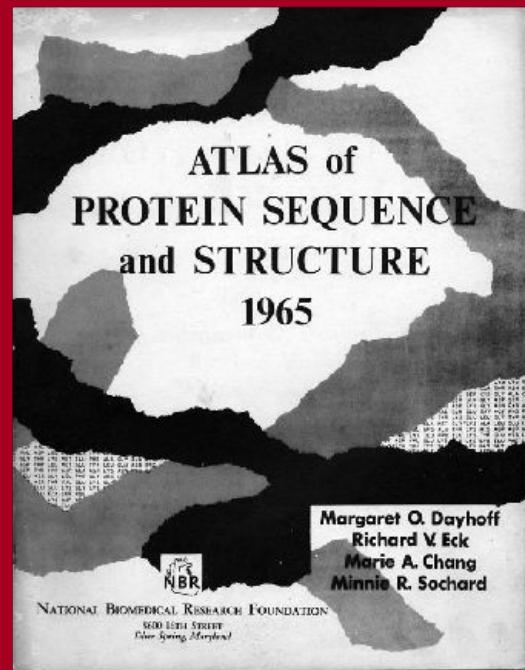


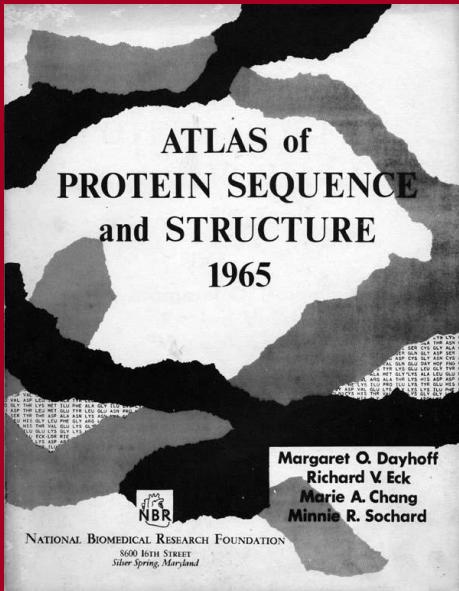
Маргарет Дейхофф (1925-1983) – первый биоинформатик

Специалист в области квантовой химии, масс-спектроскопии, термодинамики планетарных атмосфер, компьютерных вычислений с 1961г. исследует аминокислотные последовательности...

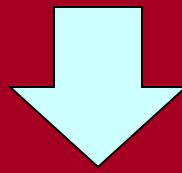


- A, C, D, E, F, G, H, I, K, N...
- Матрица а.к. замен
- Атлас последовательностей белков и их структур





65 proteins



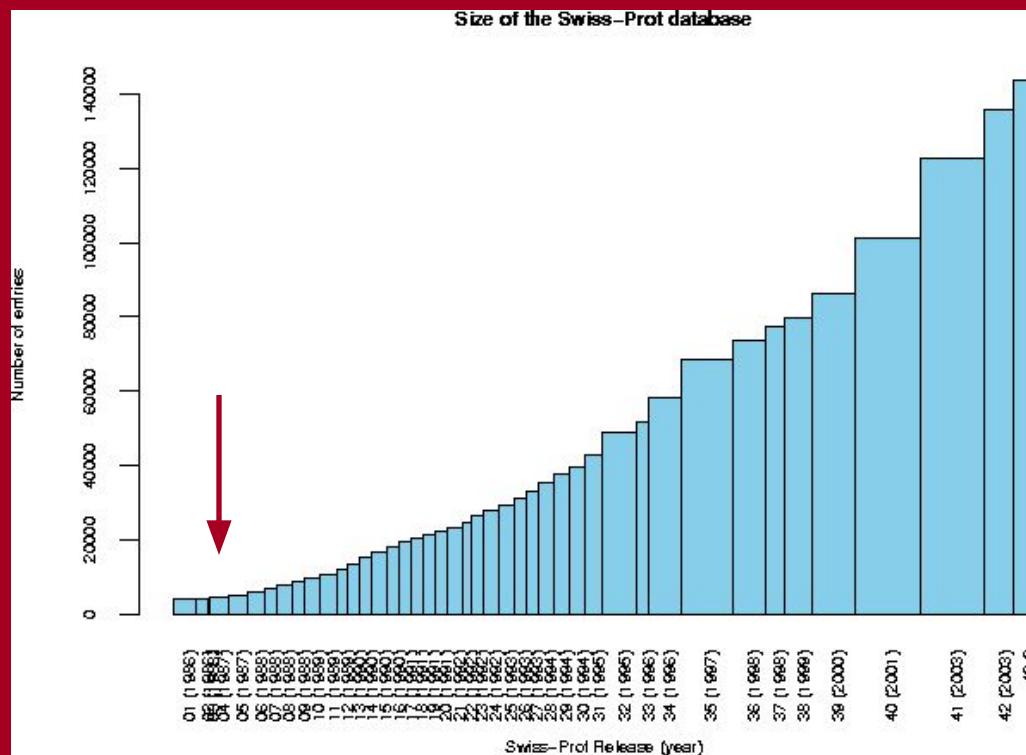
PIR Protein Information Resource

The PIR was established in 1984 by the National Biomedical Research Foundation (NBRF) as a resource to assist researchers in the identification and interpretation of protein sequence information.

