
Overview of the LiMB database

John R. Lawton, Frances A. Martinez and Christian Burks*

Theoretical Biology and Biophysics Group, T-10, MS K710, Los Alamos National Laboratory, Los Alamos, NM 87545, USA

ABSTRACT

The rapidly increasing number of databases relevant to molecular biology has given rise to a need for a coordinated effort to identify, characterize, and link them. The LiMB database, which contains information about molecular biology and related databases, is a step in that direction. It serves molecular biologists seeking data sets containing information relevant to their research, and is also intended to anticipate the needs of database designers and managers building software links for related data sets. We present an abbreviated version of the database here; the full database is available free of charge as described below.

INTRODUCTION

The rapidly increasing number of computer databases in the field of molecular biology has created a need for a systematic, coordinated approach to designing, developing, and maintaining these databases [1]. A prerequisite for much of this work is an overview of existing databases; until now, there has been no 'database of databases' that would support developing and maintaining such an overview. The LiMB (**L**isting of **M**olecular **B**iology **D**atabases) database was created to fill that gap.

The LiMB database is intended to facilitate locating and accessing databases relevant to molecular biology. It was begun in October 1986; the first (Release 1.0) formal release, containing information on 53 databases, was distributed in February 1988 [2]. It has been distributed directly to over 300 people, with a greater number of researchers accessing it through six network servers that have mounted copies of LiMB for the communities they serve.

GENERAL DESCRIPTION

Each entry in LiMB currently consists of 54 fields, including: database staff names and addresses; database maintenance hardware and software; scope of coverage and database goals; details about submission and access to the data sets; database size; and types of data covered by the database. These data items are described in greater detail below. LiMB entries are based on questionnaires filled out by the database managers or, in the absence of a completed questionnaire, on secondary sources (e.g., a journal article). LiMB is currently maintained on a Sun 3/280 with UNIX system tools; in the near future it will be maintained using a relational DBMS.

LiMB serves both the potential users of these databases (by helping them find and contact the databases which contain the information they seek) and the designers and managers of the databases (by providing a centralized source of information that can aid coordination

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Table I. LiMB data fields and definitions.

Field	Definition
entry	Name of entry
number	Accession number (will always be associated with a given data bank)
history	History of entry
status	Correspondence status
res.nam	Name of respondent
res.add	Address of respondent
res.tel	Telephone number of respondent (as dialed in the USA)
res.net	Network address of respondent
gen.nam	Name for general inquiry
gen.add	Address for general inquiry
gen.tel	Telephone number for general inquiry (as dialed in the USA)
gen.net	Network address for general inquiry
con.nam	Name for contributing data
con.add	Address for contributing data
con.tel	Telephone number for contributing data (as dialed in the USA)
con.net	Network address for contributing data
acc.nam	Name for acquiring data
acc.add	Address for acquiring data
acc.tel	Telephone number for acquiring data (as dialed in USA)
acc.net	Network address for acquiring data
name.now	Official name of database
name.alt	Alternative official/unofficial names of database
name.bad	Obsolete or incorrect names of database
source	Source of data in database
collab.in	Formal collaborators for collection of data
collab.ou	Formal collaborators for distribution of data
funding	Funding base for data bank
citation	Recent publications describing database
charter	Formal or informal charter of data bank effort
cross	Other databases to which this database is explicitly cross-referenced
data.pri	Primary data items in the database
data.sec	Secondary data items in the database
hardware	Hardware used for maintaining the data
operate	Operating system for database hardware
dbms	Software system used for maintaining data
language	Programming language used for software system
format	Format used for distributed flat text files
software	Software distributed with the database
access	Limitations on access to data
update	Frequency of database updates
con.onl	Can contributions be made to database on-line?
con.mag	Can contributions be made to database on magnetic tape?
con.flp	Can contributions be made to database on floppy disk?
con.elm	Can contributions be made to database by electronic mail?
con.pap	Can contributions be made to database on hardcopy?
acc.onl	Is database distributed on-line?
acc.mag	Is database distributed on magnetic tape?
acc.flp	Is database distributed on floppy disk?
acc.elm	Is database distributed by electronic mail?
acc.pap	Is database distributed on hardcopy?
byt.all	Number of bytes contained in the database
byt.pri	Number of bytes contained in primary data items in the database
ent.pri	Number of entries in the database
comment	Information not contained in other fields
///	end of entry

between the various databases). It was begun as a simple directory; in the future it will expand its role as a centralized information resource by providing a platform for designing front-ends for automatic access to distributed biological data sets.

