

Internet URL list

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Functional genomics

Transcriptomics databases

Microarray Bioinformatics at EBI	http://www.ebi.ac.uk/microarray/index.html
Arrayexpress at the EBI	http://www.ebi.ac.uk/arrayexpress/
Expression Profiler at EBI	http://www.ebi.ac.uk/expressionprofiler/
Documentation for Expression Profiler	http://www.bioinf.ebc.ee/EP/EP/
Gene Expression Atlas - Large Scale Meta-Analysis of Public Microarray Data	http://www.ebi.ac.uk/gxa/
GEO Gene Expression Omnibus at NCBI	http://www.ncbi.nlm.nih.gov/geo/
MaRe Microarray Retriever	http://grenada.lumc.nl/HumaneGenetica/MaRe/
Stanford Microarray Database	http://genome-www5.stanford.edu/
Yale Microarray Database	http://info.med.yale.edu/microarray/
JCV Institute Genomics	http://www.jcvi.org/cms/research/groups/
NIH ENCODE Project: ENCyclopedia Of DNA Elements	http://www.genome.gov/10005107
NGFN German National Functional Genomics Network	http://www.ngfn.de/
Genevestigator	https://www.genevestigator.ethz.ch/
GeneCAT - Gene Co-expression Analysis Toolbox	http://genecat.mpg.de/
CATMA - A complete Arabidopsis Transcriptome MicroArray	http://www.catma.org/
The Arabidopsis Information Resource - TAIR	http://www.arabidopsis.org/
AFGN Arabidopsis Functional Genomics Network	http://www.uni-tuebingen.de/plantphys/AFGN/
Microarray Gene Expression Data Society	http://www.mged.org/
Stanford Functional Genomics Facility	http://microarray.org/sfgf/

Transcriptomics tools

NIH - Guide to Microarray Data analysis	http://discover.nci.nih.gov/microarrayAnalysis/Microarray.Home.jsp
Microarray Tools at NCI	http://discover.nci.nih.gov/tools.jsp
HSLs: Microarray, SAGE and other gene expression data analysis tools	http://www.hsls.pitt.edu/guides/genetics/obrc/gene_expression/gene_expression_tools
J-Express microarray analysis free version	http://www.ii.uib.no/%7Ebjarted/jexpress/main.html
MicroArray Explorer tool for Data Mining Gene Expression Patterns	http://maexplorer.sourceforge.net/
Tools from the Eisen Lab	http://rana.lbl.gov/eisen/
BioConductor Project - Open Source Software for Bioinformatics	http://www.bioconductor.org/
R and Bioconductor Manual (Thomas Girke)	http://manuals.bioinformatics.ucr.edu/home/R_BioCondManual
GEPAS microarray analysis pipeline	http://gepas.bioinfo.cipf.es/index.html
Babelomics - Systems biology microarray data mining	http://www.fatigo.org/
TIGR Microarray Software	http://www.jcvi.org/cms/research/software/
RNA-Seq software ERANGE	http://woldlab.caltech.edu/maseq/
Broad Institute Genecluster 2.0	http://www.broad.mit.edu/cancer/software/genecluster2/gc_license.html
dChip Software: Gene Expression Microarray and SNP Microarray Analysis	http://biosun1.harvard.edu/complab/dchip/
NASC Affymetrix Service: Analysis hints	http://affy.arabidopsis.info/analysisindex.html
Analysis of Affymetrix data using Excel	http://affy.arabidopsis.info/AffyAnalysisWithExcel.html

Affymetrix - NetAffx™ Analysis Center	http://www.affymetrix.com/analysis/index.affx
MapMan - integrative view of microarray data and metabolic maps	http://gabi.rzpd.de/projects/MapMan/
GenMAPP Gene Map Annotator and Pathway Profiler	http://www.genmapp.org/

Proteomics databases and search engines

EXPASY Swiss 2Dpage	http://www.expasy.org/ch2d/
WORLD-2DPAGE Index to 2D-PAGE databases and services	http://www.expasy.org/ch2d/2d-index.html
EXPASY Peptide Mass Tool	http://www.expasy.org/tools/peptide-mass.html
EXPASY Aldente Peptide Mass Fingerprinting Tool	http://www.expasy.org/tools/aldente/
MASCOT Peptide Mass Fingerprint	http://www.matrixscience.com/search_form_select.html
SEQUEST MS proteomics search engine	http://fields.scripps.edu/?q=content/software
Phenyx MS protein search engine (GeneBio/SIB)	http://www.genebio.com/products/phenyx/
X! Tandem MS search engine	http://www.thegpm.org/TANDEM/index.html
OMSSA ms/ms search engine	http://pubchem.ncbi.nlm.nih.gov/omssa/
UCSF Mass Spectrometry Facility Protein Prospector	http://donatello.ucsf.edu/
Protein Prospector Server at Joint Proteomics Laboratory Melbourne	http://jpsl.ludwig.edu.au/
PROWL protein and MS tools	http://prowl.rockefeller.edu/
PRIDE - Proteomics Identifications Database	http://www.ebi.ac.uk/pride/
PeptideAtlas	http://www.peptideatlas.org/
OPD: Open Proteomics Database (MS)	http://bioinformatics.icmb.utexas.edu/OPD/
GPMDb proteomics database	http://gpmdb.thegpm.org/
Human Protein Atlas	http://www.proteinatlas.org/
Tranche - Secure P2P for Scientific Data Dissemination	http://tranche.proteomecommons.org/
ISPIDER MS meta protein database search	http://www.ispider.manchester.ac.uk/cgi-bin/ispider.pl
Protein Identifier Cross-Reference Service	http://www.ebi.ac.uk/Tools/picr/
NIH Histone Sequence Database	http://genome.nhgri.nih.gov/histones/
Phospho.ELM Database of phosphorylation sites	http://phospho.elm.eu.org/
Human Protein Reference Database	http://www.hprd.org/

Proteomics post translational modifications

ExPASy - FindMod tool	http://www.expasy.ch/tools/findmod/findmod_masses.html
ExPASy - Popitam - MS/MS modified peptide search tool	http://www.expasy.org/tools/popitam/
RESID Database of protein modifications	http://www.ebi.ac.uk/RESID/
Delta Mass PTM database (ABFR)	http://www.abrf.org/index.cfm/dm.home
Unimod database - protein modifications for MS	http://www.unimod.org/unimod_help.html
Unimod - Modification naming guidelines	http://www.unimod.org/names.html
PRIDE Modification Search	http://www.ebi.ac.uk/pride/modSearch.do
PRIDE modification ontology lookup service (OLS)	http://www.ebi.ac.uk/ontology-lookup/browse.do?ontName=MOD
AutoMotif Server - Modification site prediction	http://ams2.bioinfo.pl/
ExPASy - Sulfinator tool Tyr sulfination sites predictor	http://expasy.org/tools/sulfinator/
NetPhos 2.0 Server STY phosphorylation site predictor	http://www.cbs.dtu.dk/services/NetPhos/
HUPO PSI Protein Modification Documentation	http://psidev.sourceforge.net/mod/

Proteomics software

TPP Trans-Proteomic Pipeline	http://tools.proteomecenter.org/wiki/index.php?title=Software:TPP
SASHIMI MS proteomics pipeline	http://sourceforge.net/projects/sashimi
OpenMS / TOPP open source MS proteomics pipeline	http://open-ms.sourceforge.net/news.php
TOPP-the OpenMS proteomics pipeline	http://open-ms.sourceforge.net/TOPP.php
MaxQuant	http://www.maxquant.org/
Scaffold protein identification framework (by Proteome Software)	http://www.proteomesoftware.com/Proteome_software_prod_Scaffold.html
mMass - Open Source Mass Spectrometry Tool	http://mmass.biographics.cz/
PeptideProphet MS proteomics prediction tool	http://peptideprophet.sourceforge.net/
ProteinProphet MS proteomics prediction tool	http://proteinprophet.sourceforge.net/
MassNET MS proteomics annotation server	http://massnet.kr/
MassTRIX Metabolomics mass to pathway mapper	http://www.helmholtz-muenchen.de/en/mips/workgroups/metabolomics/masstrix

Proteomics organisations and standards

HUPO - Human Proteome Organisation	http://www.hupo.org/
SwissProt HPI - Human Proteome Initiative	http://www.expasy.org/sprot/hpi/hpi_stat.html
HUPO Proteomics Standards Initiative	http://www.psidev.info/
MASC Arabidopsis Proteomics Standards Subcommittee	http://www.arabidopsis.org/portals/masc/Subcommittees.jsp
mzML Specification HUPO Proteomics Standards Initiative	http://www.psidev.info/index.php?q=node/257
Mass spectrometry data formats - Wikipedia	http://en.wikipedia.org/wiki/Mass_spectrometry_data_formats
gabi Arabidopsis Proteomics Data	http://gabi.rzpd.de/projects/Arabidopsis_Proteomics/
Proteomics from Angelika Görg	http://www.weihenstephan.de/blm/deg/
Boston University Biology Proteomics Resource	http://genomics10.bu.edu/jtullai/proteomics_resources/
Deutsche Gesellschaft für Proteomforschung	http://www.dgpf.org/
Swiss Proteomics Society	http://www.swissproteomicsociety.org/
SWISS Proteomics Society Proteomics Links	http://www.swissproteomicsociety.org/links.html
Proteome commons	http://www.proteomecommons.org/index.jsp
ISB NHLBI Seattle Proteome Center	http://www.proteomecenter.org/
IonSource Proteomics Resource Links	http://www.ionsource.com/links/proteolinks.htm

Protein-Protein Interactions

EBI IntAct Project	http://www.ebi.ac.uk/intact/index.jsp
DIP - Database of Interacting Proteins	http://dip.doe-mbi.ucla.edu/
BOND - Biomolecular Object Network Databank	http://bond.unleashedinformatics.com/
MIPS Mammalian Protein-Protein Interaction Database	http://mips.helmholtz-muenchen.de/proj/ppi/
BioGRID - General Repository for Interaction Datasets	http://www.thebiogrid.org/
HPID Human Protein Interaction Database	http://wilab.inha.ac.kr/hpid/
The JCB Protein-Protein Interaction Website	http://www.imb-jena.de/jcb/ppi/
MIPS Yeast Protein-Protein-Interaction and Complex Viewer	http://mips.helmholtz-muenchen.de/proj/yeast/CYGD/interaction/
Yeast Protein complex database	http://yeast-complexes.embl.de/
MINT - Molecular Interactions database	http://mint.bio.uniroma2.it/mint/
Complexpander - Predicting protein complexes	http://llama.med.harvard.edu/cgi/Complexpander/Complexpander.pl
PathBlast - Comparison of interaction networks between organisms	http://www.pathblast.org/
iHOP - Information Hyperlinked over Proteins	http://www.ihop-net.org/UniPub/iHOP/

