

POSTER PRESENTATION

Open Access

MamPhEA: a web tool for mammalian phenotype enrichment analysis

Meng-Pin Weng*, Ben-Yang Liao

From Beyond the Genome: The true gene count, human evolution and disease genomics
Boston, MA, USA. 11-13 October 2010

Background

Most mouse (*Mus musculus*) mutants generated in laboratories have been designed to aid the study of human genetics, physiology or diseases progression. To date, nearly 9000 genes in the mouse genome have been mutated; these have been phenotyped in such a way that resembles human clinical examinations. The mutant phenotypes characterize the consequence of disturbing or disrupting the information output of a gene and thus are ideal to aid understanding of how genes function at the systems level. Therefore, enrichment analyses incorporating mouse mutant phenotypes are particularly useful in studying mammalian functional genomics in the post-genome era.

Results

We have developed MamPhEA (Mammalian Phenotype Enrichment Analysis), a web application dedicated to understanding functional properties of mammalian gene sets based on mouse mutant phenotypes [1]. It allows users to conduct enrichment analysis on predefined or user-defined phenotypes, gives users the option to specify phenotypes derived from null mutations, produces easily comprehensible results, and supports analyses on genes of all mammalian species with a fully sequenced genome. MamPhEA is freely available at <http://evol.nhri.org.tw/MamPhEA/>. Figure 1

Published: 11 October 2010

Reference

1. Weng Meng-Pin, Liao Ben-Yang: MamPhEA: a Web tool for Mammalian Phenotype Enrichment Analysis. *Bioinformatics* 2010.

Division of Biostatistics and Bioinformatics, Institute of Population Health Sciences, National Health Research Institutes, Zhunan, Miaoli County 350, Taiwan

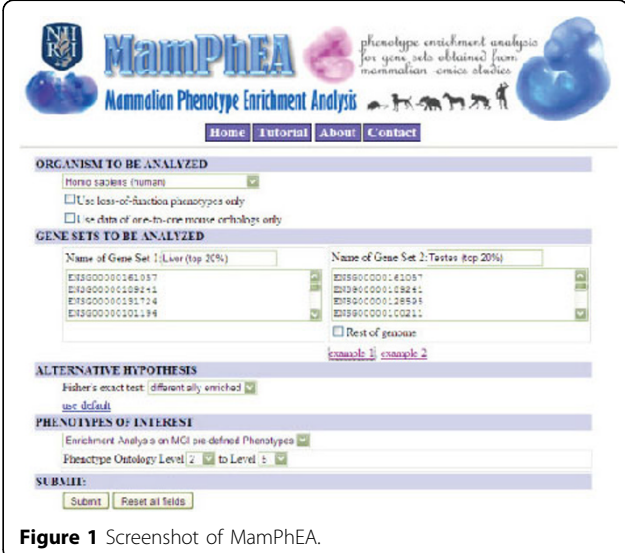


Figure 1 Screenshot of MamPhEA.

doi:10.1186/gb-2010-11-S1-P27

Cite this article as: Weng and Liao: MamPhEA: a web tool for mammalian phenotype enrichment analysis. *Genome Biology* 2010 11(Suppl 1):P27.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit

