PublisherInfo		
PublisherName	:	BioMed Central
PublisherLocation	:	London
PublisherImprintName	:	BioMed Central

Geotaxis genes

ArticleInfo		
ArticleID	:	4498
ArticleDOI	:	10.1186/gb-spotlight-20020607-01
ArticleCitationID	:	spotlight-20020607-01
ArticleSequenceNumber	:	164
ArticleCategory	:	Research news
ArticleFirstPage	:	1
ArticleLastPage	:	2
ArticleHistory	:	RegistrationDate : 2002–6–7 OnlineDate : 2002–6–7
ArticleCopyright	:	BioMed Central Ltd2002
ArticleGrants	:	
ArticleContext	:	130593311

Jonathan B Weitzman
Email: jonathanweitzman@hotmail.com

Functional genomics strategies can complement traditional genetic approaches to identifying genes underlying complex behavioral traits. In an Advanced Online Publication in Nature Genetics Toma *et al.* describe an illustrative example of a study aimed at defining genes involved in geotaxis in *Drosophila melanogaster* (*Nature Genetics,* 3 June 2002, DOI:10.1038/ng893). They examined differential gene expression levels, using microarray technology, in samples from fly strains with extreme geotaxis capacities. About 5% of genes showed differential expression. Toma *et al.*tested four candidate genes by examining single-gene mutant strains and found that three had a clear effect on geotaxis. The authors emphasize that "microarray analysis can be used as a starting point for narrowing down candidate genes involved in complex genetic processes ... and offers a promising approach to previously intractable molecular analysis of behavior".

References

1. Functional genomics and the study of development, variation and evolution.

2. *Nature Genetics*, [http://www.nature.com/ng/]