String: functional protein association networks	http://string.embl.de/
BioPAX - data exchange for biological pathway data	http://www.biopax.org/
Graphviz - Open Source Graph Visualization Software	http://www.graphviz.org/
Cytoscape - open source software for interaction visualization and integration	http://www.cytoscape.org/
visANT - Visual Analysis Tool for Biological Networks and Pathways	http://visant.bu.edu/
aiSee - commercial Graph layout software	http://www.aisee.com/

miRNA

RNA Molecular Biology Tuschl Lab	http://www.rockefeller.edu/labheads/tuschl/
miRBASE microRNA database Sanger Institute	http://microrna.sanger.ac.uk/
Rfam RNA families database of alignments and CMs Sanger Institute	http://www.sanger.ac.uk/Software/Rfam/
The siRNA user guide - Tuschl Lab	http://www.rockefeller.edu/labheads/tuschl/sirna.html
microRNA.org: A resource for predicted microRNA targets and expression	http://www.microrna.org/
OligoWalk Web Server for siRNA design	http://rna.urmc.rochester.edu/cgi-bin/server_exe/oligowalk/oligowalk_form.cgi
AsiDesigner siRNA design pipeline	http://sysbio.kribb.re.kr:8080/AsiDesigner/menuDesigner.jsf

Systems Biology

System Biology Information Resources

BioModels.NET	http://www.biomodels.net/
The Reactome Project	http://www.reactome.org/
Panther Classification Systems - Panther Pathways	http://www.pantherdb.org/pathway/
Human Metabolome Database	http://www.hmdb.ca
KDBI - Kinetic Data of Biomolecular Interactions	http://xin.cz3.nus.edu.sg/group/kdbi/kdbi.asp
SBML Systems Biology Markup Language	http://sbml.org/index.psp
SBGN Systems Biology Graphical Notation Standardization	http://sbgn.org/
The International Society for Systems Biology	http://issb.org/
Systems Biology Portal www.systems-biology.org	http://www.systems-biology.org/
The Systems Biology Institute - Tokyo	http://sbi.jp/
US National Centers for System Biology	http://www.nigms.nih.gov/Initiatives/SysBio/
Systems Biology at UC San Diego	http://systemsbiology.ucsd.edu/
Systems Biology in Germany	http://www.systembiologie.de/
HepatoSys - Network Systems Biology	http://www.hepatosys.de/
SystemsX - The Swiss Initiative in Systems Biology	http://www.systemsx.ch/
YSBN The Yeast Systems Biology Network	http://www.gmm.gu.se/YSBN/
Nature web focus: Systems biology: a user's guide	http://www.nature.com/focus/systemsbiologyuserguide/index.html
Systems Biology Wikipedia	http://en.wikipedia.org/wiki/Systems_biology

Systems Biology Modeling Tools

Systems Biology WorkBench SWB package	http://sbw.kgi.edu/research/sbwIntro.htm
JDesigner: A Biochemical Network Layout Tool	http://sbw.kgi.edu/software/jdesigner.htm
Jarnac biochemical simulation package	http://sbw.kgi.edu/software/jarnac.htm
Pasadena Twain ODE solver of the SWB package	http://sbw.sourceforge.net/sbw/software/
CADLIVE - network construction system	http://www.cadlive.jp/

Dizzy stochastic simulations tool	http://magnet.systemsbio.net/software/Dizzy/
CellDesigner - a modeling tool for biochemical networks	http://www.celldesigner.org/
SBMLsqueezer: A CellDesigner plug-in to generate kinetic rate equations for bio	http://www.biomedcentral.com/1752-0509/2/39
Cellware - Modeling and Simulation Tool	http://www.bii.a-star.edu.sg/achievements/applications/cellware/
E-Cell project	http://www.e-cell.org/
COPASI - Complex Pathway Simulator	http://www.copasi.org/
Gepasi - Biochemical Kinetics Simulator	http://www.gepasi.org/
Dynetica - a simulator of dynamic networks	http://www.duke.edu/~you/Dynetica_page.htm
PLAS Power Law Analysis and Simulation tool	http://www.dqb.fc.ul.pt/docentes/aferreira/plas.html
JSim - a Java based simulation system	http://nsr.bioeng.washington.edu/jsim/
STOCKS - Stochastic kinetic simulations	http://www.sysbio.pl/stocks/index.html
Basis Gillespie Stochastic Simulator	http://www.basis.ncl.ac.uk/software.html
CaliBayes - Bayesian calibration of biological simulators	http://www.calibayes.ncl.ac.uk/
JWS Online - Online Cellular Systems Modelling	http://jj.bio.vu.nl/index.html
PyBioS - web server for modeling and simulation of cellular systems	http://pybios.molgen.mpg.de/
Virtual Cell Internet simulation server at NRCAM	http://www.nrcam.uchc.edu/