LiMB is available free of charge through one of the following media: electronic network mail, MS-DOS based floppy disk, or printed form. Requests for the database should include name, address (e-mail or postal service), and desired medium for transmission; these requests may be directed through postal service¹ or electronic network mail.²

The project is still in its formative stage. We would greatly appreciate any ideas for improving future releases and would also appreciate being informed of any molecular biology or related databases not listed in Release 1.0 that could be included in future releases.

DATA FIELDS

Table I provides a listing of all the fields found—when the information is available and pertinent—in a flat file LiMB entry.

THE DATA

A listing of all the LiMB entries (in abbreviated form) is presented in Appendix 1.0; an index based on the data items contained in the various databases is presented in Appendix 2.0. This represents an augmented and updated listing (Release 1.1) relative to Release 1.0 of LiMB [2] and earlier, preliminary versions of these data [3,4].

ACKNOWLEDGEMENTS

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*To whom correspondence should be addressed

¹ LiMB Database; T-10, MS K710; Los Alamos National Laboratory; Los Alamos, NM 87545; USA.

² limb@lanl.gov

REFERENCES

1. Burks, C., Lawton, J.R. and Bell, G.I. (1988) *Science* **241**, 888.
2. Burks, C. and Lawton, J.R. (1988) LiMB database: Release 1.0. Unpublished release notes, Los Alamos National Laboratory, Los Alamos, NM, U.S.A..
3. Burks, C. (1987) In *Final Report for the EMBL/NIH Workshop on Future Databases for Molecular Biology*, European Molecular Biology Laboratory, Heidelberg (unpublished report).
4. von Heijne, G. (1987) '*Sequence Analysis in Molecular Biology*,' Academic Press, New York, pp. 153–60.

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APPENDIX 1.0: ABBREVIATED LiMB ENTRIES

entry AAAAAAAA (Name of entry.)
name.now Name of database.
number Number that will always be associated with a given data bank.
data.pri Primary data items in the database.
data.sec Secondary data items in the database.
gen.nam Name for general inquiry.
gen.add Address for general inquiry.
gen.tel Telephone number for general inquiry as dialed in U.S.A.)
gen.net Network address for general inquiry.
///
entry AANSPII
name.now Amino Acid and Nucleotide Sequences of Proteins of Immunological Interest
number 10001
data.pri [immunoglobulin] amino acid sequences; [immunoglobulin] nucleotide sequences; sequence alignments.
data.sec [amino acid sequence, immunoglobulin] functional features; [nucleotide sequence, immunoglobulin] functional features.
gen.nam Dr. Elvin Kabat
gen.add National Institutes of Health
Bldg. 8 Room 126
Bethesda, MD 20892
U.S.A.
gen.tel 301-496-0316
///
entry AMINODB
name.now Amino Acid Database
number 10042
data.pri [amino acid] molecular properties.
data.sec [molecular biology] literature citations.
gen.nam Dr. Cornelius Froemmel
gen.add DDR-1040 Berlin
Institut fur Biochemie
Hessische Strasse 3-4
EAST GERMANY
///
entry BIOSISP
name.now BIOSIS Previews
number 10031
data.pri [biological] literature abstracts; [biological] literature citations.
data.sec [biological] index terms.
gen.nam BIOSIS User Services
gen.add 2100 Arch Street
Philadelphia, PA 19103-1399
U.S.A.
gen.tel 215-587-4800
///
entry BRD
name.now Berlin RNA Data Bank
number 10002
data.pri [4.5S rRNA] nucleotide sequences; [5S rRNA] nucleotide sequences; [5.8S rRNA] nucleotide sequences.
data.sec [nucleotide sequence, rRNA] functional features.
gen.nam Dr. Volker Erdmann
gen.add Institut fur Biochemie
FB Chemie
Freie Universitat Berlin
Otto-Hahn-Bau
Thielallee 63
D-1000 Berlin 33 (Dahlem)
WEST GERMANY
gen.tel [011-49] 30-838 6002
///
entry CARBBANK
name.now CarbBank
number 10003
data.pri carbohydrate sequences.
data.sec [carbohydrate sequence] functional features; index terms; literature citations; [carbohydrate sequence] sources.
gen.nam Dr. Scott Doubet
gen.add Complex Carbohydrate Research Center
Russell Lab
P.O. Box 5677
Athens, GA 30613
U.S.A.
gen.tel 404-546-3555
gen.net carbbank@uga.bitnet
///
entry CAS
name.now CAS ONLINE
number 10030
data.pri [chemical] literature abstracts; [chemical] literature citations.
data.sec [chemical] index terms.
gen.nam CAS Customer Service
gen.add Chemical Abstracts Service
P.O. Box 3012
Columbus, Ohio 43210
U.S.A.
gen.tel 800-848-6538
///
entry CASORF
name.now CAS ONLINE Registry File
number 10051
data.pri [chemical] substances.
data.sec index terms; molecular formulae; [chemical] literature citations; molecular structure [chemical representations].
gen.nam CAS Customer Service
gen.add Chemical Abstracts Service
P.O. Box 3012

