

Integrated database resources in Kyoto Encyclopedia of Genes and Genomes (KEGG) and Database Center for Life Science (DBCLS)

Toshiaki Katayama

(Human Genome Center, Institute of Medical Science, University of Tokyo, Japan)

e-mail: ktym@hgc.jp

As a number of genome sequences have been completed since 1990s, we started to construct an integrated database, Kyoto Encyclopedia of Genes and Genomes (KEGG; <http://www.kegg.jp/>), as a knowledge base for understanding biological networks of genes and molecular information in each organism. In KEGG project, we continuously annotate genes found in the newly sequenced genome and re-construct metabolic and regulatory pathways of the organism. Recently, the coverage of the database is expanded to the healthcare field by supporting drug information and disease pathways. At the same time, the Database Center for Life Science (DBCLS; <http://lifesciencedb.jp/>) was launched in 2007 to integrate as many as biological database resources distributed in Japan. There existed several problems that 1) some databases were not maintained after the project was terminated, 2) many database resources were hard to utilize due to the lack of a portal site or an integrated search engine, 3) the amount of biological data is increasing exponentially year by year. To resolve these situations, DBCLS took social and technological leads in life science area in Japan. Current status of the KEGG and DBCLS resources will be reported.

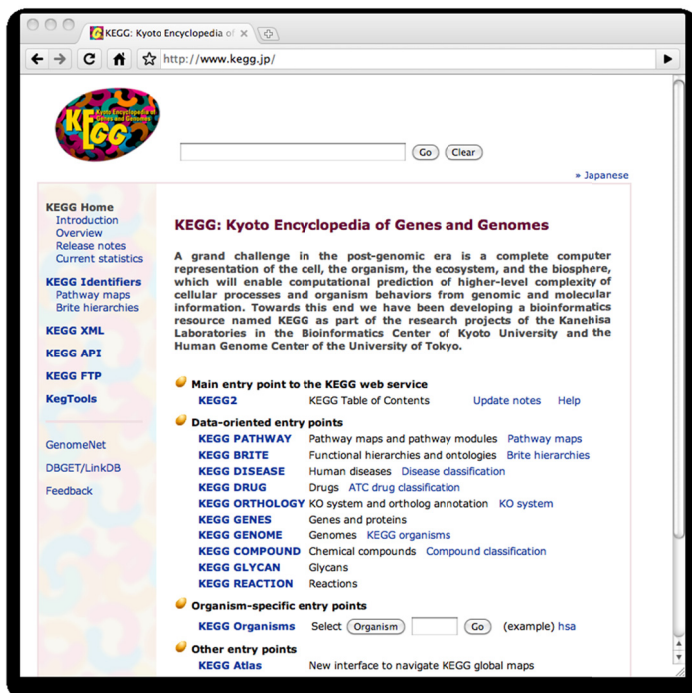


Fig. 1 (KEGG) <http://www.kegg.jp/>



Fig. 2 (DBCLS) <http://lifesciencedb.jp/>