HIV/SIV Vaccine Database

Introductory Tour

Los Alamos
NATIONAL LABORATORY

AIM of this database:

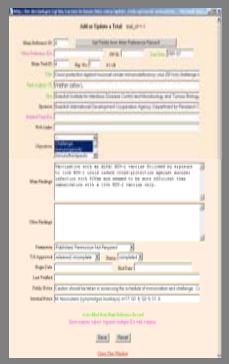
To provide quick access to information about the vaccine research using SIV, HIV and SHIV Research in Nonhuman Primates

The vaccine database was constructed to have relational structure using SYBASE database and the PERL programming language to allow data to be accessible and searchable on the internet. A set of criteria was used to scan the Pubmed for relevant studies to enter into the database giving the priority to most recently published challenge studies, the journals generally considered as the primary source of information pertaining to HIV and SIV vaccine research in nonhuman primates.

The database contains the following tables for data entry:

- Reference
- Summary
- Vaccine
- Challenge
- Adjuvant
- Placebo
- Drug
- Animal Group
- Result
- Inoculation

(see next page)



Summary table

Vaccine table

Placebo table

Challenge table

Drug table

Inoculation table

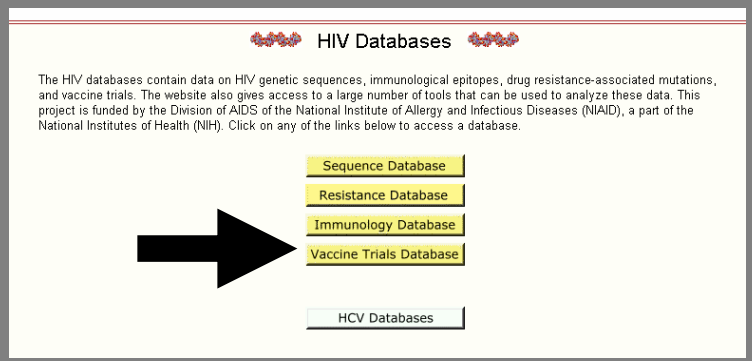
Animal Group table

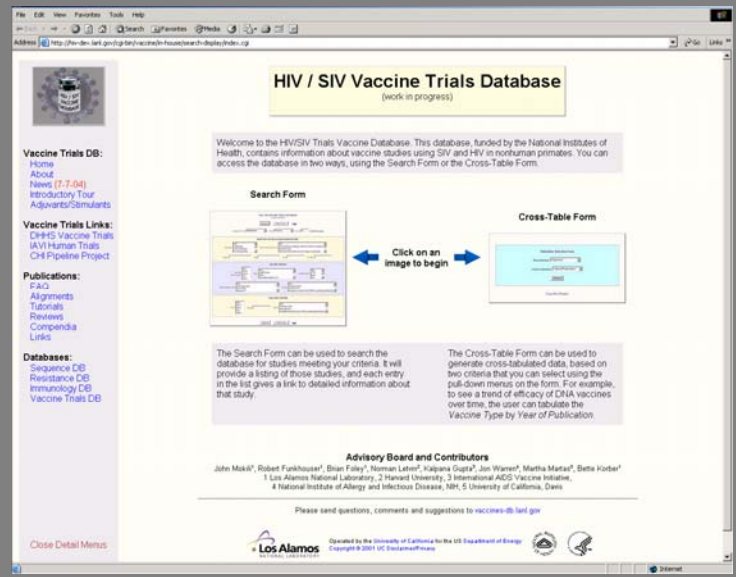
A Relational strategy was used is such a way that data are entered into each table as a separate unit and "anchored" to the Inoculation table

Accessing the Database, click the following URL:

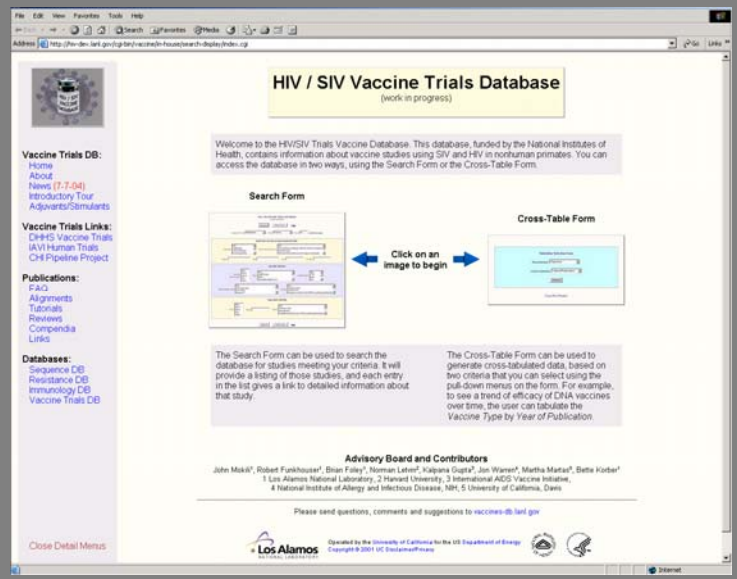
http://hiv-web.lanl.gov/

Choosing the "Vaccine Trials" option will open the Vaccine Database Home Page.