Columbus, OH 43210
 U.S.A.
 gen.tel 800-848-6538
 ///
 entry CCD
 name.now Cambridge Structural Database
 number 10039
 data.pri [small molecule] atomic coordinates.
 gen.name Dr. Olga Kennard
 gen.add Cambridge Crystallographic Data Centre
 University Chemical Laboratory
 Lensfield Road
 Cambridge CB2 1EW
 U.K.
 gen.tel [011-44] 223-336409
 gen.net ok10%chemcrys@uk.ac.cam
 ///
 entry CGC
 name.now Caenorhabditis Genetics Center
 number 10054
 data.pri organisms [C. elegans strains].
 data.sec [C. elegans] genetic maps;
 literature citations.
 gen.name Dr. Mark Edgley
 gen.add 110 Tucker Hall
 University of Missouri
 Columbia, MO 65211
 gen.tel 314-882-7384
 gen.net bioscgc@umcvmc.bitnet
 ///
 entry CSRS
 name.now Compilation of Small RNA Sequences
 number 10004
 data.pri [small RNA] nucleotide sequences.
 gen.name Dr. Ram Reddy
 gen.add Department of Pharmacology
 Baylor College of Medicine
 Houston, TX 77030
 U.S.A.
 gen.tel 713-799-4458 ext. 26
 ///
 entry CUTG
 name.now Codon Usage Tabulation from GENBANK
 number 10005
 data.pri codon usage.
 data.sec [GENBANK] cross-references.
 gen.name Dr. Toshimichi Ikemura
 gen.add National Institute of Genetics
 Mishima, Shizuoka 411
 JAPAN
 gen.tel [011-81] 559-75-0771, ext. 355
 ///
 entry DBIR
 name.now Directory of Biotechnology
 Information/Resources
 number 10053
 data.pri [biotechnology] databases.
 data.sec database access information;

database characteristics; index terms;
 database maintenance [hardware];
 database maintenance [software].
 gen.name Dr. Kathleen Arnett
 gen.add Bioinformatics Dep't, A.T.C.C.
 12301 Parklawn Drive
 Rockville, MD 20852
 U.S.A.
 gen.tel 301-231-5527
 gen.net ka3@nihcu.bitnet
 ///
 entry DCT
 name.now Drosophila Codon Tables
 number 10041
 data.pri [Drosophila] codon usage;
 ['host' gene] nucleotide sequences;
 [transposable element ORF] nucleotide
 sequences.
 data.sec [database] cross-references;
 ['host' gene] base composition;
 [transposable element ORF] base
 composition.
 gen.name Dr. Michael Ashburner
 gen.add Department of Genetics
 University of Cambridge
 Cambridge
 U.K.
 gen.tel [011-44] 223-333-969
 gen.net mal1%cam.phx@uk.ac.cam.eng-icf
 ///
 entry DDBJ
 name.now DNA Data Bank of Japan
 number 10006
 data.pri nucleotide sequences.
 data.sec [nucleotide sequence] functional features;
 index terms; [molecular biology]
 literature citations;
 taxonomic identification.
 gen.name Dr. Sanzo Miyazawa
 gen.add National Institute of Genetics
 Mishima 411
 JAPAN
 gen.tel [011-81] 559-75-0771
 gen.net ddbj%nigsun.uucp@vax2.nlm.nih.gov
 ///
 entry DRHPL
 name.now Database for the Repository of Human
 Probes and Libraries
 number 10007
 data.pri [human cDNA] clones; RFLPs;
 clones [chromosome specific libraries];
 [human genomic] clones.
 data.sec clones [descriptions]; literature citations;
 clones [library characterizations];
 clones [distribution lists].
 gen.name Dr. Donna R. Maglott
 gen.add American Type Culture Collection
 12301 Parklawn Drive

