

Polio 1947.

Cincinnati.

"Fever" in evening of 8/9/47 + "slobbered" more than usual  
 "runny nose" from 8/7 to 8/9 but did not appear ill  
 "Gen. convulsion" on 8/12/47 - taken to hosp. but sent home with  
 "red liquid" medicine for "throat"

8/14 - Screamed on movement of right lower extremity and  
 unable to move it. Also unable to sit up which  
 child had been doing before.  
 Admitted 8/14 - temp 103.4°

left-sided facial weakness + widening of left  
 palpebral fissure + paralysis of right lower  
 extremity and of back noted on admission.

h.p. = 39 WBC, 1625 RBC - Pandy pos.

8/14 - BLOOD OBTAINED (Stored in refrig. overnight - separated 8/15)

8/15 - Saline enema without solid returns - spontan. solid  
 stool several hours later added to enema  
Throat swabs

8-15 - 3 P.M. Temp 104.2° - Resp. regular but 48/min.

Left facial weakness + palpebr. fiss. wid. not very  
 definite.

Paralysis of rt. lower - incomplete (can withdraw  
 extrem. from painful stimuli  
 applied to foot)

WK? of left lower.

Neck & back stiff

Uppers O.K. - eyes, pupils, tongue - O.K.

(O.K.)

8-15 - Throat swabs I obtained  
Saline enema + later formed stool obtained

8-16 - Still febrile - condition same  
Throat swabs II  
Saline Enema II

8-17 - Still febrile - condition same  
Throat swabs III  
Saline Enema III

8-19 - still febrile - breathing O.K. Takes her formula now  
 although some difficulty in swallowing noted  
 on 8/18 (over)

8.23 - Afebrile - Blood spec II

8-30 - transferred to Children's Hospital

Disch. 12-22-47 to Home. as a Ward of the state, in care  
of Dr. E.H. White. (Orthopedist)

Clinic JE, 28, 1948.

exam 2 Aug. 1948. (10:30 A.M.)

Clinic Visit to Orthopedics 8/30/48.

Bled ± 14cc by Dr. Little (Serum V)



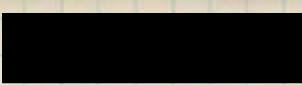
NOV 5 1947

B. Pharyngeal Swab Material.

Final Amount :- 2.4 c.c.

Culture :- ✓✓✓✓

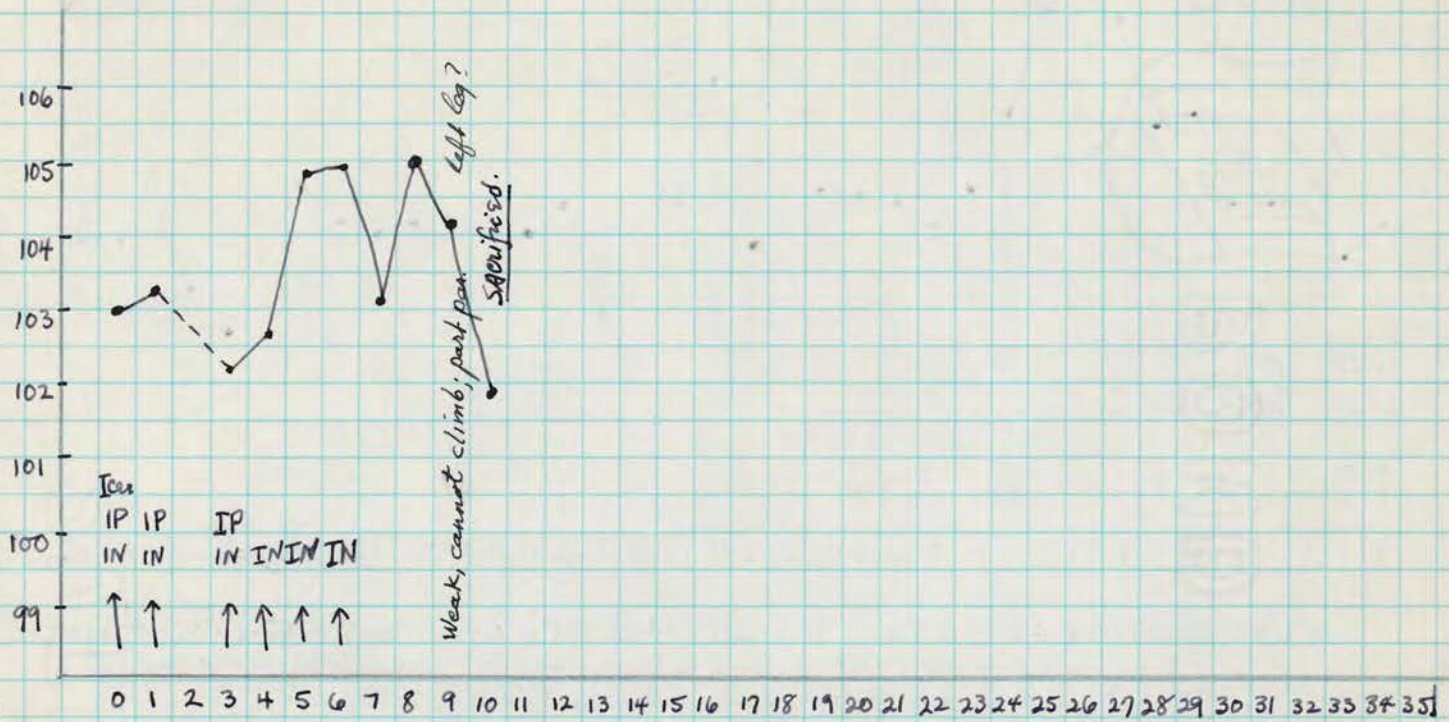
NOV 7 1947



Treated Pharyngeal Swabs - ICS.  
Treated Stool Suspension - IP  
Untreated Stool Sediment - IN.

Culture  
v v v  
v v v

RHESUS # 1.



11/7/47. - Inoculated 0.9 c.c. ICS; 20.0 c.c. IP; 1.0 c.c. IN each nostril.  
11/10/47 - IP injection was 17.0 c.c.

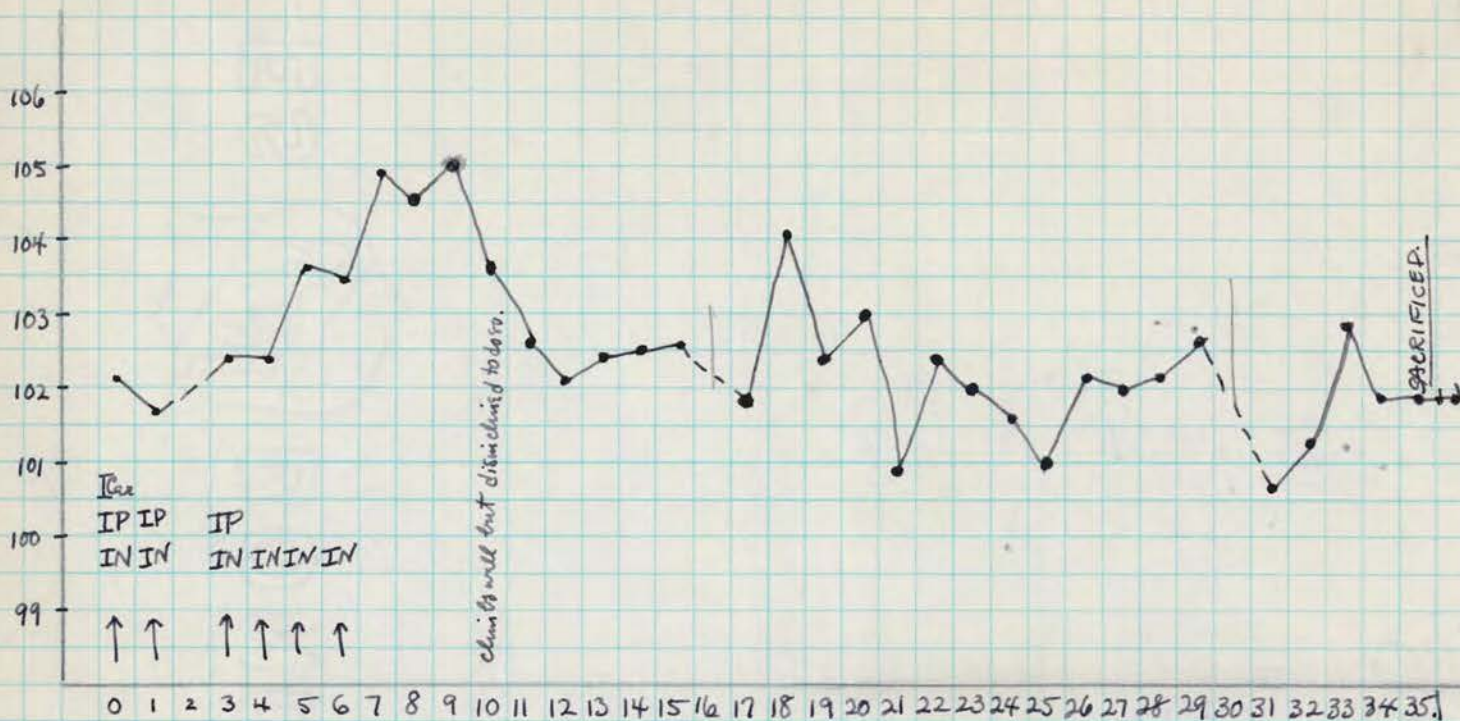
11/17/47. - Partial paralysis arms, legs, and back. - Cranial nerves intact. - Sacrificed with chloroform. -- COLON CONTENTS -- Frozen in large Lusteroid (storage box # 2)  
HISTOPATHOLOGY: portion of cord levels and medulla. (ZA)  
TISSUE FOR VIRUS: - portions of cord and medulla frozen in a Lusteroid tube. (d-8) wt=3.0g } 12/1/47. Passed to Rh. #17 and Rh. #18 q.v.; ± 6.5% remainder of 20% susp. frozen (B-1-9)

Dec 5 Histology - Polio +

NOV 7 1947

Rhesus # 897 - Splenectomized.