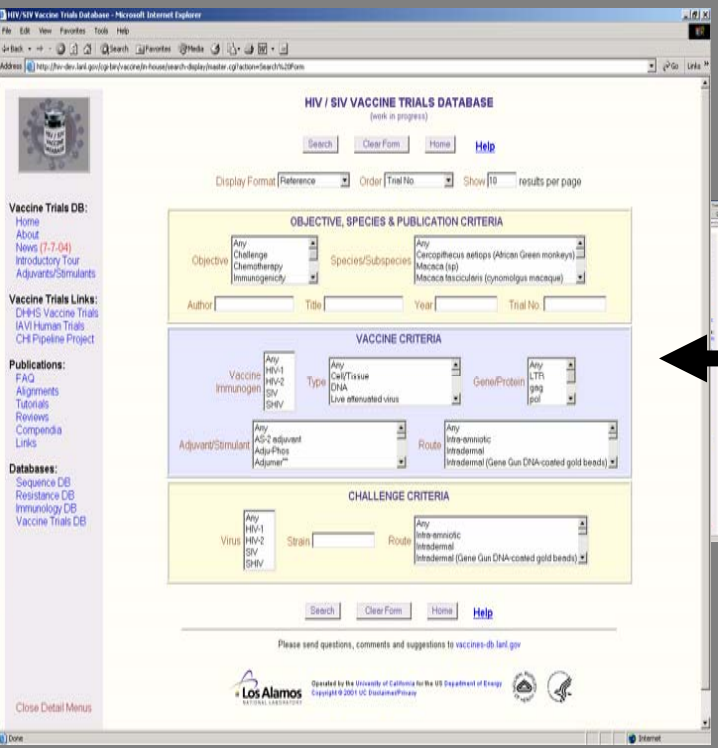
Searching data in the Vaccine Database

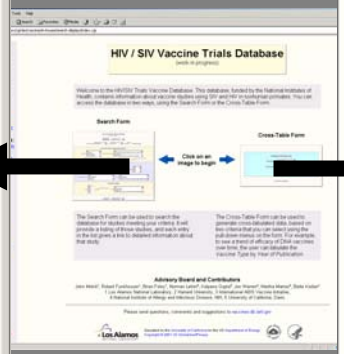


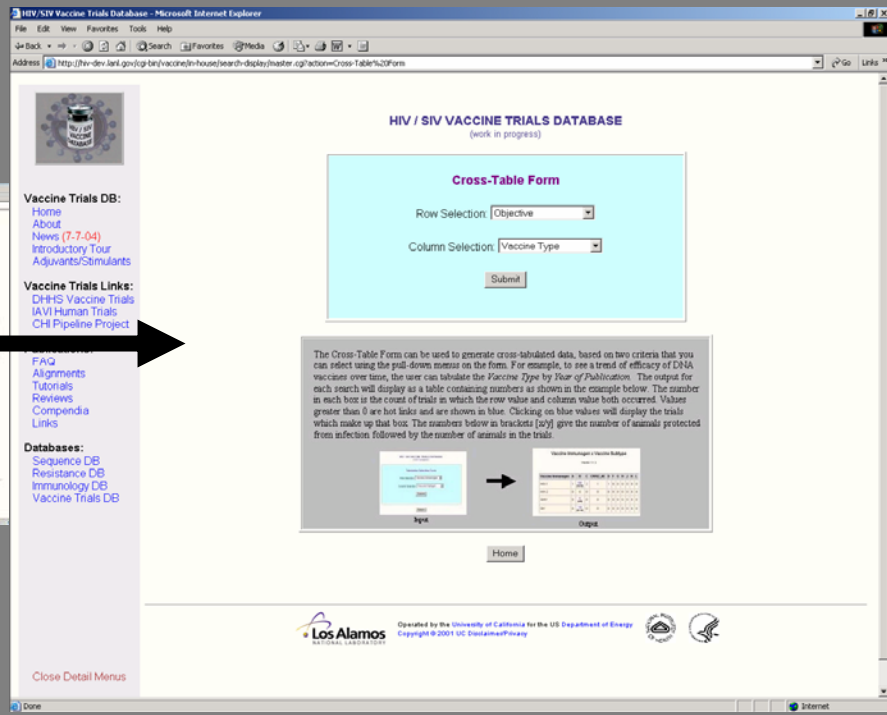
There are two ways of accessing the vaccine database

Either using the Search Form

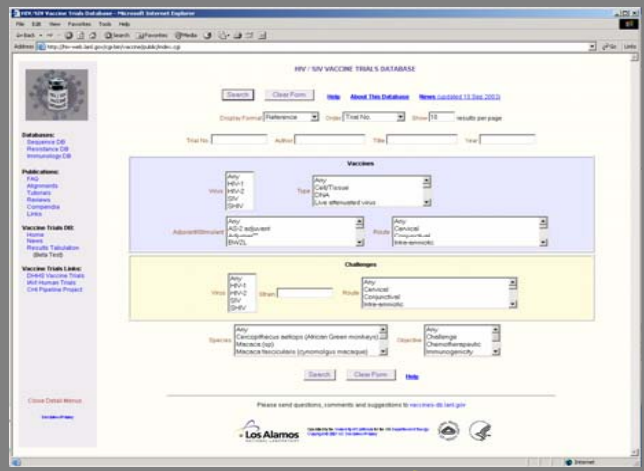
Or with the Cross-Table Form







The search criteria selected in the Search Form are used to retrieve information from 2 compartment of this database the Los Alamos "Current Database“ and in most cases to the “Previous Database”.



Los Alamos Database:
Current Database

EMMES corporation:
Previous Database

Note: Previous or EMMES section of the Database contains information previously collected by Dr Jon Warren which we made accessible through the internet.