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Rockville, MD 20852-1776
U.S.A.
gen.tel 301-231-5586
///
entry DROSO
name.now Genetic Variations of Drosophila melanogaster
number 10033
data.pri [D. melanogaster] genetic variants.
data.sec [D. melanogaster] chromosome rearrangements;
[D. melanogaster] genetic mutations;
[D. melanogaster non-chromosomal] phenotypes;
organism
[D. melanogaster, wild-type strains].
gen.nam Dr. Daniel L. Lindsley
gen.add Department of Biology
University of California at San Diego
La Jolla, CA 92093 U.S.A.
///
entry EMBL
name.now The EMBL Data Library
number 10008
data.pri nucleotide sequences.
data.sec [nucleotide sequence] functional features;
[molecular biology] literature citations;
index terms; taxonomic identification.
gen.nam EMBL Data Library
gen.add Postfach 10.2209
6900 Heidelberg
WEST GERMANY
gen.tel [011-49] 6221-387-258
gen.net datalib@embl.bitnet
///
entry GBSOFT
name.now The GenBank Software Clearinghouse
number 10028
data.pri literature citations [software].
data.sec software [acquisition information];
software [system requirements];
software [functions].
gen.nam GenBank Software Clearinghouse
gen.add IntelliGenetics, Inc.
700 El Camino Real East
Mountain View, CA 94040
U.S.A.
gen.tel 415-962-7364
gen.net genbank@bionet-20.bio.net
///
entry GC
name.now Gene Communications
number 10052
data.pri [nucleotide sequence, cloned]
literature citations.
data.sec -
gen.nam Dr. Jorg Schmidtke
gen.add Gene Communications

Box 3426
D-3400 Gottingen
WEST GERMANY
gen.tel [011-49] 551-397-599
///
entry GDN
name.now Gene Diagnosis Newsletter
number 10060
data.pri [disease, human inherited]
literature citations.
data.sec -
gen.nam Dr. Jorg Schmidtke
gen.add Gene Diagnosis Newsletter
Box 3426
D-3400 Gottingen
WEST GERMANY
gen.tel [011-49] 551-397-599
///
entry GENBANK
name.now The GenBank Genetic Sequence
Data Bank
number 10009
data.pri nucleotide sequences.
data.sec [nucleotide sequence] functional features;
index terms; [molecular biology]
literature citations;
taxonomic identification.
gen.nam Dr. David Benton
gen.add IntelliGenetics, Inc.
700 El Camino Real East
Mountain View, CA 94040
U.S.A.
gen.tel 415-962-7364
gen.net genbank@bionet-20.bio.net
///
entry HDB
name.now Hybridoma Data Bank: A Data Bank
on Immunoclonal
number 10010
data.pri hybridomas; clones [immuno-];
[monoclonal] antibodies.
data.sec index terms; literature citations.
gen.nam Dr. Esther J. Asaki
gen.add Hybridoma Data Bank
A.T.C.C.
12301 Parklawn Drive
Rockville, MD 20852
U.S.A.
gen.tel 301-231-5527
gen.net zja@nihcu.bitnet
///
entry HGIR
name.now Human Genome Information Resource
number 10058
data.pri nucleotide probes; restriction fragments;
physical maps [data].
gen.nam Dr. Thomas Marr
gen.add MS K710