Treated Pharyngeal Swabs - ICR.  
Treated Stool Suspension - IP  
Untreated Stool Suspension - IN



- 11/7/47. Inoculated 1.25 c.c. ICR (Thalamus); 20 c.c. IP; 1.0 c.c. each nostril IN. - Following immediately after left Thalamic injection, monkey extended right leg and when released was noted to keep head turned sharply to the right.
- 11/8/47. - Hold well all limbs; disinclined to climb; keeps head sharply turned to right.
- 11/10/47. - Limbs seem OK; holds head sharply turned to right; IP injection today = 17.0 c.c.
- 11/17/47. - Able to climb but disinclined to do so - difficult to evaluate - holds head turned around to the right.
- 11/19/47. - Full power all limbs and back; no cranial nerve signs; head turned to the right.
- 11/20/47. - Head turned to right; seems OK. Otherwise.
- 11/25/47. - Head turned to right; no other signs; temp. 104' (temp. rechecked.)
- 12-12-47 sacrificed with chloroform - exsanguination; - Autopsy: Extensive bilateral pulmonary tuberculosis; also TBC of liver; - small accessory spleen in gastrosplenic mesentery; -  
HISTOPATHOLOGY: Numerous segments of spinal cord and medulla taken; also thalamus; - (also accessory spleen). - (ZA)

HISTOLOGY: NO POLIO

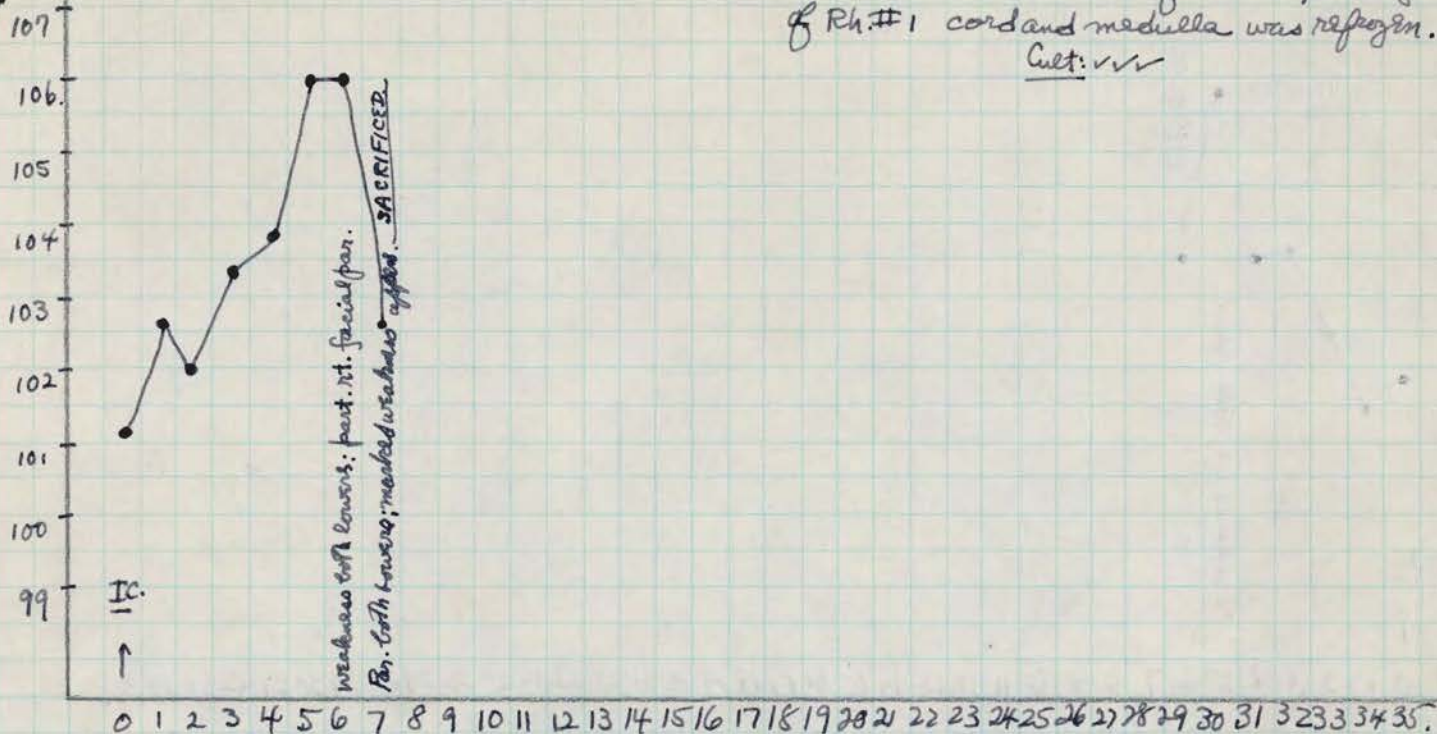
DEC 1 1947

Rhesus Passage

Inoculated IC with 1.0 cc of 20% saline suspension (sand and mortar), lightly centrifuged; cultured; and remainder of this 20% suspension of Rh.#1 cord and medulla was refrozen.

Cult: ✓✓

- Rhesus # 17. -



- 12/4/47. - Perfectly O.K.; no pilomotor response; no weakness, tremors; cranial nerves OK.
- 12/7/47. PM. - Very easily exhausted; weakness both lowers; can close both eyes, cannot elevate rt. corner of mouth.
- 12/8/47. Complete paralysis both lowers; weakness both uppers; monkey lies prostrate; cannot raise head; moves only left side of face but can close both eyes. - Sacrificed with chloroform - exsanguination. - Autopsy: no evidence of tuberculousis.

HISTOPATHOLOGY: Cord levels; medulla; + medulla-pons junction. (ZA)  
TISSUE FOR VIRUS: Cord + medulla pooled with Rh.# 18 (ornleaf), and made into 20% suspension in saline. Frozen B-1-2, labelled as Rice Polio - Generation II. - Cult. ✓✓ (2 ampoules)

Histology - Polio

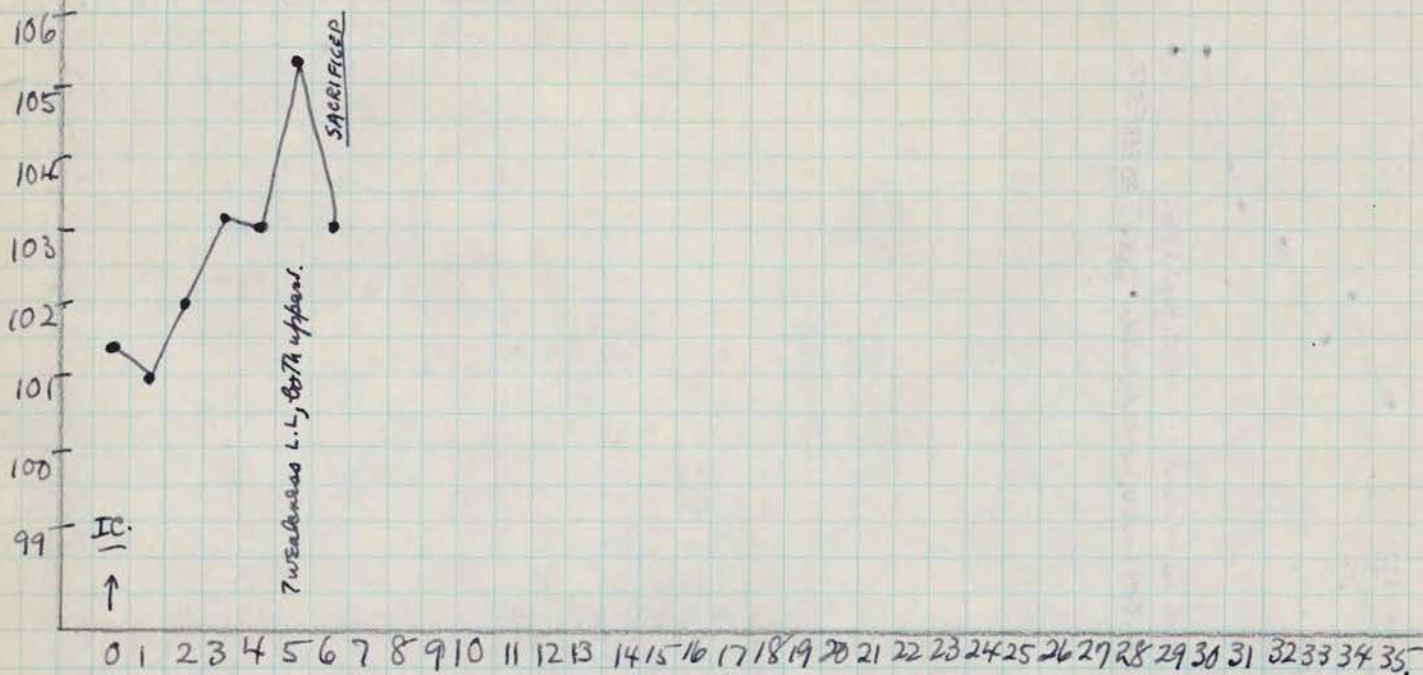
DEC 1 1947

Rhesus Passage

Rhesus #18

GINTI

Inoculated IC with 1.0 cc of a 20% saline suspension of cord-meddulla of Rh.#1, in whom Rice polio was isolated. (see over)



12/7/47. Complete paralysis all limbs, head drop; cry is weak; cranial nerves seem OK. - Sacrificed by exsanguination. - Autopsy: no TBC.