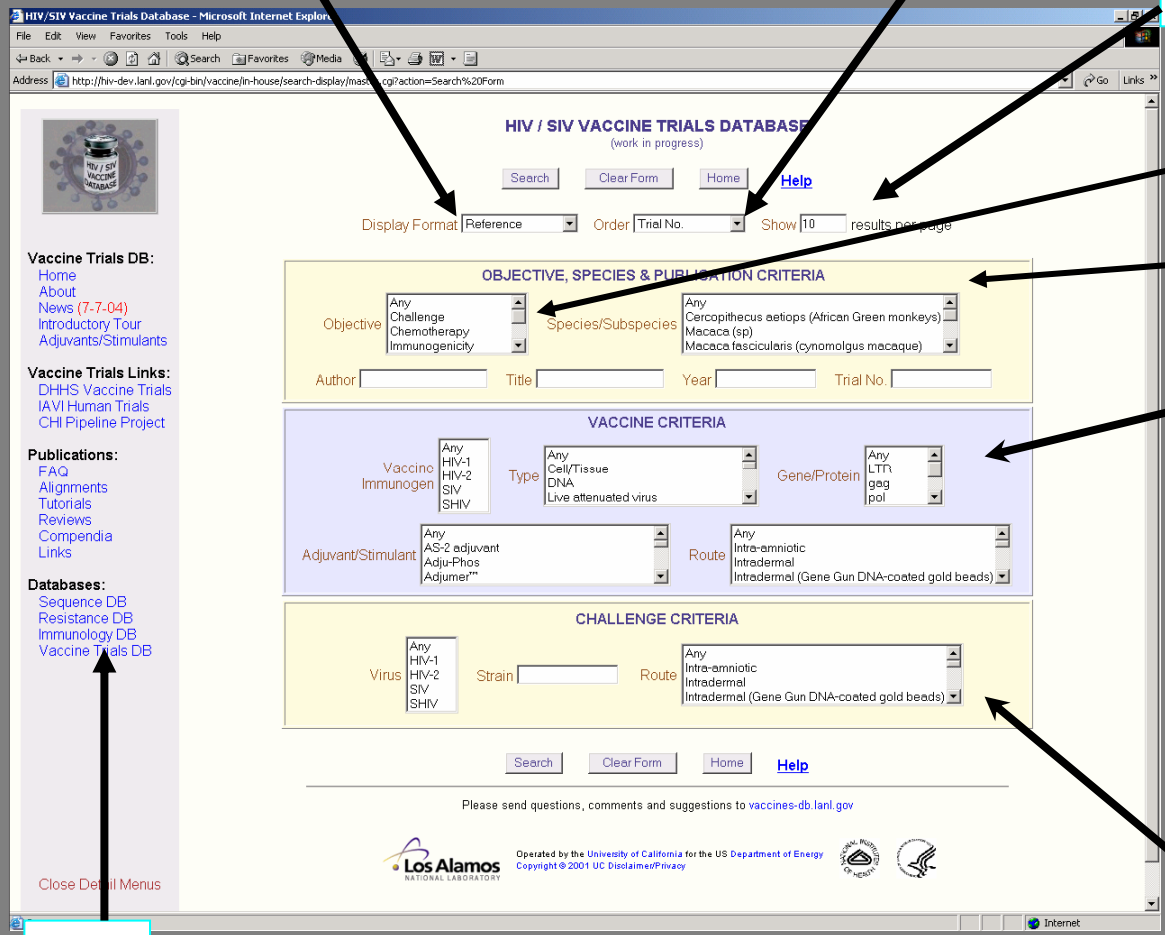
Search Form

The search criteria is either the default "any" or a combination of variables which MUST be logically possible

Specify how to display the search results

Sorting order: Trial number, author, title etc.

Total of items to display



1. Objectives

2. Animals

3. Vaccine

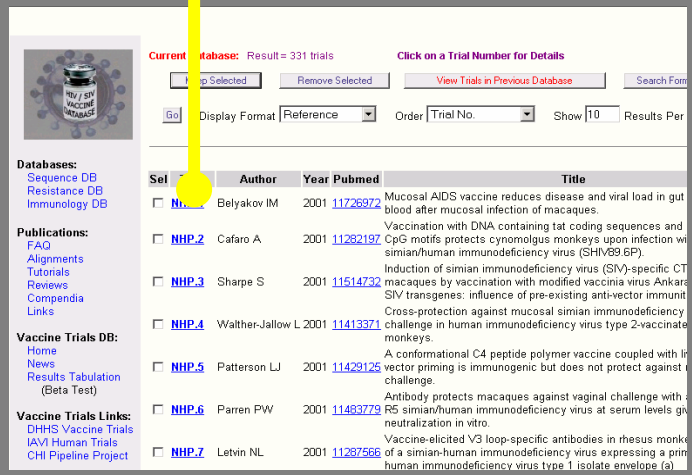
- Virus: HIV, SIV or SHIV
- Type: DNA, Live, attenuated etc.
- Adjuvant
- Route