Los Alamos National Laboratory
 Los Alamos, NM 87545
 gen.tel 505-665-0838
 gen.net tgm@hedonist-1.lanl.gov
 ///
 entry HGMCR
 name.now NIGMS Human Genetic Mutant Cell
 Repository Catalog of Cell Lines
 number 10034
 data.pri [human] cell lines.
 data.sec cell lines [characteristics]; index terms.
 gen.name Dr. Arthur E. Greene
 gen.add Coriell Institute for Medical Research
 Copewood and Davis Streets
 Camden, NJ 08103
 U.S.A.
 gen.tel 609-966-7377
 ///
 entry HGML
 name.now The Howard Hughes Medical Institute
 Human Gene Mapping Library
 number 10011
 data.pri [human] DNA probes; [human] RFLPs;
 [molecular biology] literature citations;
 [human] genetic maps.
 data.sec index terms.
 gen.name Ms. Iva H. Cohen
 gen.add Human Gene Mapping Library
 25 Science Park
 New Haven, CT 06511
 U.S.A.
 gen.tel 203-786-5515
 gen.net genesic@yalevm.bitnet
 ///
 entry HIVSSA
 name.now HIV Sequence & Sequence Analysis
 Database
 number 10040
 data.pri [HIV] amino acid sequences;
 [HIV] nucleotide sequences;
 sequence alignments.
 data.sec AIDS related animal viruses.
 gen.name Ms. Kersti MacInnes
 gen.add T-10, MS K710
 Los Alamos National Laboratory
 Los Alamos, NM 87545
 U.S.A.
 gen.tel 505-667-7510
 gen.net kam@lanl.gov
 ///
 entry JIPIDA
 name.now Artificial Variant Database: Asian and
 Oceania node of the International
 Protein Sequence Database
 number 10038
 data.pri amino acid sequences [artificial variants].
 data.sec [database] cross-references; index terms;

[molecular biology] literature citations;
 [amino acid mutagenizing] methods;
 [amino acid] chemical modification;
 [protein] molecular properties;
 [protein variant] sources.
 gen.name Dr. Akira Tsugita
 gen.add JIPID
 Life Science Institute
 Science University of Tokyo
 Yamazaki Noda 278
 JAPAN
 gen.tel [011-81] 471-24-1501 ext. 5001
 [011-81] 471-22-3899
 gen.net ex5292@jpsut30.bitnet
 42:cdt0079 (CODATA/Dialcom)
 ///
 entry JIPIDB
 name.now Biological Database: Asian and
 Oceania node of the International
 Protein Sequence Database
 number 10044
 data.pri [protein] molecular properties.
 data.sec [database] cross-references;
 [biological] literature citations;
 [protein] sources; index terms.
 gen.name Dr. Akira Tsugita
 gen.add JIPID
 Life Science Institute
 Science University of Tokyo
 Yamazaki Noda 278
 JAPAN
 gen.tel [011-81] 471-24-1501 ext. 5001
 [011-81] 471-22-3899
 gen.net ex5292@jpsut30.bitnet
 42:cdt0079 (CODATA/Dialcom)
 ///
 entry JIPIDM
 name.now NMR Database on biopolymers: Asian and
 Oceania node of the International
 Protein Sequence Database
 number 10045
 data.pri NMR data; literature citations.
 data.sec [database] cross-references; index terms;
 NMR data interpretation.
 gen.name Dr. Akira Tsugita
 gen.add JIPID
 Life Science Institute
 Science University of Tokyo
 Yamazaki Noda 278
 JAPAN
 gen.tel [011-81] 471-24-1501 ext. 5001
 [011-81] 471-22-3899
 gen.net ex5292@jpsut30.bitnet
 42:cdt0079 (CODATA/Dialcom)
 ///
 entry JIPIDN
 name.now Natural Variant Database: Asian and

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Oceania node of the International Protein Sequence Database

number 10046
data.pri amino acid sequences [natural variants].
data.sec [database] cross-references; index terms;
[molecular biology] literature citations;
[amino acid] chemical modification;
[protein variant] molecular properties;
[protein variant] sources.

gen.nam Dr. Akira Tsugita
gen.add JIPID
Life Science Institute
Science University of Tokyo
Yamazaki Noda 278
JAPAN

gen.tel [011-81] 471-24-1501 ext. 5001
[011-81] 471-22-3899
gen.net ex5292@jpsut30.bitnet
42:cdt0079 (CODATA/Dialcom)

///
entry JIPIDS
name.now Sequence Database: Asian and Oceania
node of the International Protein
Information Database

number 10047
data.pri nucleotide sequences;
amino acid sequences.

data.sec [database] cross-references; index terms;
[nucleotide sequence] functional features;
[amino acid sequence] functional features;
[biological] literature citations;
[sequence] sources.

