

# MEF<sub>1</sub> Series

MEF<sub>1</sub> - Mouse Pass 124 - Terminal Dilution Series  
Intracerebral

10<sup>-1</sup> Cyn 4764 - 4768 - 6-16-53 - killed 7/14/53

10<sup>-1</sup> to 10<sup>-5</sup> Cyn 4897 - 4921 - 7-9-53 - ~~killed~~

Subpassage from Cyn 4897

to Cyn 5009 to 5012 - 7-22-53

Subpassage from Cyn 5011

to Cyn. 5149 - 5152 } - 8-20-53

MEF<sub>1</sub>  
Series



# Estimated Schedule and Use of Monkey Space

"Subseed" Lots ready — 12-11-53

Different lots of virus — pool of 3 harvests —  
should be ready about 12/23/53

Titer each harvest of one lot <sup>(each virus)</sup> separately  
9 titrations

Ready to start Jan. 2, 1954

- 80 Monkeys for Mahoney — 5<sup>th</sup> floor
- 80 " for Y-Sk — 4<sup>th</sup> floor - side unit
- 80 " for Leon — 4<sup>th</sup> floor - corner room.

Large run for 120 monkeys — <sup>35</sup>70 rhesus for dengue

85 monkey spaces available for other things

- Brunhilde - rapid pass. — 10 icer
- Brunhilde - Inders Chimp. — 10 icer
- Residual test monk. — 20
- Tissue culture — 8
- Cortisone - Test — 30
- 78

## Other tests to be run <sup>simultaneously</sup> consecutively with large lots

Effect of simultaneous injection of all mixture of 3 types intracutaneously

- 3 types mixed in vitro — 0.6 ml / monkey — 10 monkeys  
0.2 ml in 3 sites
- 3 types given separately — 0.2 ml Type 1 - rt arm  
0.2 ml Type 2 - left arm } — 10 monkeys  
0.2 ml Type 3 - right thigh

## Effect of Cortisone on Intracut. Injection

- Type 1 — 1 ml. intracut — 105 monkeys
- Type 2 — 1 " " — 105 "
- Type 3 — 1 " " — 105 "



# Outline of Certain Projected Experiments

## 1. Effect of Cortisone on Avirulent Viruses

Dose of cortisone - 25 mg/day/monkey for 30 days  
2 days before + 28 days after =  $\frac{0.75 \text{ Gm}}{\text{monkey}}$

15  $\sigma$  monkeys intracutaneous route -  $0.75 \times 30 = 22.5 \text{ Gm}$

15  $\sigma$  monkeys intracerebrally -  $0.75 \times 30 = 22.5 \text{ "}$

45.0 Gm.

Each type to be tested separately

Decided to use only 5 monkeys per Type per route  
This would require 22.5 Gm - get 25 Gm. of cortisone

## 2. Pathogenic and Immunogenic Spectrum of Brunhilde Virus after rapid passages + terminal dilution purification

Preliminary Test - Intracerebral - undiluted - 5  
 $10^{-2}$  - 5 } 20 monkeys ✓  
Intramuscular - undiluted - 10 }

Subsequent Tests - Depending on Outcome of Above

## 3. Pathogenic + Immunogenic Spectrum of Brunhilde-Enders-Chimp Variant after rapid passages + terminal dilution purification

Preliminary Test - Intracerebral - undiluted - 5  
 $10^{-2}$  - 5 } 20 monkeys ✓  
Intramuscular - undiluted - 10 }

Subsequent Tests - Depend on outcome of above

## 4. Test in Chimpanzees

A. Intracerebr. { Type 1 (Mahoney, KP 35) - 1 ml intracerebral - 5 } Observe 35 days  
Type 2 (YSK, KP 53) - 1 ml " - 5 } Then bleed +  
Type 3 (Leon, KP 36) - 1 ml " - 5 } Complete pathology

## B. Question of Interference when 3 Avirulent Viruses are Given Simultaneously.

ORAL - Mixture of 3 viruses (1 ml of each - 3 ml total) - 3 } Collect stools  
" " (0.1 ml of each - 0.3 ml " ) - 3 } before + at weekly  
intervals - test  
Intracut - Mixture of 3 viruses (0.3 ml total - 0.1 ml in } for each type virus  
3 sites ) - 3 } separately  
Test for antibody  
at 5 weeks  
Examine viscera  
+ CNS where evidence  
of infection