HISTOPATHOLOGY: cord levels and medulla. (2A)

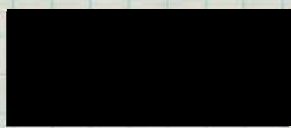
TISSUE FOR VIRUS: Cord and medulla kept on dry ice

until - 12/8/47 - Rh.#18 pooled with Rh.#17 (overleaf) and made into 20% susp. in saline and frozen (B-1-2)

Histology - Polio

TITRATION OF HUMAN POLIO STRAINS.

5-14-48



STRAIN (Gen. II)

Virus used: [redacted] strain of polio (Gen. II in monkeys); 20% in saline diluted in saline as below.

Monkeys: Normal rhesus. (NEIP farm N.C. - Tuberculin tested)

Mixtures used: Dilutions as below made up in saline; kept at room temperature (76°F) for one hour; then refrigerator for 15 hours; then in bath until inoculated on 5-15-48.

Inoculum: 0.5 cc IC. per monkey.

<u>DILUTION</u>	<u>MONKEY#</u>	<u>CLINICAL FINDINGS</u>	<u>PATHOLOGY (P/WO)</u>	<u>RESULT</u>
10 <sup>-2</sup>	Rh-435	P <sub>6</sub>		3/3
	436	P <sub>7</sub>		
	437	P <sub>8</sub>		
10 <sup>-3</sup>	438	O; K <sub>31</sub>	○	1/3
	439	O; K <sub>31</sub>	○	
	440	P <sub>8</sub>	+	
10 <sup>-4</sup>	441	O; K <sub>31</sub>	○	1/3
	442	P <sub>6</sub>		
	443	O; K <sub>31</sub>	○	
10 <sup>-5</sup>	444	O; K <sub>31</sub>	○	0/3
	445	O; K <sub>31</sub>	○	
	446	O; K <sub>31</sub>	○	

10<sup>-3.0</sup>

Rh # 43510<sup>-2</sup>

Date	Day	Remarks
MAY 15 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	<p>Part. par. took uppers; weakness over back + neck. (Found <u>DEAD</u> 90 minutes later!) Autopsy: No gross thc.</p> <p>TISSUE FOR SECTION - One segment from each of lumbar and cervical cord levels (2-A)</p> <p>TISSUE FOR VIRUS - Remainder of cord-medulla pooled with that of Rh 442 to make a 20% susp. in (50cc.) sterile saline. Wt. of pooled cords-medullae = 12.5 gms. ± 40cc. frozen in 5-20cc amps and stored. Culture: ✓✓✓ (B-2-5)</p> <p><u>11-19-48</u> Tissue for section discarded</p>

Rh # 436 $10^{-2}$ 

Date	Day	Remarks
MAY 15 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
5-22-48	7	Part. Par. Rt. Lower; weakness l. Lower; p. motor t.
5-23-48	8	Prostrate - quadriplegia. <sup>(not complete AS)</sup> No wave.
5-24-48	9	Compl. par. both lowers; part. par. both uppers; can move head and neck; aphonia
5-25-48	10	Quadriplegia. Aphonia. Can still move head.
5-26-48	11	No change.
	12	No change.
	13	"
	14	"
	15	"
	16	"
	17	" (Retains some slight movement of left up.)
	18	"
	19	"
6-4-48	20	FOUND DEAD AUTOPSY No gross lbc TISSUE FOR SECTION Single sections of lumbar and cervical (Z A) 11-19-48 Tissues discarded

Rh # 437.10<sup>-2</sup>

Date	Day	Remarks
MAY 15 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
5-21-48	6	? clumsy.
5-22-48	7.	Weakness of all 4 extremities and voice; pilomotor +; no paralysis.
5-23-48	8	Prostrate - comp. par. both lowers and rt. upper. Par. par. left upper. Voice <del>about</del> fairly strong.
5-24-48	9	no change.
5-25-48	10	" " , Voice only moderately weak.
5-26-48	11	" "
	12	Aphonia; quadriplegia; seems worse.
5-28-48	13	Quadriplegia - moribund.
	14	" "
	15.	Extremely low. - Sacrificed (chloroform - Esanguination). TISSUE FOR PATHOLOGY: Cervical; lumbar cord segments. (Z-A) <u>11-14-48</u> Tissues discarded

Rh # 438

$10^{-3}$

Date	Day	Remarks
<b>MAY 15 1948</b>	0	mild diarrhea
	1	" "
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
5-22-48	7	A.M. Pilomotor t. PM. - Same.
5-23-48	8	Excited. pilomotor response.
5-24-48	9	no change. T=103 <sup>0</sup> .
5-25-48	10	T=101 <sup>0</sup> No change.
5-26-48	11	T=102 <sup>0</sup> " "
	12	T=101 <sup>0</sup> " "
	13	Pilomotor response.
	14	"
	15	seems OK.
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
6-12-48	28	✓
	29	✓
	30	✓
6-15-48	31	✓ <del>Bled</del> <u>Bled for serum.</u> Then sacrificed; Autopsy: no gross TBC Tissue for section: lumbar; Thoracic + cervical cord segments; medulla; midbrain; P. lamina (2.4.)

Bled prior to sacrifice

HISTOLOGY: NO POLIO

Rh # 439

10<sup>-3</sup>

Date	Day	Remarks
MAY 15 1948	0	✓
	1	✓
	2	✓
	3	✓
5-19-48	4	Definite pilomotor resp.
5-20-48	5	✓ T=101°
5-21-48	6	✓
5-22-48	7	A.M. Pilomotor t.
5-23-48	8	Pilomotor response.
5-24-48	9	no change. T=102°
5-25-48	10	T=101° Definite pilomotor response.
5-26-48	11	T=101° no change
	12	T=102° Pilomotor t.
	13	? Pilomotor resp. only.
	14	✓
	15	? Pilomotor t.
	16	✓
	17	Pilomotor response
	18	Pilomotor response.
	19	" "
	20	" "
	21	" "
	22	Excited; pilomotor t.
	23	" "
6-8-48	24	pilomotor response
	25	" "
	26	" "
	27	" "
6-12-48	28	" "
	29	Pilomotor t; ? excited.
	30	Pilomotor t.
6-15-48	31	Pilomotor t. <u>Bled for serum.</u> Then sacrificed; Autopsy: <sup>no polio</sup> <sub>T<sub>62</sub></sub>

TISSUE FOR SECTION: lumbar; Thoracic; cervical cord segments  
medulla; midbrain; Thalamus. (Z.A.)

Bled prior  
to sacrifice

HISTOLOGY: NO POLIO

Rh # 44010<sup>-3</sup>

Date	Day	Remarks
MAY 15 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
5-22-48	7	T=103 <sup>3</sup> . disinclined to climb.
5-23-48	8	Prostrate - almost complete paralysis of all 4 ext. Aphonia. Drooping breathing.
5-24-48	9	no change.
5-25-48	10	Quadriplegia. Aphonia. (Very low)
5-26-48	11	No change. Moribund. <u>SACRIFICED</u> : (chloroform-exsanguination) Autopsy: No thic.
TISSUE FOR SECTION - Several sections from each of cervical, thoracic, + lumbar cord levels (2-A)		

HISTOLOGY: The levels show extensive loss of neurons with foci of dense and of scattered glial cells in ext. horns; moderate PV cuffing.

DIAGNOSIS: POLIO (Acute to Recent)

Rh # 441

10<sup>-4</sup>

Date	Day	Remarks	
MAY 15 1948	0	✓	
	1	✓	
	2	✓	
	3	✓	
	4	✓	
	5	✓	
	6	✓	
	7	✓	
	8	✓	
	9	✓	
	10	✓	
	11	✓	
	12	✓	
	13	✓	
	14	✓	
	15	✓	
	16	✓	
	17	✓	
	18	✓	
	19	✓	
	20	✓	
	21	✓	
	22	✓	
	23	✓	
	24	✓	
	25	✓	
	26	✓	
	27	✓	
	6-12-48	28	✓
		29	✓
	6-15-48	30	✓
	31	✓	

SACRIFICED (chloroform-anaesthesia) No quarter  
 TISSUE FOR SECTION Single segments of lumbar, thoracic  
 and cervical cord, medulla, midbrain & thalamus (Z.A.)

HISTOLOGY: NO POLIO

Titration of [redacted] Strain Polio

Rh # 442

10<sup>-4</sup>

Date	Day	Remarks
MAY 15 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
5-20-48	5	Excited? pilomotor response.
5-21-48	6.	Quadriplegia; complete rt. facial; alert.
		<u>SACRIFICED</u> (chloroform-exsanguination)
		TISSUE FOR SECTION - One segment from each of lumbar and cervical cord (2-A)
		TISSUE FOR VIRUS - Cord-medula (remainder) pooled & that of Rh 435 to make a 20% susp. in saline. (See Rh 435.)
		<u>11-19-48</u> tissues for section discarded

Rh # 443.