gen.nam Dr. Akira Tsugita
gen.add JIPID
Life Science Institute
Science University of Tokyo
Yamazaki Noda 278
JAPAN

gen.tel [011-81] 471-24-1501 ext. 5001
[011-81] 471-22-3899
gen.net ex5292@jpsut30.bitnet
42:cdt0079 (CODATA/Dialcom)

///
entry LIMB
name.now LiMB
number 10012
data.pri [molecular biology] databases.
data.sec database access information;
database characteristics;
[molecular biology] literature citations;
database maintenance [hardware];
database maintenance [software];
database contribution information.

gen.nam Dr. Christian Burks
gen.add Theoretical Biology and Biophysics
T-10, MS K710
Los Alamos National Laboratory

Los Alamos, NM 87545
U.S.A.
gen.tel 505-667-6683
gen.net limb@lanl.gov

///
entry LYSIS
name.now Proteolysis Database
number 10061
data.pri [protein substrate cleavage site]
literature citations;
proteinase specificity.

data.sec peptides [synthetic substrates].
gen.nam Dr. Borivoj Keil
gen.add Institut Pasteur
Chimie des Proteines
25 rue du docteur Roux
Paris 75015
FRANCE

gen.tel [011-33] 1-4734-0593
gen.net keil@pasteur.bitnet
dbi0061.dialcom (Telecom Gold)

///
entry MEDLINE
name.now MEDLINE and Backfiles
number 10013
ata.pri [medical] index terms;
[medical] literature citations;
[biological] index terms;
[biological] literature citations.

data.sec [medical] literature abstracts;
[biological] literature abstracts.

gen.nam MEDLARS Management Section
gen.add National Library of Medicine
Bldg. 38A
National Institutes of Health
Bethesda, MD 20894
U.S.A.

gen.tel 800-638-8480

///
entry MIM
name.now Mendelian Inheritance in Man
number 10064
data.pri [human inherited] diseases.
gen.nam Dr. Victor McKusick
gen.add Moore Clinic
Johns Hopkins Hospital
Baltimore, MD 21205

gen.tel 301-955-6641

///
entry MICIS
name.now Microbial Culture Information Service
number 10027
data.pri [cultured] microorganisms.
data.sec taxonomic classification;
[microorganism] sources;
microorganism [history];
literature citations.

gen.nam Dr. Geraldine Alliston
gen.add Laboratory of the Government Chemist
Cornwall House
Waterloo Road
London SE1 8XY
U.K.
gen.tel [011-44] 1-211-8834
///
entry MIPS
name.now Martinsreid Institute for Protein
Sequence Data
number 10037
data.pri amino acid sequences.
data.sec [amino acid sequence] literature citations;
[amino acid sequence] functional features;
index terms.
gen.nam Dr. Hans-Werner Mewes
gen.add Max Planck Institut für Biochemie
MPI/GEN
8033 Martinsreid
WEST GERMANY
gen.net mewes@dm0mpb51.bitnet
///
entry MSDN
name.now Microbial Strain Data Network
number 10032
data.pri [microbial strain database] cross-references;
[microbial strain] index terms.
data.sec database access information;
database characteristics;
database contribution information.
gen.nam MSDN Secretariat
gen.add Biotechnology Centre
Cambridge University
307 Huntingdon Rd
Girton, Cambridge CB3 0JX
U.K.
gen.tel [011-44] 223-277-502
gen.net 42:cdt0001 (CODATA/Dialcom)
///
entry NAPRALERT
name.now NAPRALERT
number 10059
data.pri [chemical compound] literature citations.
data.sec [taxonomy] literature citations;
[pharmacology] literature citations.
gen.nam Dr. Norman Farnsworth
gen.add University of Illinois at Chicago
Prog. for Collaborative Research in the
Pharmaceutical Sciences
833 S. Wood St.
Chicago, IL 60612
gen.tel 312-996-7253
gen.net beecher@uicbal.bitnet
///
entry NEWAT
name.now NEWAT