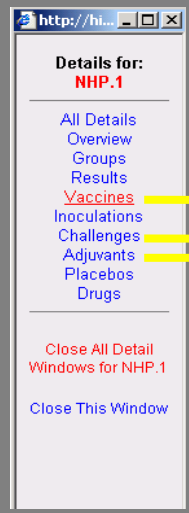
3. Challenge

- Virus: HIV, SIV or SHIV
- Route
- Strains

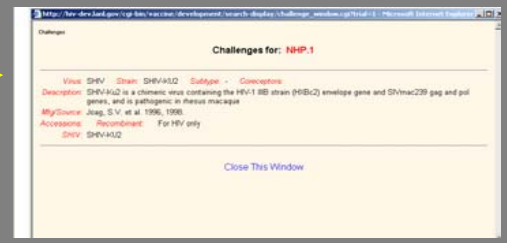
Links

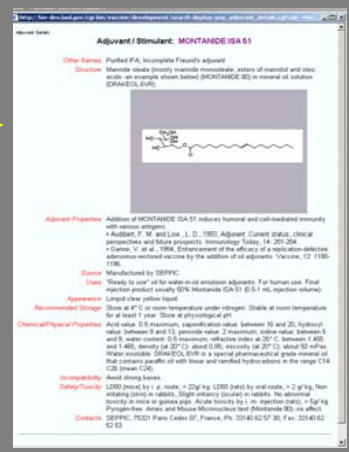
The search results are displayed in a list but details can be obtained using a navigation panel (click on a Trial number to obtain details)

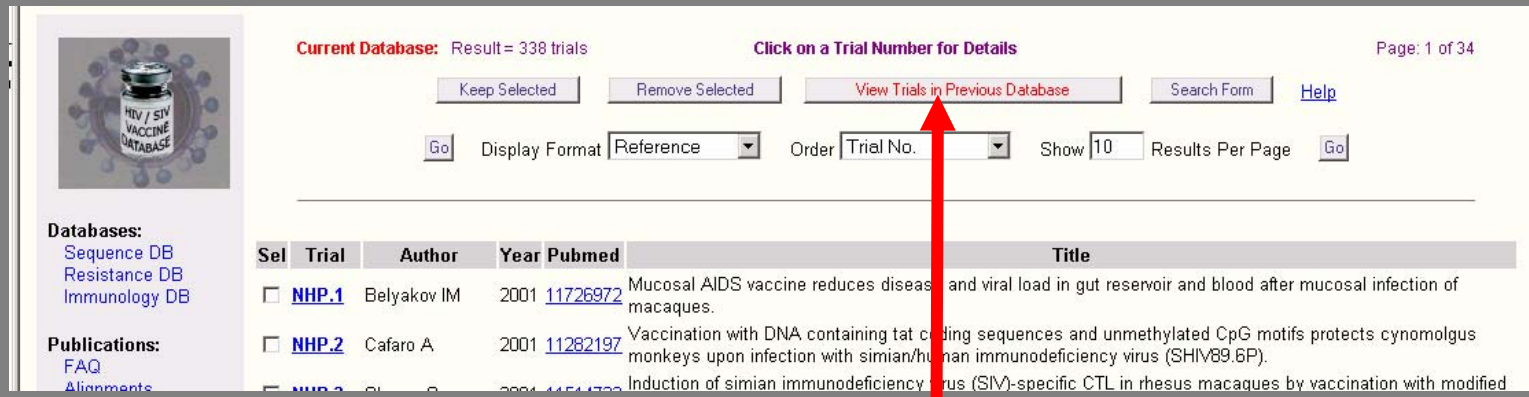




Navigation panel







EMMES corporation:
Previous Database

Los Alamos Database:
Current Database

•As the data are stored in 2 compartments, the search criteria can retrieve data either in the Previous and the current database by clicking the button showing the label “View Trials in Previous Database” or “Current Database”

Note:

- The “Previous Database” has fewer display choices, and the data was organized by Stage. A "Stage" is generally defined as a point in a trial where results for a group of test subjects were assessed. In some cases, stages span multiple published studies.

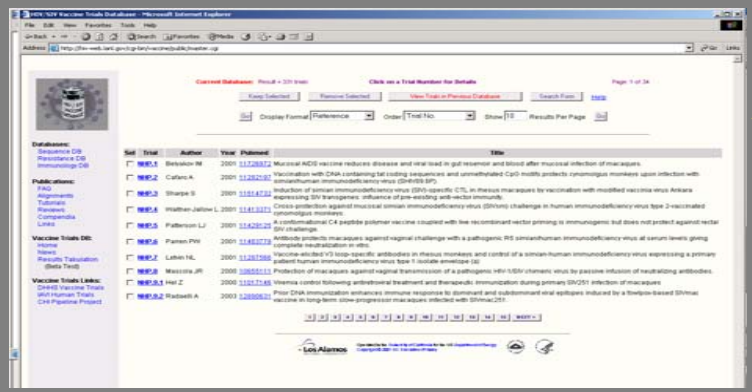
- The data in the “Current Database” are not grouped along the concept of stages, and each published paper is treated as a distinct trial (though in a few cases a published study may encompass multiple but directly related experiments)

