



Bioschemas planning meeting - Mar 2017
intermine.org

Justin Clark-Casey (@justincc), Software Engineer
Micklem lab





Cambridge
15 years

Open-source, webapp
Elixir UK node resource

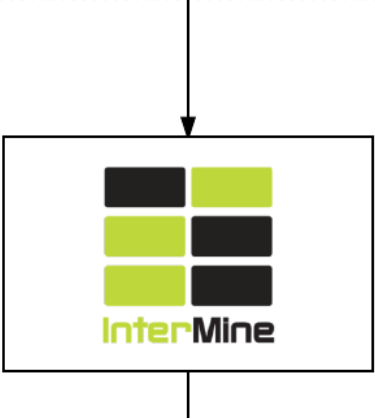


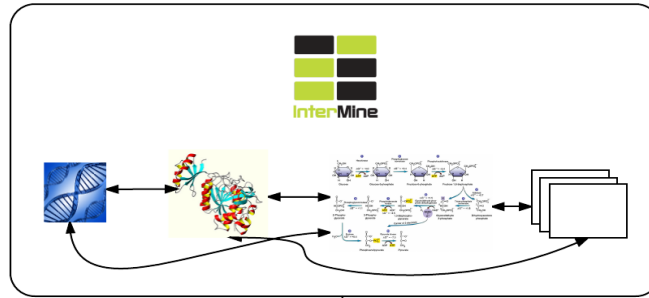


Phytozome 12

THE PLANT GENOMICS RESOURCE







search

Gene	Pathway ID	Pathway Name
bsk	04141	Protein Processing...
bsk	04310	Wnt signalling path...

Web Services

The screenshot shows the SynBioMine search page. It includes a search bar, a 'Search' button, and a 'Welcome Back!' message. Below the search bar, there are tabs for 'GENES', 'PROTEINS', 'FUNCTIONS', 'PATHWAYS', and 'RESULTS'. The 'GENES' tab is currently selected.

The screenshot shows a network diagram of a pathway. Nodes are represented by circles and are connected by lines. The nodes are color-coded: red for genes, blue for proteins, and green for metabolites. The diagram shows a central node with several branches leading to other nodes.

The screenshot shows the gene detail page for *zen D. melanogaster*. It includes the gene name, accession number (FBgn0034813), and various annotations. The 'GENES' section is highlighted, showing a list of genes and their interactions. The 'PATHWAYS' section shows a list of pathways and their interactions.

```

from intermine.webservice import Service
service = Service("http://www.synbiomine.org/synbiomine/service")
query = service.new_query("SYNBISDatasheet")
query.add_view(
    "SBOL_displayId", "SYNBIS_collectionLocation", "SYNBIS_curator",
    "SYNBIS_curationLocation", "SBOL_version",
    "SBOL_persistentIdentity",
    "SYNBIS_collector"
)

```

Potential Alignments with Bioschemas

P1 - Data Repositories

Embed InterMine repository metadata in website frontpage

P2 - Datasets

Embed in InterMine data sources page

P3 - Beacons

Integrate Beacon support for biomedical InterMine installations

P4 - Samples

- Support embedding metadata in sample pages

P5 - Phenotypes

- Support embedding of metadata in phenotype pages

P6 - Protein Annotations

Support embedding of metadata in protein pages

[Home](#)[Templates](#)[Lists](#)[QueryBuilder](#)[Regions](#)[Data Sources](#)[API](#)[MyMine](#)[Contact Us](#)[Log In](#)Search:

Data

This page lists all data sources loaded along with the date the data was downloaded and related publication. NOTE: All external links open in a new window.

DATA CATEGORY	ORGANISM	DATA	SOURCE	PUBMED	NOTE
Genes	<i>Drosophila</i>	Genome annotation for <i>D. melanogaster</i> (R6.13), <i>D. ananassae</i> (R1.05), <i>D. erecta</i> (R1.05), <i>D. grimshawi</i> (R1.3), <i>D. mojavensis</i> (R1.04), <i>D. persimilis</i> (R1.3), <i>D. pseudoobscura</i> (R3.04), <i>D. sechellia</i> (R1.3), <i>D. simulans</i> (R2.02), <i>D. virilis</i> (R1.06), <i>D. willistoni</i> (R1.05) and <i>D. yakuba</i> (R1.05).	Flybase - Version FB2016_05	Crosby et al - PubMed: 17099233	#1
Homology	<i>Drosophila</i>	Orthologues and paralogues between the 12 <i>Drosophila</i> genomes.	Flybase - Version FB2016_05	Crosby et al - PubMed: 17099233	
	<i>D. melanogaster</i> <i>D. rerio</i> <i>C. elegans</i> <i>M. musculus</i> <i>R. norvegicus</i> <i>H. sapiens</i> <i>S. cerevisiae</i>	Orthologue and paralogue relationships between these organisms	Treefam - release 9.0	Ruan et al - PubMed: 18056084	
	<i>D. melanogaster</i> <i>D. rerio</i> <i>C. elegans</i> <i>M. musculus</i> <i>R. norvegicus</i> <i>H. sapiens</i> <i>S. cerevisiae</i>	Orthologue and paralogue relationships between these organisms	Panther - version 10.0	Mi et al - PubMed: 23193289	
Proteins	<i>Drosophila</i> <i>C. elegans</i> <i>H. sapiens</i> <i>M. musculus</i> <i>R. norvegicus</i> <i>S. cerevisiae</i>	Protein annotation	UniProt - Release 2016_10	UniProt Consortium - PubMed: 17142230	
	<i>D. melanogaster</i>	Protein family and domain assignments to proteins	InterPro November 2016	Mulder et al - PubMed: 17221122	