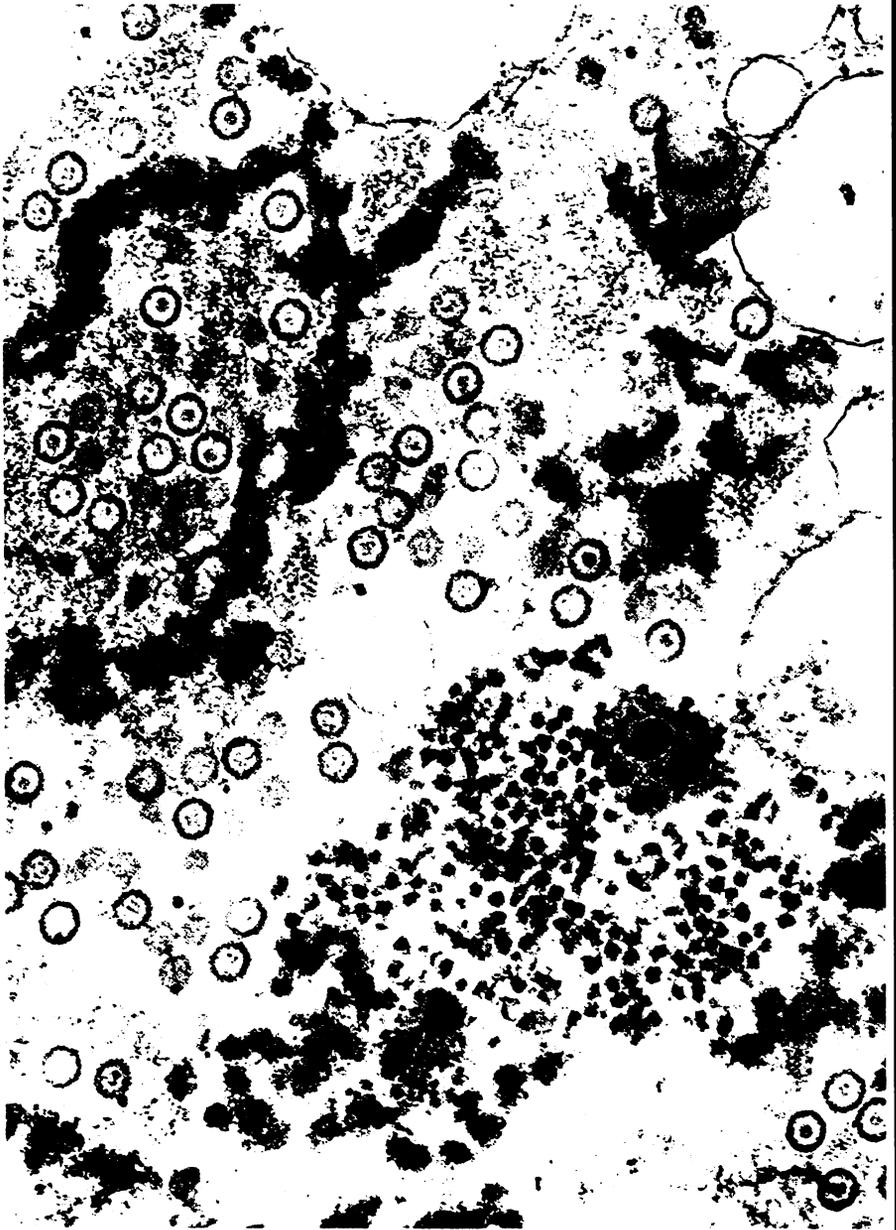


# *Intervirology*

*The Journal of the Virology Division,  
International Union of Microbiological Societies*

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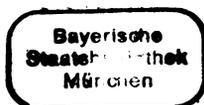
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## General Information on the Vertebrate Virus Data Bank 'DAISY': First Report

*Peter A. Bachmann, Werner Eichhorn*

World Health Organization Collaborating Centre for the Collection and Evaluation of Data on Comparative Virology, Munich, FRG

The aims of the work at the Munich Centre are to establish, collate and maintain detailed up-to-date information on viruses affecting animals and man and to establish a data bank on viruses of vertebrates in a computerized system. For this purpose, a questionnaire has been developed containing over 200 items, including relevant references. Specialists fill out questionnaires on a certain virus, which are then put into the data bank. The virus questionnaires principally consist of five sections: general data (taxonomy, history, availability of reagents); viral properties (nucleic acid, proteins, lipids, carbohydrates, physicochemical relationships); diagnosis (viral and serological diagnosis); natural and experimental infection (transmission, course of infection, immunological response); and selected references.

