Yellow Fever virus Interference ± Rift Valley Fever OCT 20 1950

PURPOSE - In previous tests mice, susceptible to Rift valley fever virus intraperitoneally, were protected when IP inoculation of yellow fever virus shortly preceded IP inoculation of an otherwise lethal dose of Rift valley fever virus.

The purpose of this test is to determine whether an interference phenomenon can be observed in mice resistant to yellow fever (F1 PRI) & inoculated ± this virus 24 days previously (I. Ch.) when challenged (I Ch) ± Rift Valley fever virus.

Western Equine Encephalitis ± which the yellow fever shows no interference is used as a control.

VIRUSES - Rift valley Fever Virus of 10/13/50 - 20% in NRS - B-4-7

Western Equine Encephalitis Virus of 3/29/50 - 10% in 50% RSS - B-8-9

Rift valley Fever inoculated 10^{-4} in ~~ff~~ animals.
Western Equine inoculated 10^{-6}.
Dilutions in 10% RSS

MICE - F1 generation mice from crossing yellow fever susceptible Swiss females ± resistant PRI males. These mice from 8/29/50 & 9/1/50 & inoculated ± 17-D yellow fever 10^{-4} on 9/26/50.

Normal PRI mice from @ the same time as the above (@ 9/1/50).

YELLOW FEVER INTERFERENCE

RIFT VALLEY FEVER 10^{-4}

F1 gen. MICE
INOC. ± YELLOW FEVER

	1	2	3	4	5	6	7
RIFT VALLEY 10^{-4}	1 - D						
	2 - D						
	3 - D						
	4 - D						
	5 - ? (CNS) D						
	6 - ? (CNS) D						
	7 - ? D						
	8 - ? D						
	9 - (CNS) D						

VIRUS - CONT.
NORMAL PRI MICE

	1	2	3	4	5	6	7
RIFT VALLEY 10^{-4}	1 - D						
	2 - D						
	3 - D						
	4 - D						
	5 - D						
	6 - Pn D						
	7 - CNS D						
	8 - (CNS) D						
	9 - ? D						
	10 - ? D						

YELLOW FEVER INTERFERONCE & RIFT VALLEY

INTERFERONCE CONTROL
WESTERN EQUINE ENCEPHALITIS

F_1 gen mice
innoculated & yellowfever

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	-	?	CNS	D										
2	-	-	CNS	D										
3	-	-	(CNS)	(CNS)	Pr	D								
4	-	-	?	:	CNS	D								
5	-	-	-	-	-	-	?	D						
6	-	-	-	-	-	-	-	-	-	-	-	-	D	
7	-	-	-	-	-	-	-	-	-	-	-	-	-	D
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-

WEE
10^{-6}

VIRUS CONT
Normal PRI

	1	2	3	4	5	6	7
1	-	D					
2	-	D					
3	-	D					
4	-	D					
5		D					
6	-	D					
7	-	D					
8	-	D					
9	-	D					
10	-	P.	D				

WEE
10^{-6}

YELLOW FEVER INTERFERONCE