

Integrative Databases for Human and Model Organism Information

MARRVEL (Model organism Aggregated Resources for Rare Variant ExpLoration)

<http://marrvel.org/>

Gene2Function

<http://www.gene2function.org/search/>

AGR (Alliance of Genome Resources)

<https://www.alliancegenome.org/>

The Monarch Initiative

<https://monarchinitiative.org/>

Human Genomic Databases

OMIM (Online Mendelian Inheritance in Man)

<https://www.omim.org/>

ClinVar

<https://www.ncbi.nlm.nih.gov/clinvar/>

gnomAD (genome Aggregation Database)

<http://gnomad.broadinstitute.org/>

Geno2MP (Genotype to Mendelian Phenotype)

<http://geno2mp.gs.washington.edu/Geno2MP/#/>

denovo-db

<http://denovo-db.gs.washington.edu/denovo-db/>

DECIPHER (DatabasE of genomiC varIation and Phenotype in Humans using Ensembl Resources)

<https://decipher.sanger.ac.uk/>

DGV (Database for Genomic Variants)

<http://dgv.tcag.ca/dgv/app/home>

HGMD (The Human Gene Mutation Database)

<http://www.hgmd.cf.ac.uk/ac/index.php>

Ortholog Prediction Tools

DIOPT (DRSC Integrative Ortholog Prediction Tool)

https://www.flyrnai.org/cgi-bin/DRSC_orthologs.pl

HCOP (HGNC Orthology Prediction Search)

<https://www.genenames.org/tools/hcop/>

OrthoList2 (C elegans-Human Ortholog search)

<http://ortholist.shaye-lab.org/>

Model Organism Databases

SGD (*Saccharomyces* Genome Database; budding yeast)

<https://www.yeastgenome.org/>

PomBase (fission yeast)

<https://www.pombase.org/>

dictyBase (social amoeba)

<http://dictybase.org/>

WormBase (nematode worms)

<https://www.wormbase.org/>

FlyBase (fruit flies)

<http://flybase.org/>

ZFIN (zebrafish)

<https://zfin.org/>

Xenbase (frogs)

<http://www.xenbase.org/entry/>

MGI (Mouse Genome Informatics; mouse)

<http://www.informatics.jax.org/>

IMPC (International Mouse Phenotyping Consortium)

<http://www.mousephenotype.org/>

RGD (Rat Genome Database; rat)

<https://rgd.mcw.edu/>

OMIA (Online Mendelian Inheritance in Animals; domestic animals)

<http://omia.org/home/>

HUGO Gene Nomenclature Committee (HGNC; human)

<https://www.genenames.org/>

Human Gene and Protein Expression Databases

GTex (The Genotype Tissue Expression Project)

<https://gtexportal.org/>

The Human Protein Atlas

<https://www.proteinatlas.org/>

Protein-Protein and Genetic Interaction Databases

STRING

<https://string-db.org/>

BioGrid

<https://thebiogrid.org/>

MIST

<http://fgrtools.hms.harvard.edu/ProteinSearch.html/>

Protein Domain Annotation and Structure Modeling Tools

UniProt

<https://www.uniprot.org/>

SMART

<http://smart.embl-heidelberg.de/>

InterPro

<https://www.ebi.ac.uk/interpro/>

ExPASy-PROSITE

<https://prosite.expasy.org/>

RCSB Protein Data Bank

<https://www.rcsb.org/>

dsysmap

<https://dsysmap.irbbarcelona.org/>

Literature Search (Published, Preprints) and Text Mining Tools

PubMed

<https://www.ncbi.nlm.nih.gov/pubmed/>

OMIM (Online Mendelian Inheritance in Man)

<https://www.omim.org/>

bioRxiv

<https://www.biorxiv.org/>

BioLitMine

<https://www.flyrnai.org/tools/biolitmine/web/>

Monarch Hippo Interactive Browser

<http://hippo.monarchinitiative.org/>

Matchmaking Websites

MatchMakerExchange

<https://www.matchmakerexchange.org/>

GeneMatcher

<https://www.genematcher.org/>

PhenomeCentral

<https://www.phenomecentral.org/>

MyGene2

<https://mygene2.org/MyGene2/>

Rare Disease Information

Orphanet

<https://www.orpha.net/consor/cgi-bin/index.php>

IRDIRC (International Rare Diseases Research Consortium)

<http://www.irdirc.org/>

NORD (National Organization for Rare Disorders)

<https://rarediseases.org/>

Genetic and Rare Diseases Information Center (GARD) Disease List at NIH

<https://rarediseases.info.nih.gov/diseases>

Disease InfoSearch

<https://diseaseinfosearch.org>

Other

IRDIRC Recognized Resources (Directory of tools and databases related to rare disease research)

<http://www.irdirc.org/research/irdirc-recognized-resources/current-irdirc-recognized-resources/>

VLS3D.com (Directory of tools and databases related to mutations and variations)

<http://www.vls3d.com/index.php/links/bioinformatics/mutations>