$10^{-4}$

Date Day Remarks

MAY 15 1948

0 ✓  
 1 ✓  
 2 ✓  
 3 ✓  
 4 ✓  
 5 ✓  
 6 ✓  
 7 ✓  
 8 ✓  
 9 ✓  
 10 ✓  
 11 ✓  
 12 ✓  
 13 ✓  
 14 ✓  
 15 ✓  
 16 ✓  
 17 ✓  
 18 ✓  
 19 ✓  
 20 ✓  
 21 ✓  
 22 ✓  
 23 ✓  
 24 ✓  
 25 ✓  
 26 ✓  
 27 ✓  
 28 ✓  
 29 ✓  
 30 ✓  
 31 ✓

6-12-48

6-15-48

SACRIFICED (chloroform-exsanguination)  
TISSUE FOR SECTION single segments of lumbar, thoracic  
 and cervical cord, medulla, midbrain & thalamus (Z A)  
AUTOPSY: No gross lbc

Rh # 444

$10^{-5}$

Date	Day	Remarks	
MAY 15 1948	0	✓	
	1	✓	
	2	✓	
		3	✓
		4	✓
		5	✓
		6	✓
		7	✓
		8	✓
		9	✓
		10	✓
		11	✓
		12	✓
		13	✓
		14	✓
		15	✓
		16	✓
		17	✓
		18	✓
		19	✓
		20	✓
		21	✓
		22	✓
		23	✓
		24	✓
		25	✓
		26	✓
		27	✓
	6-12-48	28	✓
		29	✓
		30	✓
6-15-48	31	✓	

✓ SACRIFICED (chloroform-exsanguination)  
TISSUE FOR SECTION single segments of lumbar  
 thoracic and cervical cord, medulla midbrain  
 and thalamus (2A)  
AUTOPSY no gross ltr

HISTOLOGY:

NO POLIO

Rh # 445

10.5

Date	Day	Remarks	
MAY 15 1948	0	✓	
	1	✓	
	2	✓	
	3	✓	
	4	✓	
	5	✓	
	6	✓	
	7	✓	
	8	✓	
	9	✓	
	10	✓	
	11	✓	
	12	✓	
	13	✓	
	14	✓	
	15	✓	
	16	✓	
	17	✓	
	18	✓	
	19	✓	
	20	✓	
	21	✓	
	22	✓	
	23	✓	
	24	✓	
	25	✓	
	26	✓	
	27	✓	
	6-12-48	28	✓
		29	✓
	30	✓	
6-15-48	31	✓	

✓ SACRIFICED (chloroform-exsanguination)  
TISSUE FOR SECTION ~~single~~ <sup>two</sup> segments of lumbar, thoracic  
and cervical cord, medulla, midbrain, & thalamus (ZA)  
AUTOPSY no gross lcs

HISTOLOGY: These sections show no pathological change.

DIAGNOSIS: NO POLIO

Rh # 446

10<sup>-5</sup>

Date	Day	Remarks	
MAY 15 1948	0	✓	
	1	✓	
	2	✓	
	3	✓	
	4	✓	
	5	✓	
	6	✓	
	7	✓	
	8	✓	
	9	✓	
	10	✓	
	11	✓	
	12	✓	
	13	✓	
	14	✓	
	15	✓	
	16	✓	
	17	✓	
	18	✓	
	19	✓	
	20	✓	
	21	✓	
	22	✓	
	23	✓	
	24	✓	
	25	✓	
	26	✓	
	27	✓	
	6-12-48	28	✓
		29	✓
6-15-48	30	✓	
	31	✓	

✓ SACRIFICED (chloroform-exsanguination)  
TISSUE FOR SECTION single segments of lumbar  
 thoracic and cervical cord, medulla  
 midbrain and thalamus (2A)  
AUTOPSY No gross obs.

HISTOLOGY: These sections show no pathological change.

DIAGNOSIS: NO POLIO.

# NEUTRALIZATION TEST IN MONKEYS

STRAIN POLIO VIRUS VS

SERA

G-28.78

Virus used: Generation II of [redacted] strain polio - same material titrated on 5-14-48, dilutions made up in Abbott's saline.

SERA USED: two sera from [redacted] one monkey serum (MV Immune)

1) ACUTE :- 8/17/47 - 6 D day of illness. (Frozen)

2) CONVALESCENT :- 11/11/47 - 92<sup>nd</sup> .. (Frozen)

3) MV Immune Monkey Serum: - (liquid serum refrigerated) - labelled as MV. Immune Serum - Pool of M 3415, 719, 43A, Ph. 42, 207, 1935 + 1936, 28 - ampouled by Dr. I. Young on 3-2-48 - used for lambic neutr. Test in mice.

INCUBATION OF MIXTURES: serum-virus + serum-saline mixtures to give the final virus conc. listed below - at 72°F for one hour; refrigerator ± 15 hrs; Thence ice bath during inoculations on 6-29-48.

MONKEYS: N.F.I.P. conditioned monkeys; each receiving 0.5 cc I.C.

	$10^{-1}$	$10^{-2}$	$10^{-3}$	$10^{-4}$	
<u>SALINE CONTROL</u>		646 P <sub>11</sub>	648 P <sub>10</sub>	651 P <sub>8</sub>	$10^{-4.2}$
		+ 647 D <sub>14</sub> ?	649 P <sub>5</sub>	652 P <sub>29</sub>	
		650 P <sub>8</sub>	653 O <sub>36</sub>		
<u>ACUTE SERUM</u> <small>5 days after onset</small>	654 P <sub>25</sub>	657 X <sub>35</sub>	660 X <sub>35</sub>	663 X <sub>35</sub>	$10^{-0.7}$
	○ 655 O <sub>36</sub>	658 K <sub>35</sub>	661 X <sub>35</sub>	664 X <sub>35</sub>	
	○ 656 O <sub>35</sub>	659 X <sub>35</sub>	662 K <sub>35</sub>	665 X <sub>35</sub>	
<u>CONVALESCENT SERUM</u>	666 X <sub>35</sub>	669 D <sub>5</sub>	674 X <sub>35</sub>	677 X <sub>35</sub>	$10^{-0.5}$
	670 X <sub>35</sub>	○ 672 D <sub>20</sub>	675 X <sub>35</sub>	678 K <sub>35</sub>	
	668 X <sub>35</sub>	673 D <sub>10</sub>	676 X <sub>35</sub>	679 D <sub>28</sub> ?	
<u>MV IMMUNE SERUM</u>	680 P <sub>13</sub>	683 P <sub>13</sub>			$10^{-2.5}$
	+ 681 D <sub>8</sub>	684 P <sub>8</sub>			
	682 P <sub>9</sub>	685 P <sub>13</sub>			

HOMOLOGOUS NEUTRALIZATION TEST

Rh 646

Saline control 10<sup>-2</sup>

JUN 29 1948

DATE DAY REMARKS

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6. ✓

7-6-48

7. Easily exhausted; disinclined to climb.  
Complete par. left upper; part par. of other three extremities; tremors  
SACRIFICED (chloroform - 40 sanguination) - Autopsy - no gross TBC

TISSUE FOR SECTION - single segments of lumbar & cervical cord

TISSUE FOR VIRUS - Cord & medulla of Rh 646 pooled

Pooled weight = 10 gm. | with that of Rh 649 to make a 20%  
Saline added = 40 cc. | Sterile suspension in saline. ± 32 c.c.  
frozen in 3-20 c.c. amps and  
stored. Vials #1, 2, 3

Culture: ✓✓

B-7-7

11-23-48 Tissues for section discarded

Homologous neutralization Test  
Saline control  $10^{-2}$

Rh 647

DATE	DAY	REMARKS
JUN 29	1948	0 ✓
		1 ✓
		2 ✓
		3 ✓
		4 ✓
		5 ✓
		6 ✓
		7 ✓
		8 ✓
		9 ✓
		10 ✓
		11 ✓ thru - diarrhea
		12 ✓ " "
		13 diarrhea - General weakness; No focal weakness
		14 <b>FOUND DEAD</b>

AUTOPSY: No gross lcs

TISSUE FOR SECTION: Single segments of lumbar, thoracic and cervical cord; medulla, thalamus and midbrain (Z.A.)

Tissue segments extremely soft - cervical section fractured throughout - impossible to obtain a section

HISTOLOGY

The two levels of medulla are sufficiently well preserved to be interpreted; The cord levels are hopelessly distorted. — The medulla shows acute neurophagia floor of 4<sup>th</sup> ventricle.

DIAGNOSIS: POLIO (acute)

## Homologous Neutralization Test

Rh 648

Saline Control  $10^{-3}$ 

DATE	DAY	REMARKS
JUN 29 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
7-8-48	9	Body and head tremors. T=104.2
7-9-48	10	Partial Paralysis of all extremities; Weak Voice 7/9 Bled for serum
	11	No change
	12	" "
7-12-48	13	Compl. par. left lower; Part. par. right lower and both uppers
	14	No change
	15	" "
	16	" "
	17	" "
	18	" "
	19	" "
	20	No change
	21	" "
7-21-48	22	Comp. par. both lowers & right upper; part par-left upper
	23	No change
	24	" "
	25	" "
	26	NO change.
7-26-48	27	Compl. par. left lower, Part par. right lower & both uppers.
	28	No change
	29	" "
7-29-48	30	" " <u>Bled for serum</u>
	31	" "
	32	" "
	33	" "
8-2-48	34	Compl. par. left lower, Part. Par. other 3 extremities
	35	No change
8-20-48	52	No change
9-27-48	91	Compl. Par. both lowers, Part Par. both uppers; Monkey can not sit up but eats and moves head well
9-30-48		<u>Bled for serum</u>

10-2-48 - DEAD: Autopsy: no gross T<sub>BE</sub> or visceral changes.

TISSUE FOR "OLD POLIO" CHANGES: Lumbar + cervical segments. (very pulfaceous) - (Z-D. - 10-6-48 - Tissues too soft to trim. - Discarded.

## Homologous Neutralization Test

Rh 649

Saline control  $10^{-3}$ 

DATE DAY REMARKS

JUN 29 1948

0

✓

1

✓

2

✓

3

✓

4

✓

7-4-48

5

T=104<sup>3</sup> Part. Paralysis of all 4 extremities. Weak back & neck  
 Sacrificed (chloroform -  $\text{CS}$  sanguination) - Autopsy: no gross TBs.

TISSUE FOR SECTION: segments of lumbar & cervical cord.

TISSUE FOR VIRUS: cord-medulla frozen in Lutetoid tube. (d-9)

Contact culture BAP: - ✓✓

7-6-48. Cord & medulla thawed &  
 pooled with Rh 646 to make a 20%  
 sterile suspension (see Rh 646) in saline

HISTOLOGY: Acute early neuronophagia most marked in  
 cervical than in lumbar cord.; ~~moderate~~ moderate  
 PV cuffing.

