

InterMine

- data integration
- web application for custom queries, template queries, list analysis
- REST query API with Java and Perl clients
- supports many formats for core organisms:
 - chado, GFF3, FASTA, Ensembl, GO annotation, OBO ontologies
 - UniProt, interactions (BioGrid, IntAct), BioPax, Reactome
 - KEGG, InterPro, PDB, TreeFam, PubMed, Ensembl SNPs, custom data

Sites

- FlyMine - www.flymine.org
- modENCODE - intermine.modencode.org
 - \$57M project detailed characterisation of fly and worm genomes
- MitoMiner, mitochondria database - mitominer.mrc-mbu.cam.ac.uk
- FlyTFMine, *Drosophila* transcription factors - www.flytf.org
- BOKU, Vienna
- Tufts Neuroscience, Boston
- NIBIO, Tokyo

Mines for MODS

- Joint project with SGD (yeast), RGD (rat), ZFIN (zebrafish). Each will deploy an InterMine at their site.
- RatMine launched in December
- Interoperability is key
 - seamless transfer between Mines based on orthologues, pathways, ontologies, protein domains
 - embedding of results in other Mines
 - interoperability will be simple for the user, simply clicking on links to move lists between Mines:

gene list in FlyMine

141 up-regulated in heart

export to RGD (orthologues)

40 related to Cardiovascular disease

export to FlyMine (orthologues)

- look for relevant publications
- export sequences

Progress:

- RatMine released - ratmine.mcw.edu
- ZFIN prototype - www.intermine.org/zfin
- SGD prototype - www.intermine.org/sgd

New funding

- metabolicMine - a human InterMine for metabolic disease research
- InterMine development and support

Coming year

- interoperation of Mines

- GUI for configuring up InterMine
- new QueryBuilder, experiments with GWT
- InterMine for developers
- GMOD REST API
- new list features, comparison of lists
- better range queries

Attachments

- [fm_rat.jpg](#) (80.4 kB) - added by rns on 22/01/10 09:41:06.