Small molecules

Human Metabolome Database	http://www.hmdb.ca
KEGG Drug Database	http://www.genome.ad.jp/kegg/drug/
KEGG Ligand Database	http://www.genome.ad.jp/kegg/ligand.html
ChEBI - Chemical Entities of Biological Interest	http://www.ebi.ac.uk/chebi/
MSD Ligand Chemistry in PDB	http://www.ebi.ac.uk/msd-srv/msdchem/cgi-bin/cgi.pl
NCBI PubChem Compound	http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pccompound
NCBI PubChem Substance	http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pcsubstance
NLM SIS Chemical Information	http://sis.nlm.nih.gov/chemical.html
NCI-3D Search	http://chem.sis.nlm.nih.gov/nci3d/
ChemIDplus	http://chem.sis.nlm.nih.gov/chemidplus/
CHEMINFO: Chemical Information Sources from Indiana University	http://www.indiana.edu/~cheminfo/
FAF-Drugs: Free ADME/tox Filtering	http://bioserv.rpbs.jussieu.fr/Help/FAFDrugs.html
OpenBabel format conversion tool for drugs	http://mobyle.rpbs.univ-paris-diderot.fr/cgi-bin/portal.py?form=OpenBabel
Java Molecular Editor at RPBS	http://mobyle.rpbs.univ-paris-diderot.fr/cgi-bin/portal.py?form=JME
JME Molecular Editor by Peter Ertl	http://www.molinspiration.com/jme/
SuperPred Drug Target Prediction Server	http://bioinformatics.charite.de/superpred/

Annotation

Gene Function Resources

Gene Ontology (GO) Consortium	http://www.geneontology.org/
QuickGO - GO Browser at EBI	http://www.ebi.ac.uk/ego/GSearch?q=Quick+GO
AmiGO - GO Browser	http://amigo.geneontology.org/cgi-bin/amigo/go.cgi
Ontology Lookup Service (OLS)	http://www.ebi.ac.uk/ontology-lookup/
GOA - Gene Ontology Annotation Project at EBI	http://www.ebi.ac.uk/GOA/index.html
GOSat - find statistically overrepresented GO terms	http://gostat.wehi.edu.au/
Gene Ontology Tools for Gene Expression Analysis	http://www.geneontology.org/GO.tools.microarray.shtml#serbgo
Online Mendelian Inheritance in Man	http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=OMIM
GeneCards Weizmann	http://www.genecards.org/index.shtml
Genetic Association Database	http://geneticassociationdb.nih.gov/

Integrated annotation services

NIH - DAVID Annotation tools	http://david.abcc.ncicrf.gov/home.jsp
eFamily Project - Grid integrating of protein database annotations	http://www.efamily.org.uk/
DAS - Distributed Annotation System	http://biodas.org/
DAS registry server at Sanger - available DAS servers	http://das.sanger.ac.uk/registry/listServices.jsp
SPICE - DAS Client	http://www.efamily.org.uk/software/dasclients/spice/
Ensembl Genome Browser DAS client	http://www.ensembl.org/
Dasty - DAS client	http://www.ebi.ac.uk/dasty/
Protein Information and Property Explorer (FEWB)	http://pipe.systemsbiology.net/pipe/#Summary

Gene prediction services

Glimmer Microbial Gene-Finding System	http://cbscb.umd.edu/software/glimmer/
GrailExp Grail Experimental Gene Discovery Suite	http://compbio.ornl.gov/grailexp
BCM Gene Feature Searches	http://searchlauncher.bcm.tmc.edu/seq-search/gene-search.html
CBS HMMgene server	http://www.cbs.dtu.dk/services/HMMgene/
CBS NetGene2 server	http://www.cbs.dtu.dk/services/NetGene2/
CBS NetPlantGene server	http://www.cbs.dtu.dk/services/NetPGene/
CBS Genome Atlas	http://www.cbs.dtu.dk/ws/ws.php?entry=GenomeAtlas
GeneMark	http://opal.biology.gatech.edu/GeneMark/
WebGeneMark	http://opal.biology.gatech.edu/GeneMark/genemark24.cgi
Eukaryotic WebGeneMark	http://opal.biology.gatech.edu/GeneMark/eukhmm.cgi
GENSCAN (C. Burge)	http://mobyle.pasteur.fr/cgi-bin/MobylePortal/portal.py?form=genscan
SplicePredictor	http://deepc2.psi.iastate.edu/cgi-bin/sp.cgi
ESTScan: a program for detecting, evaluating, and reconstructing potential coding regions	http://www.ch.embnet.org/software/ESTScan2.html
EBI Wise2 matches protein to genomic DNA	http://www.ebi.ac.uk/Wise2/
Lowelab tRNAscan-SE Search Server	http://lowelab.ucsc.edu/tRNAscan-SE/

