

<http://ceolas.org/VL/fly/>

### **The WWW Virtual Library: *Drosophila***

This directory points to internet resources for research on the fruit fly *Drosophila melanogaster*. If you have any comments on the site or wish to add a resource, please send me a [note](#). Questions regarding *Drosophila* research should be posted to [bionet.drosophila](#). This site is part of the [Model Organisms](#) group within the [Biosciences](#) area of the [World-Wide Web Virtual Library](#).

*Gerard Manning*

### **What is *Drosophila*?**

A quick introduction for newcomers, including links for teaching sites, online courses and useful books.

### **FlyBase**

FlyBase is the core Internet resource for *Drosophila* researchers, with information on stocks, genes, mutants, researchers, publications and much much more. The US site above (in Indiana) is the original, with mirrors ( [US - Berkeley](#) | [US - Harvard](#) | [England](#) | [France](#) | [Australia](#) | [Japan](#) | [Israel](#) | [Taiwan](#) ) around the world.

### ***Drosophila* genome project**

Information on the *Drosophila* genome effort, which includes mapping, sequencing and large scale mutagenesis projects. Now known as the Berkeley Fly Database, it integrates genome project information with the Encyclopedia of *Drosophila*.

See also the [European \*Drosophila\* Genome Project](#) involved in sequencing the X chromosome, and an [overview](#) of the genome project by Gerry Rubin.

### ***Drosophila* Labs on the Web**

Over one hundred home pages with research information, stocks, protocols and various blends of *Drosophila* humour.

### **The Interactive Fly**

An ambitious and extensive hypertext encyclopedia of fly genes and developmental processes, and a great starting point.

### ***Drosophila* neurobiology**

- The **Flybrain** project ([USA](#) | [Germany](#) | [Japan](#)) has information and images of the *Drosophila* nervous system.
- A *Drosophila* nervous system [atlas](#) (Fishbach lab).
- A clickable [hyper-neuroblast map](#), with information on lineage and gene expression in the early CNS (Doe lab).
- The [Motor Axon guidance primer](#) (Zinn lab).
- [FlyTrap](#) is an online database of gene expression patterns (of P[Gal4] lines) in the fly brain.
- The [Virtual Brain](#) has 3D reconstructions of fly brains.

### **Fly Stock Centers**

[Bloomington](#), Indiana.

The largest of stock centers has a nice website including information on culturing flies and equipment sources.

[Umeå](#), Sweden.

(see also stock listing at [Flybase](#))  
[Szeged](#), Hungary  
Extensive collection of P element lines.

#### [Drosophila species stock center](#)

In Arizona, USA. Carries stocks of several hundred different Drosophila species.

### **Other Resources**

#### [FlyMove](#)

Excellent learning resource, with extensive pictures and animations of embryonic development.

#### [FlyView](#)

A graphical atlas of expression patterns of genes and enhancer traps at all stages of development.

#### [DRES \(Drosophila-related EST sequences\)](#)

A catalog of human cDNA clones that show sequence similarity to Drosophila genes.

#### [GIFTS - Gene Interactions in the Fly](#)

Catalogs gene interactions in Drosophila pattern formation, run by Bernard Jacq's group in Marseille.

#### [Tracheal development](#)

A new resource by the Affolter lab.

#### [Immunity](#)

A listing of Drosophila genes involved in the immune response.

#### [Malpighian tubule resource](#)

Information for research on the malpighian tubule (insect kidney).

#### [Fly Spermatogenesis Resource](#)

Maintained by the DiNardo Lab, includes a spermatogenesis overview and molecular marker details

#### [Drosophila Cadherin homepage](#)

Reviews and classification of cadherin genes in Drosophila.

#### [FlyNome](#)

A small but growing reference site on the stories behind the fanciful naming of many fly genes.

#### [JFly - Japanese Drosophila resources](#)

Jfly is a Web site mainly in Japanese, with many resources, including archives of the Japanese Drosophila mailing list, and (in English), some protocols, back issues of the Drosophila Information Newsletter and Drosophila references libraries in EndNote format.

Chromosome squashes

- Original Bridges (1935) [pictures](#) (Hawaii).
- [EM pictures](#) (Helsinki).

#### [GeNet / SegNet](#)

The Gene Networks Database has extensive information on interaction between

segmentation genes, including antibody stains, interaction diagrams and categorised interaction classes, including [images](#) of gene expression during segmentation and Java viewers.

The Virtual Flylab

This was a free resource allowing students to model fly crosses online and view the outcome. It's now part of the commercial [Biology Labs Online](#)

### Protocols

A list of protocols available from the web sites of several Drosophila labs.

### Sequence and genome resources

- [Drosophila genome](#) site at NCBI
- The [TIGR Drosophila gene index](#) is a collection of known and predicted gene sequences from EST, cDNA and genomic data.
- [BCM Gene Finder](#) for Drosophila sequences
- [Grail Gene Finder](#), with Drosophila option.
- [FastA search](#) against Drosophila-specific databases (Don Gilbert).
- [Drosophila microarray project](#) (Stanford).
- [Developmental Gene Expression timecourse](#) (Yale).

### Commercial Suppliers

- [Habitat Design](#) has some very nice Drosophila-themed T-shirts, cards, bags and suchlike.
- [Carolina Biological Supply](#) provides wild type and mutant flies, and supplies, for school genetics experiments.
- [The Drosophila Company](#) provides fly cultures
- [Applied Scientific](#) provide a range of supplies for fly stock maintenance.
- [Lab Scientific](#) provide fly culture equipment and supplies.
- [United Lab Plastics](#) supply plastic Drosophila culture vials and insect rearing chambers.
- [Genesee Scientific](#) (formerly DocFrugal) sells a variety of Drosophila culture supplies.
- [FlyInjection](#) does the work of making transgenic flies, for a price.
- [Ed's Fly Meat](#), and [flyculture.com](#) provide fly cultures, and culture medium, for those who feed flies to their pets!
- [Trikinetics](#) makes a Drosophila activity monitor, for circadian research.
- [Tritech Research](#) sell Drosophila supplies and incubators.
- Other suppliers may be listed in the [Sources of Supplies](#) page from the Bloomington Stock Center.
- The [Harvard Bioshop](#) makes a variety of fly-handling equipment.
- [Power Scientific](#) sell Drosophila incubators and other lab equipment.

### Related resources

- The best source of up-to-date news on Drosophila, and a good place to ask and answer requests is the [bionet.drosophila](#) newsgroup on Usenet. An elaborate [archive](#) is available on the Web from Bionet.
- The [Biosciences area](#) of the Virtual Library has many relevant pages, including ones for [developmental biology](#), [genetics](#), and [Model Organisms](#).
- [Drosophila Conferences](#), from Flybase
- [Cold Spring Harbor Laboratory Press](#) has information on a number of Drosophila-related books that they publish, as well as a indices of recent issues of [Genes and Development](#).
- [The Company of Biologists](#), has information on the journals Development, Journal of Cell Science, Bioessays and Journal of Experimental Biology.

- The [Genetics Society of America](#) is online, with information on the annual Drosophila meeting, membership and their journal, Genetics.
- [Entomology Resources](#) (Colorado State University)
- The [Developmental Studies Hybridoma Bank](#) curates many antibodies against Drosophila antigens.

Finally, two personal links, in case you're looking for a [Bioinformatics Consultant](#) or a site for [Macintosh Bioinformatics](#).

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