A special computer program has been developed for the virus data bank employing the programming language PASCAL and a strictly sequential file concept. This system

*Address inquiries to:* Dr. P.A. Bachmann, Institute for Medical Microbiology, Infectious and Epidemic Diseases, Veterinary Faculty, University of Munich, Veterinärstrasse 13, D-8000 Munich 22 (FRG)

allows for unlimited corrections to be made on each questionnaire, while other files can be used for retrieval. The data bank has four independent features: input and update of questionnaires; entering of questionnaires (updated) into the data bank set; selection of a virus questionnaire and its transfer to the input file (update); and retrieval.

The data bank program is compatible with most of the commercially available systems. All data are stored on magnetic discs. There is a wide range of options for the retrieval of data: retrieval of completed virus data questionnaires; retrieval of certain parts of the questionnaires; retrieval of answers to a single or multiple questions for all viruses in the data bank; and multiple linkage analysis for different data items (comparison of multiple data from all viruses).

Plain language is used for all virus data and, to facilitate retrieval and linkage analysis, a standard list of key words has been compiled enabling the use of the data bank without complicated training.

Regular updating of the virus questionnaires in the data bank is planned at yearly intervals. Since new items (questions) will have to be introduced into the questionnaire, and others presently listed in the questionnaire deleted, software has been developed

to include these additional steps in the program. This permits changes in the present concept as well as in virus questionnaires already stored in the data bank.

Retrieval, input and updates are carried out using an interactive computer terminal. Data can be obtained as a printout or microfiche or on magnetic tapes.

Stored data are available on request to public health authorities, institutions, study groups of the International Committee on Taxonomy of Viruses and other organizations, and on a limited basis to individuals.

In addition, software has been developed for a vaccine data sheet based on the virus program. Data for each viral vaccine produced will be collected. A short questionnaire has been prepared in cooperation with several specialists in the field. Data collection on rabies vaccines has been started in collaboration with the WHO Mediterranean Zoonoses Centre, Athens.

The following is a list of viruses in the data bank.

#### ***Parvoviridae***

Minute virus of mice  
 Bovine parvovirus  
 Parvovirus H-1  
 Porcine parvovirus  
 Equine dependovirus  
 Canine dependovirus  
 Avian dependovirus  
 Bovine dependovirus  
 Parvovirus RT  
 Rabbit parvovirus  
 Aleutian disease virus  
 Parvovirus LuIII  
 Parvovirus TVX  
 Feline panleukopenia virus  
 Goose parvovirus  
 Dependovirus types 1-4

#### ***Adenoviridae***

Equine adenovirus  
 Human adenovirus type 5  
 Rabbit adenovirus  
 Bovine adenovirus type 4  
 Simian adenovirus types 1-24  
 Tupaia adenovirus

#### ***Herpesviridae***

Channel catfish virus  
 Porcine cytomegalovirus  
 Equine herpesvirus types 2 and 3  
 Canine herpesvirus  
 IBR IPV virus  
 Marek's disease virus  
 Turkey herpesvirus  
 Pseudorabies virus  
 Human cytomegalovirus  
 Herpesvirus salmonis  
 Guinea pig cytomegalovirus  
 Guinea pig herpes-like virus  
 Infectious laryngotracheitis virus  
 Bovine mammillitis virus

#### ***Poxviridae***

Vaccinia virus

#### ***Iridoviridae***

African swine fever virus

#### ***Picornaviridae***

Teschen talfan virus  
 Foot-and-mouth disease virus, type O

#### ***Caliciviridae***

Feline calicivirus  
 Vesicular exanthema of swine virus

#### ***Reoviridae***

Bovine rotavirus  
 Chicken rotavirus  
 Infectious bursal disease virus  
 Ovine rotavirus

***Coronaviridae***

Enteritis of turkey virus  
Feline infectious peritonitis virus  
Mouse hepatitis virus type 3 and type 4,  
strain A 59  
Sialodacryoadenitis virus  
Bovine coronavirus  
Transmissible gastroenteritis virus  
Rat coronavirus  
Hemagglutinating encephalomyelitis vi-  
rus  
Canine coronavirus  
Avian infectious bronchitis virus  
Human coronaviruses 229E and OC43

***Orthomyxoviridae***

Influenzavirus types A, B, and C

***Paramyxoviridae***

Canine distemper virus  
Rinderpest virus  
Newcastle disease virus  
Peste des petits ruminants virus  
Avian paramyxovirus types 2-9  
Bovine respiratory syncytial virus

***Togaviridae***

Bovine viral diarrhea virus  
Border disease virus  
Equine arteritis virus  
Hog cholera virus

***Rhabdoviridae***

Spring viremia of carp virus  
Eel rhabdovirus  
Infectious hematopoietic necrosis virus  
Rabies virus  
Bovine ephemeral fever virus

***Bunyaviridae***

Nairobi sheep disease virus

***Retroviridae***

Visna-maedi virus  
Equine infectious anemia virus  
Bovine leukemia virus

***Arenaviridae***

Lymphocytic choriomeningitis virus

**Nonclassified viruses**

Runde virus  
Marburg virus