Promotor prediction services

CBS NetStart 1.0 server Translation Start	http://www.cbs.dtu.dk/services/NetStart/
CBS Promoter 2.0 server	http://www.cbs.dtu.dk/services/promoter/
WWW Promotor Scan Pol II	http://www.bimas.cit.nih.gov/molbio/proscan/index.html
EPD Eukaryotic promotor database	http://www.epd.isb-sib.ch/
TRADAT Transcription Databases and Analysis Tool	http://www.epd.isb-sib.ch/TRADAT.html
TFM Explorer	http://bioinfo.lifl.fr/TFME/
TFM-Scan	http://bioinfo.lifl.fr/TFM/TFMscan/
TFSEARCH - Transcription Factor Search	http://www.cbrc.jp/research/db/TFSEARCH.html
TRANSFAC database at Biobase Biological Databases	http://www.biobase.de/index.php?id=transfacdatabases
OREgAnno: Open Regulatory Annotation	http://www.oreganno.org/oregano/Help.jsp
JASPAR Transcription factor database	http://jaspar.genereg.net/
JASPAR Transcription factor database paper	http://nar.oxfordjournals.org/cgi/reprint/36/suppl_1/D102
MotifMogul - Multiple Transcription Factor Binding Sites Algorithms	http://xerad.systemsbioology.net/MotifMogulServer/
Tiffin Fly genome motif database	http://servlet.sanger.ac.uk/tiffin/
Regulatory Sequence Analysis Tools (RSAT)	http://rsat.ulb.ac.be/rsat/
Footprinter 3 phylogenetic conserved motif extraction - Web server	http://genome.cs.mcgill.ca/cgi-bin/FootPrinter3.0/FootPrinterInput2.pl
Footprinter phylogenetic conserved motif extraction - Manual	http://genome.cs.mcgill.ca/FootPrinter3.0/doc/manual.html
AlignACE yeast cis-regulatory element search	http://atlas.med.harvard.edu/
DIALIGN - multiple sequence alignments to find conserved regulatory elements	http://bibiserv.techfak.uni-bielefeld.de/dialign/
The Gibbs Motif Sampler	http://bayesweb.wadsworth.org/gibbs/gibbs.html
MEME MAST motif discovery and search	http://meme.sdsc.edu/meme/intro.html
DiRE identification of Distant Regulatory Elements of co-regulated genes	http://dire.dcode.org/
ConTra - identification of conserved transcription factor binding sites	http://bioit.dmbr.ugent.be/ConTra/index.php

Pathways

KEGG: Kyoto Encyclopedia of Genes and Genomes	http://www.genome.ad.jp/kegg/
ExPASy - Biochemical Pathways	http://www.expasy.org/cgi-bin/search-biochem-index
NCI BioCarta - Pathways	http://cgap.nci.nih.gov/Pathways/BioCarta_Pathways
PANTHER (Protein ANalysis THrough Evolutionary Relationships) Classification	http://www.pantherdb.org/
Signaling Gateway - Cell Signaling Resource Nature	http://www.signaling-gateway.org/
Reactome Project	http://www.reactome.org/
BioCyc Database Collection	http://www.biocyc.org/
MetaCyc Encyclopedia of Metabolic Pathways	http://metacyc.org/
NCI Nature Pathway Interaction Database	http://pid.nci.nih.gov/
IUPHAR receptor database	http://www.iuphar-db.org/
LGICD Ligand-gated ion-channel database	http://www.ebi.ac.uk/compneur-srv/LGICdb/LGICdb.php
AraCyc - Pathway Database of Arabidopsis thaliana	http://www.arabidopsis.org/biocyc/
Invitrogen Pathways	http://www.invitrogen.com/site/us/en/home/LINNEA-Online-Guides/LINNEA-Pathways.html
NetPath human signal transduction pathways	http://www.netpath.org/
BBID-Biological Biochemical Image Database	http://bbid.grc.nia.nih.gov/
Signal Transduction - Biochemweb.org virtual library	http://www.biochemweb.org/signaling.shtml
BioPAX - data exchange for biological pathway data	http://www.biopax.org/
visANT - Visual Analysis Tool for Biological Networks and Pathways	http://visant.bu.edu/

MapMan - integrative view of microarray data and metabolic maps	http://gabi.rzpd.de/projects/MapMan/
GenMAPP Gene Map Annotator and Pathway Profiler	http://www.genmapp.org/
Biological Networks	http://biologicalnetworks.net/index.php
Comparative Pathway Analyzer	https://www.cebitec.uni-bielefeld.de/groups/brf/software/cpa/index.html
PaLS Pathway and Literature Strainer (gene set annotation tool)	http://pals.bioinfo.cnio.es/
ProdoNet Prokaryotic gene list pathway annotator	http://www.prodonet.tu-bs.de/
GraphWeb: analysis of biological networks	http://biit.cs.ut.ee/graphweb/
Network Analysis Tools (NeAT)	http://rsat.ulb.ac.be/rsat/index_neat.html

Enzymes

Enzyme Database - BRENDA	http://www.brenda-enzymes.info/
IntEnz EBI Enzyme Database	http://www.ebi.ac.uk/intenz/
Catalytic Site Atlas - CSA (EBI)	http://www.ebi.ac.uk/thornton-srv/databases/CSA/
REBASE The Restriction Enzyme Database	http://rebase.neb.com/rebase/rebase.html
Protein Kinase Resource	http://www.nih.go.jp/mirror/Kinases/
Kinase.com Global kinome analysis	http://www.kinase.com/
NetworkKIN kinase substrate relationship prediction	http://networkkin.info/search.php
PRIME Developed Kinase Pathway Database	http://kinasedb.ontology.ims.u-tokyo.ac.jp:8081/