DIAGNOSIS: POLIO (Acute)

## Homologous Neutralization Test

Rh 650

Saline control  $10^{-3}$ 

DATE	DAY	REMARKS
JUN 29 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓ diarrhea
	6.	✓
7-6-48	7	Pilomotor response; head tremors
	8	Compl. par. rt. lower. Partial Par. left lower and both uppers. Head tremors
	9.	Compl. par both lowers and left upper; Part par. right upper; Weak voice
7-9-48	10	Quadriplegia. 7-9-48 Bled for serum
	11	"
	12	"
	13	"
	14	"
	15	"
	16	"
7-16-48	17	Quadriplegia - right facial
	18	"
	19	No change
7-19-48	20	FOUND DEAD

AUTOPSY: No gross obs

TISSUE FOR SECTION: single segments of lumbar &amp; cervical cord; &amp; medulla (2.A.)

Tissue for section very soft.

11-19-48 Tissues Discarded

# Homologous Neutralization Test

Rh 651

saline control  $10^{-4}$

DATE	DAY	REMARKS
JUN 29 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
7-7-48	8	Partial par. both uppers and lowers. Head tremors
	9	Compl. par. left lower. Part pa. both uppers and left lower
7-9-48	10	Compl. par. both lowers; Part par. both uppers.
	11	No change
	12	" "
	13	" "
	14	" "
	15	" "
	16	" "
	17	Compl. Par. both lowers, Part Par. both uppers
	18	No change
	19	" "
	20	" "
	21	" "
	22	" "
	23	" "
7-23-48	24	Comp par both lowers and right upper; part par left upper
	25	No change
	26	No change
7-26-48	27	Compl. Par both lowers, Part. Par both uppers
	28	No change
	29	" "
7-29-48	30	" " <u>Bled for serum</u>
	31	" "
	32	" "
	33	" "
8-2-48	34	Compl. Par. both lowers, Part. Par. both uppers, weak voice
	35	No change
8-20-48	52	" "
8-26-48	58	<u>FOUND DEAD</u>
		<u>AUTOPSY</u> : no gross tbc
		<u>TISSUE FOR SECTION</u> : several segments of lumbar & cervical cord (z.a.)
		<u>11-19-48</u> Tissues discarded

7-9-48

Bled for serum

## Homologous Neutralization Test

Rh 652

Saline control  $10^{-9}$ 

DATE DAY REMARKS

JUN 29 1948

0	✓
1	mild diarrhea
2	✓
3	✓
4	✓
5	✓
6	✓
7	✓
8	✓
9	✓
10	✓
11	✓
12	✓
13	✓
14	✓
15	✓
16	✓
17	✓
18	✓
19	✓
20	✓
21	✓
22	✓
23	✓
24	✓
25	✓
26	✓
27	✓
28	✓
7-28-48	29 At. Def. weakness of both upper. Disinclined to climb T=104.3 P.M. Part. Par. of both upper. Tremors. <i>Blod for serum.</i>
	30 Compl. Par. of left upper; Part Par. other 3 extremities
7-31-48	31 Quadriplegia
	32 Quadriplegia; aphonia
	33 No change
8-2-48	34 Quadriplegia; aphonia
	35 No change
8-20-48	52 Quadriplegia; Weak voice
8-26-48	58 <u>FOUND DEAD</u>

AUTOPSY: No gross lbrTISSUE FOR SECTION Tissue very soft so only, one segment of cervical cord and several sections of medulla. (Z.A.)11-19-48 Tissues discarded

## Homologous Neutralization Test

Rh 653

Saline Control  $10^{-4}$ 

DATE	DAY	REMARKS
JUN 29 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
8-2-48	34	✓
	35	✓
8-4-48	36	

SACRIFICED - (chloroform - exsanguination)

AUTOPSY - No gross lcs

TISSUE FOR SECTION - Single segments of lumbar, thoracic and cervical cord; medulla, midbrain, thalamus → (ZA)

HISTOLOGY: Above segments reveal no pathology.DIAGNOSIS: NO PSLIO

## Homologous Neutralization Test

Rh 654

Acute Serum

10<sup>-1</sup>

DATE DAY REMARKS

JUN 29 1948

DATE	DAY	REMARKS
	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	thick
	8	thin
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
7-24-48	25	Part Par. all 4 extremities
	26	Partial paralysis of all 4 extremities; cranial nerves O.K.
7-26-48	27	No change
	28	" "
7-28-48	29	Compl. Par. left upper; Part. Par. other 3 extremities
7-29-48	30	No change <u>Bled for serum</u>
7-30-48	31	Compl. Par. of left upper. Part Par. other 3 extremities
	32	No change
8-2-48	33	Compl. Par. of left upper. Part Par. other 3 extremities
8-2-48	34	Compl. Par. right lower; <del>Part</del> and left upper; Part Par. left lower & right upper
	35	No change
8-20-48	52	Part. Par. all 4 extremities
9-27-48	91	No Change; Monkey sits up and can climb
9-30-48		<u>Bled for serum</u>
		<u>10-7-48 - Homologous Challenge IC (see record).</u>

# Homologous Neutralization Test

Rh 655

Acute Serum  $10^{-1}$

DATE DAY REMARKS

JUN 29 1948

0 ✓  
 1 ✓  
 2 ✓  
 3 ✓  
 4 ✓  
 5 ✓  
 6 ✓  
 7 ~~thin~~  
 8 ✓  
 9 ✓  
 10 ✓  
 11 ✓  
 12 ✓  
 13 ✓  
 14 ✓  
 15 ✓  
 16 ✓  
 17 ✓  
 18 ✓  
 19 ✓  
 20 ✓  
 21 ✓  
 22 ✓  
 23 ✓  
 24 ✓  
 25 ✓  
 26 ✓  
 27 ✓  
 28 ✓  
 29 ✓  
 30 ✓  
 31 ✓  
 32 ✓  
 33 ✓  
 8-2-48 34 ✓  
 35 ✓

8-4-48 36

SACRIFICED - (Chloroform - Exsanguination)  
AUTOPSY - No gross the  
TISSUE FOR SECTION - ~~5~~ segments of lumbar, thoracic<sup>(2)</sup>  
 and cervical cord; medulla, midbrain and  
 thalamus → (2A) (Midbr. & thalamus discarded 9/17/48)

HISTOLOGY: Above levels show no pathology.

DIAGNOSIS NO POLIO

Homologous Neutralization Test

Rh 656

Acute serum 10<sup>-11</sup>

JUN 29 1948

DATE DAY REMARKS

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓ (Thin)
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓ (thin)
- 11 ✓ "
- 12 ✓
- 13 ✓
- 14 ✓
- 15 ✓ bone sinus - left ankle
- 16 ✓ " " " "
- 17 ✓ bone sinus - 100,000 units of penicillin I.P.
- 18 ✓ " " " " " "
- 19 ✓ (bone sinus seems healed)
- 20 ✓
- 21 ✓
- 22 ✓
- 23 ✓
- 24 ✓
- 25 ✓
- 26 ✓
- 27 ✓
- 28 ✓
- 29 ✓
- 30 ✓
- 31 ✓ thin - diarrhea
- 32 ✓ thin
- 33 ✓ thin - mild diarrhea
- 8-2-48 34 ✓ thin - no diarrhea
- 8-3-48 35 ✓ thin

SACRIFICED (chloroform-exsanguination)

AUTOPSY: No gross abn

TISSUE FOR SECTION Digest segments of lumbar thoracic and cervical cord; medulla, thalamus and midbrain (Z.A.)

(1) discarded 9/17/48.

HISTOLOGY: Above segments reveal no histology.

DIAGNOSIS: NO POLIO

## Homologous Neutralization Test

Rh 657

Acute Serum  $10^{-2}$ 

DATE DAY REMARKS

JUN 29 1948

0 ✓  
 1 ✓  
 2 ✓  
 3 ✓  
 4 ✓  
 5 ✓  
 6 ✓  
 7 ✓  
 8 ✓  
 9 ✓  
 10 ✓  
 11 ✓  
 12 ✓  
 13 ✓  
~~14~~ ✓  
 15 ✓  
 16 ✓  
 17 ✓  
 18 ✓  
 19 ✓  
 20 ✓  
 21 ✓  
 22 ✓  
 23 ✓  
 24 ✓  
 25 ✓  
 26 ✓  
 27 ✓  
 28 ✓  
 29 ✓  
 30 ✓  
 31 ✓  
 32 ✓  
 33 ✓  
 34 ✓

8-2-48

8-3-48

35 ✓ Observation Terminated. Monkey tag number changed to  
 657X. monkey set aside to be used again.  
8-30-48 Rh 657X used for Walter Neutralization Test.

Rh 658

Homologous Neutralization Test

Acute Serum  $10^{-2}$ 

JUN 29 1948

DATE DAY REMARKS

DATE	DAY	REMARKS
	0	Diarrhea
	1	mild diarrhea
	2	" "
	3	" "
	4	✓
	5	mild diarrhea
	6	same
	7	✓
	8	mild diarrhea
	9	" "
	10	✓
	11	✓
	12	✓
	13	✓
	14	thin - General weakness; severe diarrhea
	15	same
	16	"
	17	General weakness; diarrhea
	18	same
	19	"
	20	"
7-20-48	21	General weakness; diarrhea; thin; awkward
	22	no change
	23	" "
	24	" "
	25	" "
	26	same.
7-26-48	27	thin; severe diarrhea
	28	same
	29	very thin - diarrhea
	30	same
	31	same condition
	32	thin diarrhea
	33	No change
8-2-48	34	thin - diarrhea
8-3-48	35	thin - diarrhea
		<u>SACRIFICED:</u> (chloroform-exsanguination)
		<u>AUTOPSY:</u> No gross the
		<u>TISSUE FOR H&amp;E SECTION:</u> Single segments of lumbar and cervical & thoracic cord; medulla; thalamus and midbrain (Z.A.)
		discarded 9/17/48.
		<u>11-17-48</u> Tissues discarded

Homologous Neutralization Test

Rh 659

Acute Serum  $10^{-2}$

JUN 29 1948

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓
- 11 ✓
- 12 ✓
- 13 ✓
- 14 ✓
- 15 ✓
- 16 ✓
- 17 ✓
- 18 ✓
- 19 ✓
- 20 ✓
- 21 ✓
- 22 ✓
- 23 ✓
- 24 ✓
- 25 ✓
- 26 ✓
- 27 ✓
- 28 ✓
- 29 ✓
- 30 ✓
- 31 ✓
- 32 ✓
- 33 ✓
- 34 ✓

mild diarrhea

mild diarrhea

8-2-48  
8-3-48

- 35 ✓

Observation Terminated Monkey tag number changed to 659-X. Monkey to be used again  
9-30-48 Rh 659X used for Walter Neutralization Test.