number 10014
data.pri amino acid sequences.
data.sec [molecular biology] literature citations;
[amino acid sequence] sources.
gen.nam Dr. R.F. Doolittle
gen.add Chemistry Department D-006
University of California, San Diego
La Jolla, CA 92093
U.S.A.
gen.tel 619-534-4417
///
entry PDB
name.now Protein Data Bank
number 10015
data.pri [biomacromolecular] atomic coordinates.
data.sec [biomacromolecule] functional features;
[biomacromolecular] literature citations;
[biomacromolecule] molecular properties.
gen.nam Dr. Frances C. Bernstein
gen.add Chemistry Department
Brookhaven National Laboratory
Upton, NY 11973
U.S.A.
gen.tel 516-282-4382
gen.net abola@bnldag.bitnet
///
entry PIR
name.now National Biomedical Research Foundation
Protein Identification Resource
Protein Sequence Database
number 10016
data.pri amino acid sequences.
data.sec [amino acid sequence] literature citations;
[amino acid sequence] functional features;
index terms.
gen.nam Dr. Kathryn E. Sidman
gen.add National Biomedical Research Foundation
3900 Reservoir Road, N.W.
Washington, D.C. 20007
U.S.A.
gen.tel 202-687-2121
gen.net pirmail@gunbrf.bitnet
///
entry PPR
name.now Plasmid Prefix Registry
number 10017
data.pri plasmid prefixes.
data.sec plasmid prefixes [locale of registrants];
plasmid prefixes [name of registrants].
gen.nam Dr. Esther Lederberg
gen.add Department of Medical Microbiology
Sherman Fairchild Building - 5402
Stanford University School of Medicine
Stanford, CA 94305-2499
U.S.A.
gen.tel 415-723-1772
///

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entry PRFLITDB
name.now PRF/LITDB
data.pri [amino acid sequence] literature abstracts;
[amino acid sequence] literature citations.
data.sec index terms.
gen.name Dr. Yasuhiko Seto
gen.add Protein Research Foundation
4-1-2 Ina, Minoh-shi
Osaka 562
JAPAN
///
entry PRFSEQDB
name.now PRF/SEQDB
number 10018
data.pri amino acid sequences.
data.sec [amino acid sequence] functional features;
[biological] literature citations.
gen.name Dr. Yasuhiko Seto
gen.add Protein Research Foundation
4-1-2 Ina, Minoh-shi
Osaka 562
JAPAN
///
entry PSEQIP
name.now PseqIP
number 10019
data.pri amino acid sequences.
data.sec index terms.
gen.name Dr. Isabelle Sauvaget
gen.add Institut Pasteur
25 rue du Docteur Roux
75724 Paris Cedex 15
FRANCE
gen.tel [011-33] 1-45-68-85-09
///
entry PTG
name.now Protein Translation of GENBANK
number 10020
data.pri amino acid sequences.
data.sec [nucleotide sequence] functional features;
[molecular biology] literature citations;
index terms; taxonomic identification.
gen.name Dr. Christian Burks
gen.add Theoretical Biology and Biophysics Grp.
T-10, MS K710
Los Alamos National Laboratory
Los Alamos, NM 87545
U.S.A.
gen.tel 505-667-6683
gen.net cb@lanl.gov
///
entry QTDGPD
name.now Quest 2D Gel Protein Database
number 10021
data.pri gel electrophoretic data
[protein, spot representation];
data.sec gel electrophoretic data
[protein, spot coordinates];
gel electrophoretic data
[protein, spot quality];
[protein] molecular properties.
gen.name Dr. Cecile Chang
gen.add Cold Spring Harbor Laboratory
P.O. Box 100
Cold Spring Harbor, NY 11724
U.S.A.
gen.tel 516-367-8356
///
entry RED
name.now Restriction Enzyme Database
number 10022
data.pri restriction enzymes.
data.sec [restriction enzyme] functional features;
literature citations; literature abstracts;
[restriction enzyme isolation] methods.
gen.name Dr. Rich Roberts
gen.add Cold Spring Harbor Laboratory
Cold Spring Harbor, NY 11724
U.S.A.
gen.tel 516-367-8388
gen.net roberts@bionet-20.arpa
///
entry RFLPD
name.now RFLP Database
number 10057
data.pri RFLPs.
gen.name Dr. Howard Cann
gen.add Centre d'Etude du Polymorphisme
Humain
3, rue d'Ulm
75005 Paris
FRANCE
gen.tel [011-33] 1-43-29-12-11
///
entry SEQANALREF
name.now Sequence Analysis Literature Reference
Data Bank
number 10055
data.pri [sequence analysis] literature citations.
data.sec index terms.
gen.name Dr. Amos Bairoch
gen.add Departement de Biochimie Medicale
C.M.U.
1 Rue Michel Servet
1211 Geneva 4
SWITZERLAND
gen.tel [011-41] 22-61-84-92
gen.net bairoch@cgecmu51.bitnet
///
entry SIGPEP
name.now SIGPEP
number 10029
data.pri [signal peptide] amino acid sequences.
data.sec [amino acid sequence] sources;
literature citations.
gen.name Dr. Gunnar von Heijne