Motifs Profiles Domains

Interpro Domain and Profile Database	http://www.ebi.ac.uk/interpro/
ExPASy - PROSITE	http://www.expasy.org/prosite/
ExPASy - ScanProsite tool	http://www.expasy.org/tools/scanprosite/
SIB myHits motif scan	http://hits.isb-sib.ch/cgi-bin/motif_scan
PRINTS protein fingerprints	http://www.bioinf.man.ac.uk/dbbrowser/PRINTS/
SMART - Simple Modular Architecture Research Tool	http://smart.embl-heidelberg.de/
Blocks WWW Server	http://blocks.fhcrc.org/blocks/
Block Search	http://blocks.fhcrc.org/blocks/blocks_search.html
The Sanger Centre Pfam Server	http://pfam.sanger.ac.uk/
The Sanger Centre HMM Pfam Searcher	http://pfam.sanger.ac.uk/search?tab=searchSequenceBlock
TIGRFAMs protein families HMM	http://www.jcvi.org/cms/research/projects/tigrfams/overview/
ProDom conserved protein domains	http://prodom.prabi.fr/prodom/current/html/home.php
CDD Conserved domains database NCBI	http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=cdd
DomCut prediction of linker regions between functional domains	http://www.bork.embl-heidelberg.de/~suyama/domcut/
PANTHER (Protein ANalysis THrough Evolutionary Relationships) Classification	http://www.pantherdb.org/
PIR iProClass Protein Classification	http://pir.georgetown.edu/pirwww/dbinfo/iproclass.shtml
Superfamily HMM models SCOP	http://supfam.mrc-lmb.cam.ac.uk/SUPERFAMILY/
Gene3D Structural and Functional Annotation	http://gene3d.biochem.ucl.ac.uk/Gene3D/
ModBase - Comparative protein structure models	http://modbase.compbio.ucsf.edu/modbase-cgi/index.cgi
Interproscan	http://www.ebi.ac.uk/Tools/webservices/services/interproscan
WebLogo	http://weblogo.berkeley.edu/
WebLogo Server	http://weblogo.berkeley.edu/logo.cgi
Human Protein Reference Database	http://www.hprd.org/
PhosphoMotif Finder	http://www.hprd.org/PhosphoMotif_finder

ELM Eukaryotic Linear Motif Functional Site Prediction	http://elm.eu.org/
Phospho.ELM Database of phosphorylation sites	http://phospho.elm.eu.org/
NetworkIN kinase substrate relationship prediction	http://networkin.info/search.php
Footprinter 3 phylogenetic conserved motif extraction - Web server	http://genome.cs.mcgill.ca/cgi-bin/FootPrinter3.0/FootPrinterInput2.pl
Footprinter phylogenetic conserved motif extraction - Manual	http://genome.cs.mcgill.ca/FootPrinter3.0/doc/manual.html
AlignACE yeast cis-regulatory element search	http://atlas.med.harvard.edu/
DIALIGN - multiple sequence alignments to find conserved regulatory elements	http://bibiserv.techfak.uni-bielefeld.de/dialign/
The Gibbs Motif Sampler	http://bayesweb.wadsworth.org/gibbs/gibbs.html
MEME MAST motif discovery and search	http://meme.sdsc.edu/meme/intro.html

Protein structures

RCSB Protein Data Bank	http://www.rcsb.org/pdb/
Entrez-Structure	http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=Structure
Domain Structure Database NCBI	http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=Domains
Protein Databank in Europe (PDBe)	http://www.ebi.ac.uk/pdbe/
Structures by electron microscopy at MSD	http://www.ebi.ac.uk/msd-srv/emsearch/index.html
SWISS-MODEL	http://swissmodel.expasy.org/SWISS-MODEL.html
EMBNNet - A Quick Guide to Swiss-Model	http://www.embnet.org/node/64
SCOP: Structural Classification of Proteins	http://scop.mrc-lmb.cam.ac.uk/scop/
Superfamily HMM models SCOP	http://supfam.mrc-lmb.cam.ac.uk/SUPERFAMILY/
CATH database of structural domains	http://www.cathdb.info/index.html
Gene3D Structural and Functional Annotation	http://gene3d.biochem.ucl.ac.uk/Gene3D/
The DALI database	http://ekhidna.biocenter.helsinki.fi/dali/start
NCBI VAST structural alignments	http://www.ncbi.nlm.nih.gov/Structure/VAST/vast.shtml
ModBase - Comparative protein structure models	http://modbase.compbio.ucsf.edu/modbase-cgi/index.cgi
BALL and BALLView Visualization and Modelling Tools	http://www.ball-project.org/
PyMOL molecular visualization system	http://www.pymol.org/
DeepView Swiss-PdbViewer	http://spdbv.vital-it.ch/

Sequences

Entrez Browser NCBI	http://www.ncbi.nlm.nih.gov/Entrez/
SRSWWW EMBL-EBI	http://srs.ebi.ac.uk/
DBGET/LinkDB Integrated Database Retrieval System	http://www.genome.ad.jp/dbget/dbget2.html
BCM Search Launcher	http://searchlauncher.bcm.tmc.edu/
GeneCards Weizmann	http://www.genecards.org/index.shtml
Genome Matrix databases information integration	http://genomematrix.molgen.mpg.de/gm/index.html
RefSeq Reference Sequence NCBI	http://www.ncbi.nlm.nih.gov/RefSeq/
Unigene NCBI	http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=unigene
Uniprot Universal Protein Resource Swiss-Prot/TREMBL/PIR	http://www.uniprot.org/
EMBNNet QuickGuide Swissprot Trembl Databases	http://www.embnet.org/node/64
PIR - Protein Information Resource	http://pir.georgetown.edu/
IPI - International Protein Index EBI	http://www.ebi.ac.uk/IPI/IPIhelp.html
Protein Identifier Cross-Reference Service	http://www.ebi.ac.uk/Tools/picr/
Vector Database	http://seq.yeastgenome.org/vectordb/

NCBI UniVec and VecScreen Vector contamination search	http://www.ncbi.nlm.nih.gov/VecScreen/UniVec.html
Public SRS installations Biowisdom	http://downloads.biowisdomsrs.com/publicsrs.html