Rh 660

Homologous Neutralization Test

Acute Serum  $10^{-3}$

JUN 29 1948

DATE DAY REMARKS

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓
- 11 ✓
- 12 ✓
- 13 ✓
- 14 ✓
- 15 ✓
- 16 ✓
- 17 ✓
- 18 ✓
- 19 ✓
- 20 ✓
- 21 ✓
- 22 ✓
- 23 ✓
- 24 ✓
- 25 ✓
- 26 ✓
- 27 ✓
- 28 ✓
- 29 ✓
- 30 ✓
- 31 ✓
- 32 ✓
- 33 ✓
- 34 ✓

✓ 11  
 ✓ 81  
 ✓ 11

8-2-48

8-3-48

35 ✓ Observation Terminated Monkey tag number changed to 660-X  
 Monkey to be used again.  
8-30-48 Rh 660X used for Walters Neutralization Test

Homologous Neutralization Test

Rh 661

Acute Serum  $10^{-3}$

DATE DAY REMARKS

JUN 29 1948

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓
- 11 ✓
- 12 ✓
- 13 ✓
- 14 ✓
- 15 ✓
- 16 ✓
- 17 ✓
- 18 ✓
- 19 ✓
- 20 ✓
- 21 ✓
- 22 ✓
- 23 ✓
- 24 ✓
- 25 ✓
- 26 ✓
- 27 ✓
- 28 ✓
- 29 ✓
- 30 ✓
- 31 ✓
- 32 ✓
- 33 ✓
- 34 ✓

8-2-48

8-3-48

35 ✓ Observation Terminated Monkey tag # changed to 661X.  
 Monkey to be used again  
8-30-48 Rh 661X used for Walter's Neutralization Test

# Homologous Neutralization Test

Rh 662

Acute Serum  $10^{-3}$

JUN 29 1948

DATE DAY REMARKS

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓
- 11 ✓
- 12 ✓
- 13 ✓
- 14 ✓
- 15 ✓
- 16 ✓
- 17 ✓
- 18 diarrhea
- 19 ✓ "
- 20 ✓
- 21 ✓
- 22 ✓
- 23 ✓
- 24 ✓
- 25 ✓
- 26 ✓
- 27 ✓
- 28 ✓
- 29 ✓
- 30 ✓
- 31 ✓
- 32 ✓ diarrhea
- 33 ✓
- 8-2-48 34 ✓
- 8-3-48 35 ✓

SACRIFICED (chloroform-exasanguination)  
AUTOPSY: No gross bc  
TISSUE FOR SECTION single segments of lumbar, thoracic & cervical  
 cord; medulla; thalamus and midbrain (Z.A.)  
 discarded 9/17/48.  
11-19-48 Tissues discarded



Homologous Neutralization Test

Rh 664

Acute Serum  $10^{-4}$

JUN 29 1948

DATE DAY REMARKS

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓
- 11 ✓
- 12 ✓
- 13 ✓
- 14 ✓
- 15 ✓
- 16 ✓
- 17 ✓
- 18 ✓
- 19 ✓
- 20 ✓
- 21 ✓
- 22 ✓
- 23 ✓
- 24 ✓
- 25 ✓
- 26 ✓
- 27 ✓
- 28 ✓
- 29 ✓
- 30 ✓
- 31 ✓
- 32 ✓
- 33 ✓
- 34 ✓

8-2-48

8-3-48

35 ✓ Observation terminated. Monkey tag # changed to 664-X  
 Monkey to be used again.

8-4-48 Rh 664X given to Drs. Sabin & Hambro for Plasmasol  
 and S.N. 13058-17 Expt.

# Homologous Neutralization Test

Rh 665

Acute Serum  $10^{-4}$

JUN 29 1948

DATE	DAY	REMARKS
	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
8-2-48	34	✓
8-3-48	35	✓ <u>Observation Terminated</u> Monkey tag # changed to <u>665-X</u> Monkey to be used again
		<u>8-4-48</u> Rh 665X given to Drs. Sabin & Hambro for Plasmaid and S.N. <u>13058-17</u> Expt.

0  
1  
2  
3  
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30  
31  
32  
33  
34  
35

✓ Observation Terminated Monkey tag # changed to 665-X  
Monkey to be used again

8-4-48 Rh 665X given to Drs. Sabin & Hambro for  
Plasmaid and S.N. 13058-17 Expt.

Homologous Neutralization Test  
 Rh 666 Convalescent Serum 10<sup>-1</sup>

JUN 29 1948

DATE DAY REMARKS

0 ✓  
 1 ✓ *thin*  
 2 ✓  
 3 ✓  
 4 ✓  
 5 ✓  
 6 ✓  
 7 ✓  
 8 ✓  
 9 ✓  
 10 ✓  
 11 ✓  
 12 ✓  
 13 ✓  
 14 ✓  
 15 ✓  
 16 ✓  
 17 ✓  
 18 ✓  
 19 ✓  
 20 ✓  
 21 ✓  
 22 ✓  
 23 ✓  
 24 ✓  
 25 ✓  
 26 ✓  
 27 ✓  
 28 ✓  
 29 ✓  
 30 ✓  
 31 ✓  
 32 ✓  
 33 ✓  
 34 ✓  
 35 ✓

8-2-48

8-3-48

Observation Terminated Monkey tag # changed to 666 X and set aside to be used again  
 8-4-48 Rh 666X given to Drs. Sabin and Humber for Plasmacid and SM 13058-17 Expt. (Acq. 8/7/48 by Dr. Sabin - using Hoferkamp virus. - Died 9/28/48 - No autopsy)

# Homologous Neutralization Test

Rh 670

Convalescent Serum  $10^{-1}$

JUN 29 1948

DATE	DAY	REMARKS
	0	Diarrhea
	1	O.K.
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓ <del>thin</del>
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
8-2-48	34	✓
8-3-48	35	✓ Observation terminated. Monkey tag # changed to 670 X Monkey to be used again.

9-7-48. - Monkey has been having diarrhea, and very thin. Dead today. Discarded. -

Rh 668

Homologous Neutralization Test

Convalescent Serum  $10^{-1}$

JUN 29 1948

DATE DAY REMARKS

DATE	DAY	REMARKS
	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓

8-2-48

8-3-48

8-25-48

✓ Observation Terminated Monkey tag # changed to 668 X  
Monkey to be used again.

Moribund  
SACRIFICED (chloroform - exsanguination) - NO gross TBC.  
Discarded

# Homologous Neutralization Test

Rh 669

Convalescent Serum  $10^{-2}$

DATE DAY REMARKS

JUN 29 1948

0

Diarrhea

1

thin - diarrhea

2

thin - diarrhea

3

General Weakness - thin - diarrhea

4

Same

7-4-48

5

FOUND DEAD

AUTOPSY: Extensive esophogastromu- infestation; lungs ok.

TISSUE FOR SECTION: - Thalamus; midbrain; medulla;  
cervical; Thoracic; lumbar cord levels. (2A).

11-19-48 Tissues discarded

Homologous Neutralization Test  
Rh 672 Convalescent Serum  $10^{-2}$

DATE DAY REMARKS

JUN 29 1948

0  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20

✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓ mild diarrhea  
✓  
✓  
✓  
✓  
✓ mild diarrhea  
✓ " "  
✓ thin "  
✓ " "  
General Weakness; very apathetic; severe diarrhea; thin  
Same condition  
FOOD DEAD..

AUTOPSY: No gross lcs.  
TISSUE FOR SECTION: Single segments of lumbar thoracic & cervical cord;  
medulla, thalamus & midbrain (Z.A.)  
Tissue for section very soft.

HISTOLOGY: Spinal cord segments too distorted to interpret properly; medulla; midbrain;  
and inf. Thalamus show no pathology. -

DIAGNOSIS: NO POLIO

## Homologous neutralization Test

Rh 673

Convalescent Serum  $10^{-2}$ 

DATE	DAY	REMARKS
JUN 29 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓ thin Men. Weakness
7-9-48	10	<u>FOUND DEAD</u>

AUTOPSY: No gross the  
TISSUE FOR SECTION Single segments of lumbar, thoracic and  
 cervical cord; medulla, midbrain & thalamus.

11-19-48 Tissues discarded

Homologous Neutralization Test

Rh 674

Convalescent Serum  $10^{-3}$

DATE DAY REMARKS

JUN 29 1948

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓
- 11 ✓
- 12 ✓
- 13 ✓
- 14 ✓ mild diarrhea
- 15 ✓
- 16 ✓
- 17 ✓
- 18 ✓
- 19 ✓
- 20 ✓
- 21 ✓
- 22 ✓
- 23 ✓
- 24 ✓
- 25 ✓
- 26 ✓
- 27 ✓
- 28 ✓
- 29 ✓
- 30 ✓
- 31 ✓
- 32 ✓
- 33 ✓

8-2-48

34 ✓

8-3-48

35 ✓

Observation Terminated Monkey tag # changed to 674 X  
 Monkey to be used again.  
8-30-48 Rh 674X used for Walter Neutralization Test.

