WormBase Newsletter

June 2006

WormBase starts a Wiki

The WormBase wiki is a community-driven collaborative website and began in the early part of 2006. Users can post and edit documents and create links to other documents or websites. Please note that the wiki is not a forum for discussions, rather it is a repository for evolving documents related to WormBase and the worm community. Documents that can be found in the Wiki include the WormBase User's guide, FAQs, job openings, information about *C. elegans* meetings and commonly requested files and datasets. Please visit the wiki at http://www.wormbase.org/wiki.



Completeness of different data types in WormBase

Completeness of information in WormBase depends on the type of data viewed. Though we would like the information under every data type to be as complete and as up-to-date as possible, this is not the case, due to reasons that include limitations of time, staff, when the curation was begun and different curation priorities that WormBase sets for itself. Data types are complete to different degrees. While the curation of gene expression patterns is one of the most complete data types in WormBase (please contact us if you know of any missing expression pattern data), the phenotype curation of alleles, transgenes and RNAi experiments has just begun as an independent data type and the curation of information from RNAi experiments is midway to being complete (note that large scale RNAi data is complete as can be whereas curation of RNAi experiments from individual published papers is very much an ongoing effort). Also, please note that a systematic curation of many data types from papers published prior to 2001 has not been undertaken as yet, though the data from these papers is most likely found in the 'concise description' section written to describe gene function. We will soon post a detailed description of data completeness in the wiki, with related statistics. An alternate route of data flow into WormBase is via an user directly submitting data using our data submission forms at http://wormbase.org/db/curate/base.

Linking WormBook to WormBase

WormBook (http://www.wormbook.org) is an open-access collection of original, peer-reviewed articles related to the biology of *C. elegans*. WormBase would like to make it effortless for users to navigate between WormBook and WormBase by creating links between them. As an initial step, ninety-eight 'paper objects' have been created that correspond to chapters in WormBook and have been added to WormBase, meaning that WormBook chapters will be part of the bibliography in WormBase version WS159. These paper objects contain citation information as well as lists of gene, cell, variation, clone, transgene and rearrangement objects discussed in that particular chapter. This will allow us to provide direct links to WormBook from Paper, Gene and other WormBase pages.

Improvements to the CGC strain search in WormBase

WormBase has improved its CGC strain search functionality. In addition to searching for the strain name, users may search for strains carrying a specific gene or allele as well as other information stored in the 'strain' class (remarks, species, mutagen, date_received etc). Newly entered CGC strains that are not yet available in WormBase can be queried via the search interface as well. The strain search option at the CGC (http://www.cbs.umn.edu/CGC/Strains/strains.htm) now takes users directly to WormBase instead of Leon Avery's *C.elegans* strain search, which is no longer maintained.

Information related to 'Authors' and connecting authors to their published papers in WormBase

If you have authored a paper related to *C. elegans* it is likely that you have a 'Person' page in WormBase with the following types of data listed on the page: your contact information with links to your web pages (if any), your publications and abstracts related to *C. elegans*, your position in the intellectual lineage of *C. elegans* scientists and addresses of laboratories and institutions you worked at, in the past. If you are the principal investigator, other types of information like the CGC designated lab code and the allele and gene classes that have been assigned to you will also be listed. *Please note that papers you have published will not be listed on this page unless you verify them*. Also, please be sure your papers are correctly assigned to you. If you do not have a 'Person page' or would like to update your contact/publications/lineage data please contact Cecilia at cecilia@tazendra.caltech.edu. You may also use our online forms to update either contact or intellectual lineage information. Please see http://tazendra.caltech.edu/~azurebrd/cgi-bin/forms/person lineage.cgi

Gene Ontology (GO) annotations in WormBase

WormBase is a member of the GO Consortium, http://www.geneontology.org a collaborative effort between several model organism databases as well as other databases to develop a common terminology for describing genes and gene products. The goal of the GO project is to make searching across databases (which tend to describe their genes using a wide variety of terminology mostly dictated by their community), easier and thus information searching and retrieval by a computer easier. Genes are annotated to GO terms from three ontologies that help to describe the gene in terms of it's molecular function, what biological processes it affects and the cellular component in which it is expressed. GO annotations may be found on a gene page under the section 'Gene Ontology' and consist of the GO term, the 'evidence code' and a literature reference. WormBase uses manual, automatic and semi-automatic methods to generate GO annotations. Also, the first issue of the GO newsletter that was recently released can be found at http://www.geneontology.org/newsletter/current-newsletter.shtml.

A new face for Textpresso

The beta version of Textpresso 2.0 for worm literature is ready for testing. Besides a major overhaul of the backend of the system, this edition of Textpresso offers enhanced capabilities such as case sensitive searches, phrase searches and different search modes like boolean (taking into account the frequency of the term in the document) and tf*idf (calculating the frequency of the term in the document corrected for the frequency of the term in all documents). In addition we are introducing a query language that allows for more flexible and powerful searches. Results can be sorted according to different display fields. This site is still somewhat slow, as some program modules are in the process of being sped up, and its database is currently updated at irregular intervals. Eventually, this version will replace the official site. The beta site can be accessed at http://www.textpresso.org/worm/. A master site is currently under development that allows searches across different model organism literatures and research areas (worm, fly, neuroscience, etc.).

Two new mirror sites for WormBase

WormBase has two new mirror sites, one at the Wellcome Trust Sanger Institute in Cambridge, UK (http://wormbase.sanger.ac.uk) and one in France at the University Marseille (http://crfb-3.univ-mrs.fr). This brings the total number of mirrors to four. Users are advised to access one of these mirror sites whenever the main site is unavailable. Please note that the Korean mirror site is no longer functional and has been removed from the list of mirror sites on the home page.