Genomes

Ensembl Genome Browser	http://www.ensembl.org/
Entrez-Genome NCBI	http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=Genome
Integr8 Proteome Analysis at EBI	http://www.ebi.ac.uk/integr8/
GOLD: Genomes On Line Database v 2.0	http://www.genomesonline.org/
CBS Genome atlas database	http://www.cbs.dtu.dk/services/GenomeAtlas/
MIPS: Munich Information Centre for Protein Sequences	http://www.helmholtz-muenchen.de/en/ibis
J. Craig Venter Institute (ex TIGR) MD USA	http://www.jcvi.org/
The Sanger Centre	http://www.sanger.ac.uk/
Whitehead Institute	http://www.wi.mit.edu/
Broad Institute Center for Genome Research	http://www.broad.mit.edu/
GeneCards Weizmann	http://bioinformatics.weizmann.ac.il/cards/
HGP - Human genome project information	http://www.ornl.gov/sci/techresources/Human_Genome/home.shtml
Human Genome Resources NCBI	http://www.ncbi.nlm.nih.gov/genome/guide/human/
Mouse Genome Resources NCBI	http://www.ncbi.nlm.nih.gov/genome/guide/mouse/
Rat Genome resources NCBI	http://www.ncbi.nlm.nih.gov/genome/guide/rat/
Fugu Fish Genome Project	http://www.fugu-sg.org/project/info.html
ZFIN - Zebrafish information network	http://zfin.org/
Wormbase C. elegans	http://www.wormbase.org/
C.elegans Blast server (Sanger Centre)	http://www.sanger.ac.uk/cgi-bin/blast/submitblast/c_elegans
FlyBase Drosophila	http://flybase.net/
Yeast Genome Database MIPS	http://mips.helmholtz-muenchen.de/genre/proj/yeast/index.jsp
Schizosaccharomyces pombe genome (Sanger Centre)	http://www.sanger.ac.uk/Projects/S_pombe/
Neurospora crassa Database (Broad)	http://www.broad.mit.edu/annotation/genome/neurospora/Home.html
Neurospora crassa Database (MIPS)	http://mips.helmholtz-muenchen.de/genre/proj/ncrassa/
Fungal Genetics Stock Center	http://www.fgsc.net/
tair - The Arabidopsis Information Resource	http://www.arabidopsis.org/
GABI Primary Database (GabiPD) - Genomanalyse Pflanze	http://gabi.rzpd.de/
Plant genomes (MIPS)	http://www.helmholtz-muenchen.de/index.php?id=3946
Maize Genetics and Genomic Database	http://www.maizegdb.org/
International Rice Genome Sequencing Project	http://rgp.dna.affrc.go.jp/E/IRGSP/

Bioinformatics server

EBI European Bioinformatics Institute	http://www.ebi.ac.uk/index.html
NCBI US National Center for Biotechnology Information	http://www.ncbi.nlm.nih.gov/
GenomeNet WWW server Japan	http://www.genome.ad.jp/
ExPASy Proteomics Server	http://www.expasy.org/
EMBNNet - A Quick Guide to Expasy	http://www.embnet.org/node/64
Pôle Bio-Informatique Lyonnais	http://pbil.univ-lyon1.fr/
Weizmann Institute Bioinformatics and Biological Computing	http://bip.weizmann.ac.il/index.html

Baylor College of Medicine HGSC	http://www.hgsc.bcm.tmc.edu/
San Diego Supercomputer Center Biological Projects	http://www.sdsc.edu/research/ResearchOverview.html
Bielefeld University Bioinformatics Server	http://bibiserv.techfak.uni-bielefeld.de/
HUSAR Bioinformatics Lab - Biocomputing Services at DKFZ	http://genome.dkfz-heidelberg.de/
The Genomics and Bioinformatics Group NCI	http://discover.nci.nih.gov/index.jsp
Bioinformatics Software Server Lille	http://bioinfo.lifl.fr/index.php

Link lists

Expasy	http://www.expasy.org/
Expasy Life Science Directory	http://www.expasy.org/links.html
Bioinformatics Links Directory UBIC	http://bioinformatics.ca/links_directory/
HSLs: OBRC: Online Bioinformatics Resources Collection	http://www.hsls.pitt.edu/guides/genetics/obrc
Nucleic Acids Research Database Summary Paper List	http://www3.oup.co.uk/nar/database/a/
Nucleic Acids Research Database Issue 2010	http://nar.oxfordjournals.org/content/vol38/suppl_1/index.dtl
Nucleic Acids Research Database Issue 2009	http://nar.oxfordjournals.org/content/vol37/suppl_1/index.dtl
Nucleic Acids Research Webserver Issue 2009	http://nar.oxfordjournals.org/content/vol37/suppl_2/index.dtl
Nucleic Acids Research Webserver Issue 2008	http://nar.oxfordjournals.org/content/vol36/suppl_2/index.dtl
CMS Molecular Biology Resource	http://mbcf.dfci.harvard.edu/cmsmbr/
Harvard Dept of MCB - Biology Links	http://mcb.harvard.edu/BioLinks.html
CiteULike - online reference management sharing service	http://www.citeulike.org/
Connotea - online reference and link sharing	http://www.connotea.org/
del.icio.us social bookmarking	http://del.icio.us/
Biotech Europe Link Base	http://www.biotech-europe.de/rubric/linkbase/index.html