# Homologous Neutralization Test

Rh 675

Convalescent Serum  $10^{-3}$

DATE DAY REMARKS

JUN 29 1948

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓
- 11 ✓
- 12 ✓
- 13 ✓
- 14 ✓
- 15 ✓
- 16 ✓
- 17 ✓
- 18 ✓
- 19 ✓
- 20 ✓
- 21 ✓
- 22 ✓
- 23 ✓
- 24 ✓
- 25 ✓
- 26 ✓
- 27 ✓
- 28 ✓
- 29 ✓
- 30 ✓
- 31 ✓
- 32 ✓
- 33 ✓

8-2-48

34 ✓

8-3-48

35 ✓

Observation Terminated Monkey tag # changed to 675 X  
 Monkey to be used again.  
8-30-48 Rh 675X used for Walter Neutralization Test

Homologous Neutralization Test

Rh 676

Convalescent Serum  $10^{-3}$

DATE DAY REMARKS

JUN 29 1948

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓
- 11 ✓
- 12 ✓
- 13 ✓
- 14 ✓
- 15 ✓
- 16 ✓
- 17 ✓
- 18 ✓
- 19 ✓
- 20 ✓
- 21 ✓
- 22 ✓
- 23 ✓
- 24 ✓
- 25 ✓
- 26 ✓
- 27 ✓
- 28 ✓
- 29 ✓
- 30 ✓
- 31 ✓
- 32 ✓
- 33 ✓
- 34 ✓

8-2-48

8-3-48

35 ✓

Observation Terminated Monkey tag # changed to 676 X  
 Monkey to be used again

9-7-48 Given to Drs. Sabin and Hambro for plasmaid control

# Homologous Neutralization Test

Rh 677

Convalescent Serum  $10^{-4}$

DATE DAY REMARKS

JUN 29 1948

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

8-2-48 34

8-3-48 35

✓ Observation terminated Monkey tag # changed to 677X  
 Monkey to be used again  
 8/31/48 Given to Drs. Solson & Zamboon for Rhesusoid and S.N. Expt.

# Homologous Neutralization Test

Rh 678

Convalescent Serum  $10^{-4}$

DATE DAY REMARKS

JUN 29 1948

0

✓

1

✓

2

✓

3

✓

4

✓

5

✓

6

✓

7

✓

8

✓

9

✓

10

✓

11

✓

12

✓

13

✓

14

✓

15

✓

16

✓

17

✓

18

✓

19

✓

20

✓

21

✓

22

✓

23

✓

24

✓

25

✓

26

✓

27

✓

28

✓

29

thin - general weakness - tires easily

30

same

31

thin mild diarrhea

32

thin

33

thin - mild diarrhea

8-2-48

34

thin

8-3-48

35

thin

SACRIFICED (chloroform-exsanguination)

AUTOPSY: No gross ~~tho~~

TISSUE FOR SECTION Single segments of lumbar thoracic and cervical cord; medulla, {thalamus and midbrain} (Z.A.)  
discarded 9/17/48

11-19-48 Tissues discarded

Homologous Neutralization Test

Rh 679

Convalescent Serum  $10^{-4}$

DATE	DAY	REMARKS
JUN 29 1948	0	Diarrhea
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓

7-26-48 27 ✓ thin diarrhea, passive; no focal weakness.

7-27-48 28 FOUND DEAD

AUTOPSY: no gross lbr  
TISSUE FOR SECTION Entire Cns in Z.A. (Thalamus midbrain)  
 (discarded 9/17/48)

11-19-48 tissues discarded

# Homologous Neutralization Test

Rh 680

MV Immune Serum  $10^{-1}$

JUN 29 1948

DATE	DAY	REMARKS
	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓ diarrhea
	10	✓
7-10-48	11	Distinct Head tremors; excited; easily exhausted; Weakness of all 4 extre.
7-11-48	12	T: 104.2 Head and body tremors; Weakness of all extremities; Disinclined to climb. Weak voice; excited
7-12-48	13	Compl. Par. both lowers; Partial Par. both uppers; Left facial.
	14	No change
	15	" "
	16	" "
	17	Compl. par. lowers; Part par. both uppers; left facial
	18	No change
	19	" "
	20	" "
	21	" "
	22	" "
	23	" "
	24	" "
	25	" "
	26	NO " change
7-26-48	27	Compl. par. both lowers; Part par. both uppers; left facial.
	28	No change
	29	" "
7-29-48	30	" " <u>Bled for serum</u>
	31	" "
	32	" "
	33	" "
8-2-48	34	Compl. Par. both lowers; Part. Par. both uppers; part left facial
	35	No change
8-20-48	32	Compl. Par. both lowers; W. both uppers.
9-24-48		<u>FOUND DEAD</u>
		<u>AUTOPSY</u> : No gross the
		<u>TISSUE FOR SECTION</u> : Several segments of lumbar thoracic & cervical cord. 2 sections of medulla also single sections of thalamus and midbrain (Z.A.)
		<u>11-19-48</u> tissues discarded

# Homologous Neutralization Test

Rh 681

MY Immune Serum  $10^{-1}$

DATE DAY REMARKS

JUN 29 1948

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓

7-7-48.

- 8 ✓

## FOUND DEAD

AUTOPSY: Both lungs deeply congested? pneumonia, bilaterally.

TISSUE FOR SECTION: - lung.

Thalamus; midbrain; pons; medulla; numerous sections of  
cervical; Thoracic + lumbar cord. (Z.A.)  
(9 Cervical; 5 lumbar; 5 Thoracic; 3 medulla).

HISTOLOGY: Above levels show acute neurophagia early and  
into PV. infiltration.

DIAGNOSIS: POLIO (Acute)

Rh 682

## Homologous Neutralization Test

MV Immune Serum [10-7]

DATE	DAY	REMARKS
JUN 29 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
7-8-48	9	Part Paralysis of all 4 extremities
7-9-48	10	Compl. par. of left lower, Part. par. right lower and uppers. <u>Bled for serum</u>
	11	No change but did a Co
	12	" "
7-12-48	13	Compl. Par. both lowers, Part. par. both uppers.
	14	No change
	15	" "
	16	" "
	17	" "
	18	" "
7-18-48	19	" " <u>Complete paralysis with drop</u>
	20	No change
	21	" "
	22	" "
	23	" "
	24	" "
	25	" "
	26	NO Change.
7-26-48	27	Compl. par. both lowers; Part. par. both uppers.
	28	No change
	29	" "
7-29-48	30	" " <u>Bled for serum</u>
	31	" "
	32	" "
	33	" "
8-2-48	34	Compl. par. both lowers, Part. Par. both uppers.
	35	No change
8-20-48	52	No change
9-27-48	91	Compl. par. left lower and almost Compl. Par. right lower; Part. Par. both uppers; Monkey is very thin but can climb.
9-30-48		<u>Bled for serum</u>
		<u>10-7-48</u> - Homologous Challenge IC (see record).

Homologous Neutralization Test

Rh 683

MV Immune Serum  $10^{-2}$

DATE DAY REMARKS

JUN 29 1948

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓
- 11 ✓
- 12 ✓
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22

Disinclined to climb.

7-12-48

Quadriplegia; Weak voice; Right facial.

7-12 Bled for serum

No change

" "

Quadriplegia; aphonia; Compl. bilat facial

No change

" "

" "

FOUND DEAD

AUTOPSY - no gross TBC

TISSUE FOR SECTION - Two segments of lumbar and cervical cord; medulla. (ZA)

11-19-48 tissues discarded

Homologous Neutralization Test  
 Rh 684                      MV Immune Serum  $10^{-2}$

DATE	DAY	REMARKS
JUN 29 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
7-7-48	8	Partial Paralysis of all extremities, Weak voice
	9	No change
7-9-48	10	Compl. par. both lowers; Part. Par. both uppers. aphonics
	11	No change
	12	" "
	13	" "
	14	" "
	15	" "
	16	" "
	17	Compl. Par both lowers & left upper. Part Par right upper. Some sinus right wrist
	18	No change, 100,000 units of penicillin
	19	" "
	20	" "
	21	" "
	22	" "
	23	" "
	24	" "
	25	" "
	26	NO Change.
6-26-48	27	Compl. par. both lowers, Part par both uppers.
	28	No change
	29	" "
7-29-48	30	" " <u>Bled for serum</u>
	31	" "
	32	" "
	33	" "
8-2-48	34	Compl. Par. both lowers & left upper; Part par. right upper.
	35	No change
8-20-48	52	Compl. Par. both lowers; Part. Par. both uppers.
8-26-48	58	FOUND DEAD

Autopsy: No gross tbc; spinal cord soft.  
TISSUE FOR SECTION Several segments of lumbar & cervical cord (2.A.)  
 (after trimmed, the anterior horns seemed "empty" - i.e. almost vacuolated grossly.)  
11-19-48 Tissues discarded

## Homologous Neutralization Test

Rh 685

MY Immune Serum  $10^{-2}$ 

DATE	DAY	REMARKS
JUN 29 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
7-12-48	13	Part. Par. all 4 extremities <u>7-12- Bled for serum</u>
	14	No change
	15	" "
	16	" "
	17	Compl. Par. both lowers; Part par. both uppers.
	18	No change
	19	" "
	20	" "
	21	" "
	22	" "
	23	" "
7-23-48	24	Comp. par both lowers and right upper; part par left upper
	25	No change
	26	NO change.
8-7-48	27	Compl. par both lowers; Part par. both uppers.
	28	No change
	29	" "
7-29-48	30	" " <u>Bled for serum</u>
	31	" "
	32	" "
	33	" "
	34	" "
	35	" "
8-20-48	52	Compl. Par. both lowers. Part. Par both uppers.
9-27-48	91	No Change; Monkey can not sit up; but moves body and head well
9-30-48		<u>Bled for serum.</u>
		<u>10-7-48</u> - Homologous Challenge IC (see record).