Searching the database:

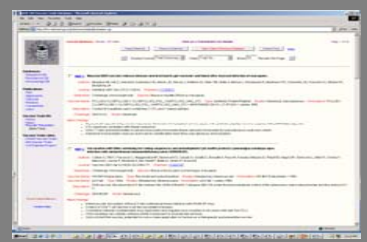
- Example: A user searching the database for <u>any</u> trials, <u>any</u> vaccines, with or without challenge can simply press the “search” button which is the database default for “any”.

- The results can be displayed in “Reference” (or Trials summary or Results) format.

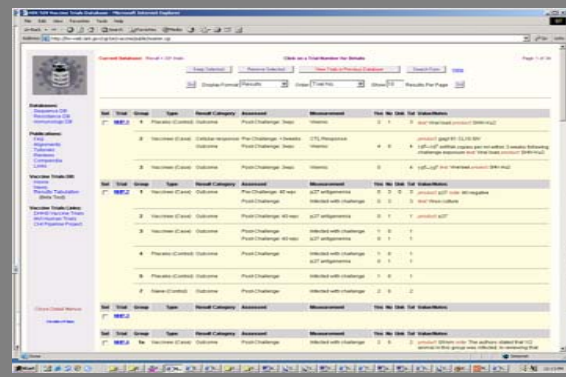
Output



Reference

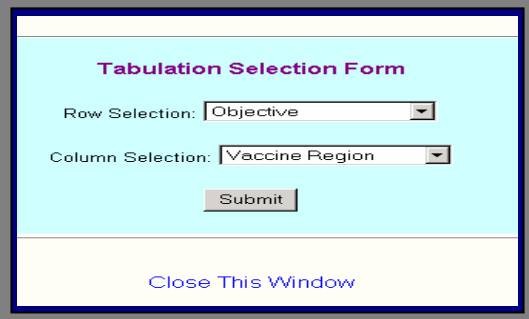


Trial Summary

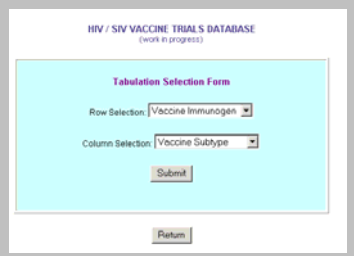


Results Details

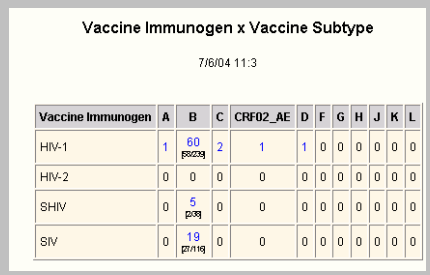
Cross-Table Form



The Cross-Table Form can be used to generate cross-tabulated data, based on two criteria that you can select using the pull-down menus on the form. For example, to see a trend of efficacy of DNA vaccines over time, the user can tabulate the *Vaccine Type* by *Year of Publication*. The output for each search will display as a table containing numbers as shown in the example below. The number in each box is the count of trials in which the row value and column value both occurred. Values greater than 0 are hot links and are shown in blue. Clicking on blue values will display the trials which make up that box. The numbers below in brackets [x/y] give the number of animals protected from infection followed by the number of animals in the trials.



Input



Vaccine Immunogen x Vaccine Subtype

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Vaccine Immunogen	A	B	C	CRF02_AE	D	F	G	H	J	K	L
HIV-1	1	60 [58/239]	2	1	1	0	0	0	0	0	0
HIV-2	0	0	0	0	0	0	0	0	0	0	0
SHIV	0	5 [2/8]	0	0	0	0	0	0	0	0	0
SIV	0	19 [7/116]	0	0	0	0	0	0	0	0	0

Output

Ongoing development will make it possible to perform direct comparison of trials and to evaluate candidate vaccines in preclinical stage. While this database is under construction, we encourage the users to contact us with suggestions in order to improve the existing and to add new tools.

Thank you