The bioinformatics bench

Linux

Ubuntu Linux	http://www.ubuntu.com/
Debian Linux	http://www.debian.org/
Open SUSE Linux	http://de.opensuse.org/
Novell SUSE Linux	http://www.novell.com/linux/
Fedora Project	http://fedoraproject.org/
RedHat Linux	http://www.redhat.com/
Linux Kernel Archives	http://www.kernel.org/
BioLinux - Wikipedia	http://en.wikipedia.org/wiki/BioLinux
Knoppix	http://www.knopper.net/knoppix/index-en.html
BioKnoppix	http://bioknoppix.hpcf.upr.edu/
EMBNet A QuickGuide to UNIX	http://www.embnet.org/node/64
Linux Online	http://www.linux.org/
Linux Community (German)	http://www.linux-community.de/
linux.de	http://www.linux.de/
Linux user group Tuebingen	http://tuebingen.linux.de/

WAMP

Apache	http://www.apache.org/
SELFHTML	http://selfhtml.org/
MySQL	http://dev.mysql.com/
PHP	http://www.php.net/
SELFPHP	http://www.selfphp.info/
phpMyAdmin	http://sourceforge.net/projects/phpmyadmin/
Comparison of WAMPs	http://en.wikipedia.org/wiki/Comparison_of_WAMPs
XAMPP	http://www.apachefriends.org/de/xampp.html

Perl

PERL	http://www.perl.com/
The Perl directory at perl.org	http://www.perl.org/
Perl documentation	http://perldoc.perl.org/
ActiveState - ActivePerl Downloads	http://www.activestate.com/Products/ActivePerl/
CPAN PERL Script Archiv	http://www.cpan.org/
Bioperl	http://bio.perl.org/
Installing Bioperl on Windows - BioPerl	http://www.bioperl.org/wiki/Installing_Bioperl_on_Windows
EMBNET QuickGuides PERL and Regular Expressions	http://www.embnnet.org/node/64

R and BioConductor

The R project for statistical computing	http://www.r-project.org/
The Comprehensive R archive network	http://cran.r-project.org/
BioConductor Project - Open Source Software for Bioinformatics	http://www.bioconductor.org/
R and Bioconductor Manual (Thomas Girke)	http://manuals.bioinformatics.ucr.edu/home/R_BioCondManual
useR! 2010 R user conference Gaithersburg, Maryland	http://user2010.org/
useR! 2009 R user conference Rennes, France	http://www2.agrocampus-ouest.fr/math/useR-2009/

Editors

The Vim Editor	http://www.vim.org/
Proton	http://www.computerbase.de/downloads/software/entwicklung/proton/
Komodo	http://www.activestate.com/Products/komodo_edit/

Laboratory tools

DOE 2000 Electronic Notebook Project ORNL	http://www.csm.ornl.gov/~geist/java/applets/enote/
DOE 2000 Electronic Notebook Project Main	http://www.epm.ornl.gov/enote/
WETLAB: an open source electronic lab notebook	http://arrowsmith.psych.uic.edu/arrowsmith_uic/wetlab.html
PHP Labware Project	http://bioinformatics.org/phplabware/labwiki/index.php

EMBOSS

EMBOSS	http://emboss.sourceforge.net/
EMBOSS wiki	http://emboss.open-bio.org/wiki/
EMBOSS application wiki	http://emboss.open-bio.org/wiki/Appdocs
EMBOSS applications	http://emboss.sourceforge.net/apps/release/6.2/emboss/apps/index.html
EMBOSS applications program groups	http://emboss.sourceforge.net/apps/release/6.2/emboss/apps/groups.html
EMBOSS for Windows	ftp://emboss.open-bio.org/pub/EMBOSS/windows/
EMBOSS user documentation	http://emboss.sourceforge.net/docs/
EMBOSS FAQ	http://emboss.sourceforge.net/docs/faq.html
EMBOSS Main Tutorial	http://emboss.sourceforge.net/docs/emboss_tutorial/emboss_tutorial.html
EMBOSS mailing lists	http://emboss.sourceforge.net/support/#usermail
EmbNet EMBOSS and wEMBOSS Quick Guides	http://www.embnet.org/node/64
JEMBOSS	http://emboss.sourceforge.net/Jemboss/
wEMBOSS	http://wemboss.sourceforge.net/
Public SRS installations Biowisdom	http://downloads.biowisdomsrs.com/publicsrs.html

NCBI BLAST software

BLAST Wikipedia	http://en.wikipedia.org/wiki/BLAST
BLAST setup procedure for Windows	http://www.ncbi.nlm.nih.gov/staff/tao/URLAPI/pc_setup.html
NCBI BLAST download	ftp://ftp.ncbi.nlm.nih.gov/blast/executables/LATEST/
BLAST FASTA databases download	ftp://ftp.ncbi.nih.gov/blast/db/FASTA/
BLAST standalone documentation	ftp://ftp.ncbi.nih.gov/blast/documents

Open Source Bioinformatics Platforms

myGRID - Open Source Middleware Environment for Bioinformatics Workflows	http://www.mygrid.org.uk/
TAVERNA Open Source Bioinformatics Workbench	http://taverna.sourceforge.net/
eFamily Project - Grid integrating of protein database annotations	http://www.efamily.org.uk/
Bioclipse - visual platform for structural chemo- and bioinformatics	http://www.bioclipse.net/
Systems Biology WorkBench SWB package	http://sbw.kgi.edu/research/sbwIntro.htm
Mobyle web environment for bioinformatics workflows	http://bioweb2.pasteur.fr/projects/mobyle/what_is_mobyle.html
Chinook P2P Bioinformatics Platform	http://www.bcgsc.bc.ca/chinook/
Gaggle data management framework	http://www.systemsbio.org/Technology/Data_Management/Gaggle