The plants interest group report

Stanford January 2004

A) Annotation

The plant group is actively pursuing further annotation of plant genomes in both the US and Europe.

1) Annotation in the U.S.A.

We are doing a ontology workshop at the Plant and Animal Genome (PAG) meeting on 12 January 2004 --- 3:20 pm - 6:00 pm. GO will be a part of it. Although it is an open workshop, we have invited about 20 people from plant databases and labs working on high throughput experiments on plant gene expression, mutant analyses and genome sequencing. The invitees involve bioinformatics/research/graduate students. The meeting is supported by NSF sponsored Research Coordination Network Grants to Gramene (http://www.gramene.org) and Deep Gene (http://ucjeps.berkeley.edu/bryolab/deepgene/) projects.

More info is at http://www.intl-pag.org/12/12-ontology.html

In addition to the scheduled talks, we are having an hour long hands on session on introduction and browsing the ontology and annotations, followed by a 20-30 min discussion.

2) Annotation in Europe:

We have met with the CropNet group at the John Innes Centre to discuss further manual annotation and they are now considering what they can contribute. In addition to this we are in discussion with Antirrhinum majus database group to consider further annotation of Antirhinum genes products.

B) Extension of Ontologies - Plant-associated microbes

A consortium has submitted a proposal to NSF to extend the ontologies and annotate plant-associated microbes. Extracted from the abstract: "Plant-associated microbes have

evolved to evade, suppress or neutralize the defense systems of their plant hosts. The ability to discover those similarities is greatly impeded by the lack of a set of standard terms to describe how microbes from diverse kingdoms interact with plants. The overall goal of the Plant-associated microbes proposal is to extend the Gene Ontology with terms describing molecular functions, biological processes and cellular structures used by bacteria, fungi, oomycetes and nematodes for establishing associations with plants." Members of the plant-associated microbes (PAMGO) group have joined the plants interest group and others, and will interact with the GO community.

C) GO Content

A considerable expansion of plant gametogenesis section of the biological process ontology has been prepared and is currently on hold, awaiting the organisation of the development section of the same ontology. The new gametogenesis terms will be implemented after the meeting if there is no likelyhood of the development section being agreed soon.