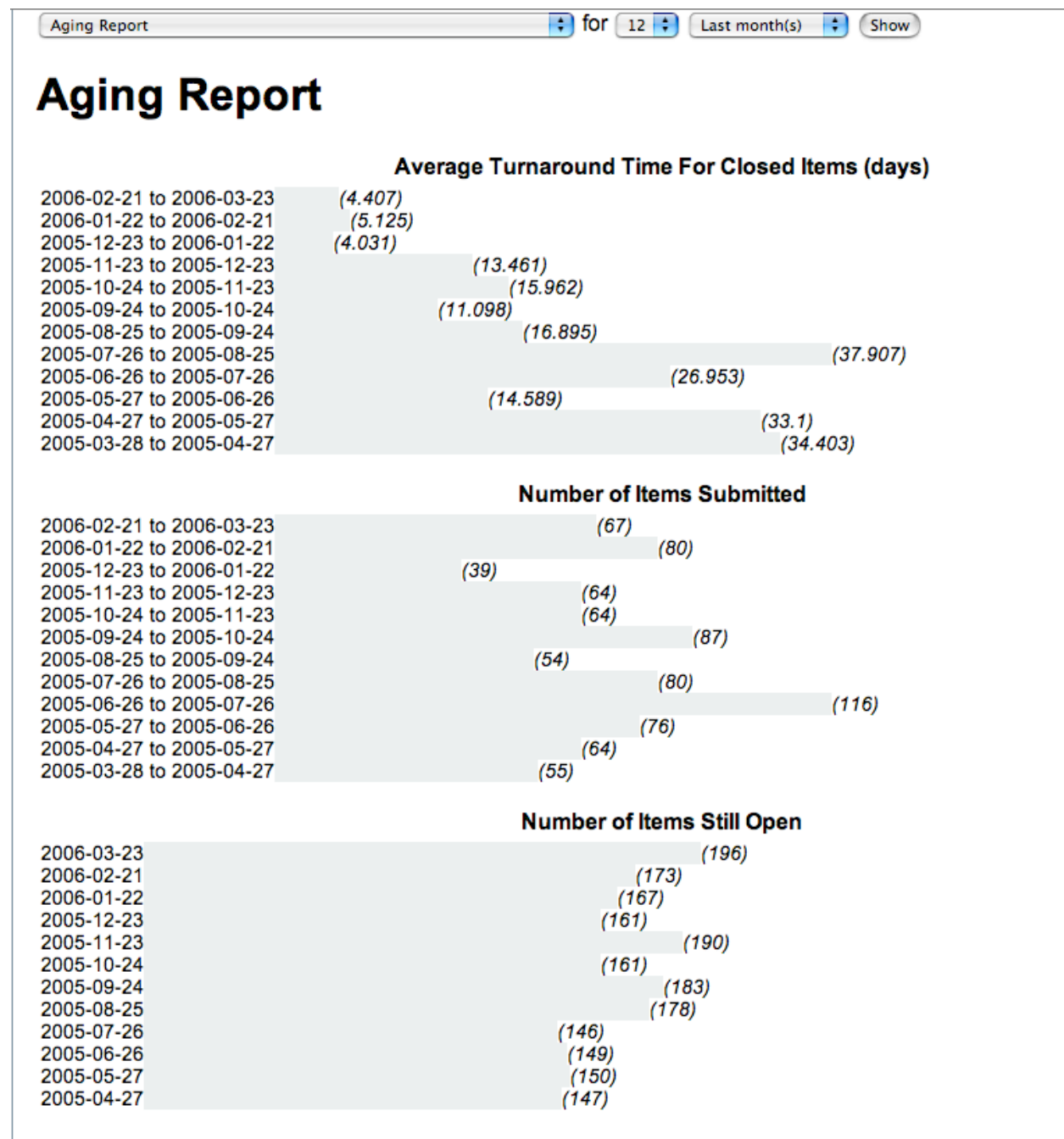
- The Gene Ontology. Wellcome Trust Advanced Course, Cambridge, UK. Jane Lomax, June 2005.

- GOing forward: Refining the content of the Gene Ontology. ISMB 2005, Detroit, MI. Midori Harris, June 2005.
 - The Gene Ontology. MetaboMeeting 1.0, Cambridge, UK. Jane Lomax, July 2005.
 - Does your species show in GO? *Xenopus tropicalis* Annotation Jamboree, Hinxton, UK. Jen Clark, July 2005.
 - Does your species show in GO? 1st European Farm Animal Functional Genomics Workshop, Edinburgh, UK. Jen Clark, September 2005.
 - Developing and Using the Gene Ontology. GENIA workshop on Text mining, Ontologies and Natural Language Processing in Biomedicine, manchester, UK. Midori Harris, March 2006.
- also several posters (e.g. ISMB, Biocurator, etc.)

6. Other Highlights

- New interest groups: neurobiology, farm animals
- mips2go & multifun2go mappings updated; work on mapping IMG to GO
- Progress in GO annotation outreach; about 110 groups contacted
- GO user survey conducted, and results analyzed
- New, improved GO bibliography page with search and configurable display (and update script); also, now up to 799 entries; new categories proposed: use of GO in clinical applications; use of GO in network modeling and analysis; use of GO in comparative genomics and evolutionary analysis; use of GO to support predictions (i.e. predicting something other than GO annotations)
- Restyled web pages
- Additions to documentation for specific content topics
- OBO-Edit working group formed, with John Day-Richter and several MOD curators (see poster)
- Participation in AmiGO working group
- Visitors:
 - Mikel Egaña Aranguren, University of Manchester (Ph.D. student), September 2005. Work examining compositional structure of GO terms, GO relationships, OBO / OWL conversion (follow-up to GONG project), work with Chris Mungall on GO / CL integration.
 - Erika Feltrin, University of Padova, Italy (Ph.D. student), January–July 2006. Work on ontology development in neurobiology, annotation of UniProt entries (e.g. glutamate receptors); will probably also work on some signaling pathways in GO, and will look at relevant bits of Reactome.
- GO Users Meeting at MGED8, Bergen, Norway

SourceForge reporting, Curator Requests tracker, March 2005–March 2006



GO term history January 2001–March 2006