gen.add Theoretical Physics
 Royal Institute of Technology
 S-10044 Stockholm
 SWEDEN
 gen.tel [011-46] 8-787 7172
 ///
 entry SRRSD
 name.now 16S Ribosomal RNA Sequence Database
 number 10024
 data.pri [16S rRNA] nucleotide sequences.
 data.sec [16S rRNA nucleotide sequence]
 functional features.
 gen.name Dr. George Fox
 gen.add Department of Biochemical Science
 University of Houston SR-1
 4800 Calhoun
 Houston, TX 77004
 U.S.A.
 gen.tel 713-749-3980; 713-749-2830
 gen.net fox@uhrcc2.bitnet
 fox@uhrcc2.crcr.uh.edu
 ///
 entry SRSRSC
 name.now Small Ribosomal Subunit RNA
 Sequence Compilation
 number 10025
 data.pri [small subunit rRNA] nucleotide sequences.
 data.sec [nucleotide sequence, small subunit rRNA]
 functional features; [sequence] sources;
 [molecular biology] literature citations.
 gen.name Dr. Rupert De Wachter
 gen.add Departement Biochemie
 Universiteit Antwerpen (UIA)
 Universiteitsplein 1
 B-2610 Antwerpen
 BELGIUM
 gen.tel [011-32] 3-828-25-28, ext. 269
 ///
 entry SWISSPROT
 name.now SWISS-PROT Protein Sequence Data Bank
 number 10023
 data.pri amino acid sequences.
 data.sec [amino acid sequence] functional features;
 index terms.
 gen.name Dr. Amos Bairoch
 gen.add Departement de Biochimie Medicale
 C.M.U.
 1 Rue Michel Servet
 1211 Geneva 4
 SWITZERLAND
 gen.tel [011-41] 22-61-84-92
 gen.net bairoch@cgecmu51.bitnet
 ///
 entry TOXNET
 name.now Toxicology Data Network
 number 10049
 data.pri [toxic] chemicals.
 data.sec [chemical] literature citations; toxin
 properties; [chemical synthesis] methods.

gen.name Dr. Philip Wexler
 gen.add National Library of Medicine
 8600 Rockville Pike
 Bethesda, MD 20894
 U.S.A.
 gen.tel 301-496-6531
 ///
 entry TRF
 name.now The Taxonomic Reference File at BIOSIS
 number 10048
 data.pri organism [bacterial].
 data.sec organism [bacterial, synonyms];
 taxonomic classification;
 index terms.
 gen.name Dr. Robert T. Howey
 gen.add BIOSIS
 2100 Arch Street
 Philadelphia, PA 19103-1399
 U.S.A.
 gen.tel 215-587-4917
 gen.net 42:CDT0018 (CODATA/Dialcom)
 ///
 entry TRNAC
 name.now tRNA Compilation
 number 10026
 data.pri [tRNA] nucleotide sequences;
 [tRNA gene] nucleotide sequences;
 sequence alignments.
 data.sec [molecular biology] literature citations;
 [tRNA] secondary structures;
 [tRNA] sources.
 gen.name Dr. Mathias Sprinzl
 gen.add Department of Biochemistry
 University of Bayreuth
 Universitätsstrasse 30
 D-8580 Bayreuth
 WEST GERMANY
 [011-49] 921-552-668
 gen.net datex-p 45921040258
 ///
 entry VECTOR
 name.now Cloning Vector Sequence Database
 number 10036
 data.pri [cloning vector] nucleotide sequences.
 data.sec [molecular biology] literature citations;
 [cloning vector nucleotide sequence]
 base composition; [cloning vector] sources;
 [database] cross-references; index terms.
 gen.name Dr. William Gilbert
 gen.add Whitehead Institute, Room 211
 Nine Cambridge Center
 Cambridge, MA 02142
 U.S.A.
 gen.tel 617-258-5139
 gen.net gilbert@mitwibr.bitnet
 ///

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Nucleic Acids Research

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