The PIR-PSD current release 78.03, November 24, 2003, contains 283366 entries.



Swiss-Prot is a protein knowledgebase established in **1986** and maintained collaboratively, since 1987, by the Department of Medical Biochemistry of the University of Geneva (now the Swiss Institute of Bioinformatics) and the EMBL Data Library (now the EMBL Outstation - The European Bioinformatics Institute (EBI)). The Swiss-Prot protein knowledgebase consists of sequence entries.



Amos Bairoch

Swiss-Prot – «золотой стандарт» аннотации



SwissProt View of Species: Human (HUMAN)																																			
This page displays the SwissProt protein database for the Human species (HUMAN). The database contains approximately 20,000 entries, including proteins from various sources and databases. The entries are organized into several categories, such as Enzymes, Structural proteins, and Proteins involved in signal transduction. The annotations include detailed descriptions of the protein's function, localization, and interactions with other proteins. The sequence information is presented in a standard FASTA format, allowing for easy comparison with other protein databases.																																			
The following table provides a summary of the protein entries in the SwissProt database for Human:																																			
<table border="1"><thead><tr><th>Category</th><th>Number of Entries</th></tr></thead><tbody><tr><td>Enzymes</td><td>~10,000</td></tr><tr><td>Structural proteins</td><td>~5,000</td></tr><tr><td>Proteins involved in signal transduction</td><td>~3,000</td></tr><tr><td>Proteins involved in metabolism</td><td>~2,000</td></tr><tr><td>Proteins involved in transport</td><td>~1,000</td></tr><tr><td>Proteins involved in folding</td><td>~500</td></tr><tr><td>Proteins involved in assembly</td><td>~300</td></tr><tr><td>Proteins involved in degradation</td><td>~200</td></tr><tr><td>Proteins involved in post-translational modification</td><td>~100</td></tr><tr><td>Proteins involved in nucleic acid metabolism</td><td>~50</td></tr><tr><td>Proteins involved in lipid metabolism</td><td>~20</td></tr><tr><td>Proteins involved in carbohydrate metabolism</td><td>~10</td></tr><tr><td>Proteins involved in protein metabolism</td><td>~5</td></tr><tr><td>Proteins involved in membrane transport</td><td>~2</td></tr><tr><td>Proteins involved in energy metabolism</td><td>~1</td></tr><tr><td>Total</td><td>~20,000</td></tr></tbody></table>		Category	Number of Entries	Enzymes	~10,000	Structural proteins	~5,000	Proteins involved in signal transduction	~3,000	Proteins involved in metabolism	~2,000	Proteins involved in transport	~1,000	Proteins involved in folding	~500	Proteins involved in assembly	~300	Proteins involved in degradation	~200	Proteins involved in post-translational modification	~100	Proteins involved in nucleic acid metabolism	~50	Proteins involved in lipid metabolism	~20	Proteins involved in carbohydrate metabolism	~10	Proteins involved in protein metabolism	~5	Proteins involved in membrane transport	~2	Proteins involved in energy metabolism	~1	Total	~20,000
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Описание документа:
идентификатор,
имя, дата создания и
модификации

Аннотация последовательности

Последовательность

>28 500 000 000 п.н.

в > 22 000 000 последовательностях



GenBank



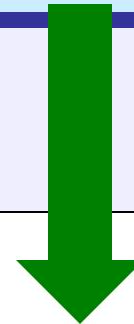
EMBL



DDBJ



компьютерный поиск гена, трансляция и
компьютерная аннотация



>1 100 000

последовательностей

Базы данных
научной литературы

UniPa
rc
(UniProt
Archive)

PIR-PSD

pir.georgetown.edu

Экспертиза



~140 000
последовательностей



UniRe
f
(UniProt
Non-redund
ant
Reference
databases)

VSMOLDAVDE SSNTGSGFCGS NAQTSSEESV QDSTDIMALL DNNHLCGSMCD
TQASLPPF TKAQD VETRDNVQT AVNVPAGEL PAGPFAOMNI
KQIIRH VVQYV QDSDV SILENVTGY SVERIQQDIFL
NLUPPA A RYRQYVQVYRN A RYRQYVQVYRN BETVGHANI AGSKFAPMPN
QS LSEI TUS JESW HPSRSHV A ELRREEEA ENDEAQXQHM
UniProt
the universal protein resource