# HOMOLOGOUS NEUTRALIZATION TEST SERUM-DILUTION METHOD

9-20-48. VIRUS USED: Generation II of [redacted] strain polio in Rhesus - same pool as used for initial titration (5-14-48) and for the neutralization test performed on 6-28-48. - The cumulative titer of virus from those two tests was  $10^{3.7}$  - so that the fixed dose of virus is 50 PD<sub>50</sub> selected for this test below was calculated to be achieved by using final virus conc. of 1:100 vs. The varying dilutions of serum.

SERA USED: Two sera from [redacted] - ACUTE: - 8/14/47 (6<sup>th</sup> day of illness) - CONVALESCENT: - 11/11/47. (92<sup>nd</sup> day of illness)

INCUBATION: Serum-virus and control dilutions indicated below, at room temp. (72°F) for one hour, then refrigerator ± 15 hours overnight, then into ice-bath during inoculations on 9/21/48.

MONKEYS: Normal conditioned Rhesus from Chad's Farm.

INOCULUM: 0.5 cc per monkey i.c.e.r.

FINAL CONCENTRATION OF VIRUS = 1:100

SERUM:	UNDILUTED	1:4	1:16	1:64
<u>ACUTE</u> 8/14/47. 5 <sup>th</sup> day after onset	Rh. 8840, X <sub>35</sub> 8850, X <sub>35</sub> 8860, X <sub>41</sub> ○ 8870, X <sub>35</sub>	Rh. 888 P <sub>10</sub> + 8890, K <sub>31</sub> "old" "NP" ○ 8900, K <sub>31</sub> ○ 8910, K <sub>31</sub>	Rh. 8920, K <sub>31</sub> ○ 893 P <sub>10</sub> 894 P <sub>5</sub> 8950, K <sub>31</sub> ○	Rh. 896 P <sub>12</sub> ○ 897-NOK <sub>32</sub> ○ 8980, K <sub>35</sub> 899 P <sub>9</sub>
<u>CONVALESCENT</u> 11/11/47. 91 <sup>st</sup> day after onset	Rh. 900 D <sub>21</sub> ○ 9010, X <sub>35</sub> 9020, K <sub>32</sub> 9030, X <sub>35</sub>	Rh. 9040, K <sub>31</sub> ○ 905 P <sub>16</sub> 9060, K <sub>34</sub> ○ 9070, K <sub>34</sub> ○	Rh. 9080, K <sub>34</sub> ○ 9090, K <sub>34</sub> ○ 9100, K <sub>34</sub> ○ 9110, K <sub>34</sub> ○	Rh. 912 ○, K <sub>34</sub> 913 ○, K <sub>34</sub> 914 ○, K <sub>34</sub> 915 ○, K <sub>34</sub>

	1:100	10 <sup>-3</sup>	10 <sup>-4</sup>	10 <sup>-5</sup>
<u>SALINE</u> <u>CONTROL</u>	Rh. 823 P <sub>9</sub> 871 P <sub>10</sub> 872 P <sub>9</sub> 874 P <sub>6</sub>	Rh. 875 P <sub>9</sub> 876 P <sub>11</sub> 877 P <sub>10</sub>	Rh. 878 D <sub>6</sub> ○ ○ 8790, K <sub>31</sub> ○ 8800, K <sub>31</sub>	Rh. 8810, K <sub>31</sub> 8820, K <sub>31</sub> 8830, K <sub>31</sub>

Homologous Neutralization Test

Serum Dilution Method

Rh. 823-

Saline 1:100 Virus -

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
9-30-48	9	<p>(No gross TBs)</p> <p>Partial Paralysis of all 4 extremities. - Sacrificed (chloroform Exsanguination) - - Cord medulla pooled with that of Rh. 872 (q.v.), combined wt = 11.4 Gms; made up in micro-Waring blender to 58 cc (is a 20% susp); centrifuged and frozen in (<math>\pm 35^{\circ}</math>) three 20<sup>cc</sup> and one 10<sup>cc</sup> ampoule. Vials #1, 2, 3 and 4 respectively stored in (8-7-6)</p> <p><u>Cult.</u> ✓✓</p>

## Homologous Neutralization Test

Serum Dilution Method

Rh. 871Saline 1:100 virus.

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
9-30-48	8	✓
	9	Weakness of both lower. Disinclined to climb
	10.	Part. par. all 4 extremities.
	11.	Quadriplegia: aphonia.
	12.	Same.
T3	<u>DEAD</u> - discarded.	

## Homologous Neutralization Test

## Serum Dilution Method

Rh. 872Salmi E 1:100 Virus.

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
9-30-48	9	Complete Paralysis of right lower. Partial Paralysis of left lower - Sacrificed (chloroform - exsanguination) - cord - medulla pooled with that of Rh. 823 for virus. (see Rh. 823).
	<u>10.</u>	

## Homologous Neutralization Test

## Serum Dilution Method

Rh. 874-Saline 1:100 Virus -

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
9-27-48	6	T-1049 Complete Paralysis of right lower and left upper; Partial Paralysis of left lower and right upper; 10 <sup>00</sup> a.m. Complete Aphonia. Weak neck and back. 2 <sup>30</sup> p.m. DEAD. - <u>Autopsy</u> : no gross TBC.  ISSUES: Cord Levels. (Z.A.) <u>11-19-48</u> Tissues Discarded

## Homologous Neutralization Test

## Serum Dilution Method

Rh. 875Saline -  $10^{-3}$  virus.

Date	Day	Remarks
Sept. 21, 1948	0	✓ (left lower eyelid has a recent small cut; there is mild diarrhea).
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
9-30-48	8	✓
	9	Partial Paralysis of all extremities
	10.	Compe. par. both lowers; part. par. both uppers; tremors; weak back & neck.
	11.	Quadriplegia (feeble movement left hand).
	12.	Same.
	13.	Same.
	14	No Change
	15.	Mourbund. <u>Sacrificed - Discarded</u>

## Homologous Neutralization Test

## Serum Dilution Method

Rh. 876-Saline  $10^{-3}$  virus-

Date	Day	Remarks
Sept. 21, 1948	0	✓ (very mild diarrhea).
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓ thin - mild diarrhea
	10	✓ " " " "
	11	Partial par. all 4 exts.
	12	Quadriplegia; aphonia.
13	<u>DEAD</u> - dis. caused.	

## Homologous Neutralization Test

Serum Dilution Method

Ph. 877.Saline  $10^{-3}$  virus.

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓ mild diarrhea
	9	✓ " "
	10.	Partial paralysis all 4 extremities.
	11.	Tetraplegia; weak virus.
	12.	" " "
	13.	DEAD - discarded.

## Homologous Neutralization Test

Serum Dilution Method

Rh. 878-Saline 10<sup>-4</sup> virus-

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
<u>9-27-48.</u>	6	<p><u>DEAD:</u> Autopsy: no gross Tbc. - CNS is very soft.  Rt. lower lobe consolidated. }  <u>Tissues:</u> - 4 lumbar, 2 Thoracic, 4 Cervical; 2 Medulla;  midbrain; Thalamus. (Z-A.).</p>

HISTOLOGY: No gross exudate was discovered at autopsy,  
There is microscopic evidence of suppurative  
meningitis - No evidence of polio

Homologous Neutralization Test

Serum Dilution Method

Rh. 879.

SalmE 10<sup>-4</sup> virus.

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
30	✓	

10-22-48

31

SACRIFICED (chloroform-exsanguination)

Autopsy: No gross lcs.

TISSUE FOR SECTION 2 medulla, 4 cervical, 2 thoracic, 7 lumbar cord (2.A)

HISTOLOGY: Above segments reveal no pathology.

DIAGNOSIS: NO POLIO

## Homologous Neutralization Test

Serum Dilution Method

Rh. 880Saline  $10^{-4}$  virus.

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
10-2248	31	SACRIFICED (chloroform-exsanguination) AUTOPSY: No gross lbc TISSUE FOR SECTION 2 medulla, 2 thoracic, 4 cervical (2.A.) and lumbar cord.
HISTOLOGY: Above segments free of pathology.		
DIAGNOSIS: <u>NO POLIO</u>		

10-2248

31

SACRIFICED (chloroform-exsanguination)

AUTOPSY: No gross lbc

TISSUE FOR SECTION 2 medulla, 2 thoracic, 4 cervical (2.A.)  
and lumbar cord.

HISTOLOGY: Above segments free of pathology.

DIAGNOSIS: NO POLIO

Homologous Neutralization Test

Serum Dilution Method

Rh. 881.

Saline 10<sup>-5</sup> virus.

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
34	✓	small - Neon
10-26-48	35	SACRIFICED (chloroform - exsanguination)

AUTOPSY: No gross bc  
TISSUE FOR SECTION Spinal and cervical cord segments (2. A)  
 medulla and thoracic  
11-19-48 Tissues Discarded

Homologous Neutralization Test

Serum Dilution Method

Rh. 882-

Saline 10<sup>-5</sup> virus-

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	Pilomotor response
	9	" " excited
	10	" " "
	11	" " "
	12	Same. - no weakness.
	13	seems OK today.
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
30	✓	
10-22-48	31	<u>SACRIFICED</u> (chloroform-exsanguination) <u>AUTOPSY</u> : No gross <u>the</u> <u>TISSUE FOR SECTION</u> medulla, cervical, thoracic lumber (L.A.) 11-19-48 Tissues Discarded



Homologous Neutralization Test

Serum Dilution Method

Rh. 884-

Acute Serum - undiluted.

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
34	✓	

10-26-48 35 Observation Terminated: Monkey tag number changed to 884X so that he may be used again

11-8-48 Used as control monkey to receive 100 PD<sub>50</sub> of Hoferkamp virus - The control for Rh. 699 (Hopkins convalescents); Rh. 631 and Rh. 1931 (Risser convalescents); and Rh. 654, 682; 685 (Rice convalescents).

Homologous Neutralization Test

Serum Dilution Method

Rh. 885-

Acute Serum - undiluted.

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
34	✓	

10-26-48

35 Observation Terminated Monkey tag number changed to 885X; so that he may be used again

11-12-48 Rh 885x used for Nervous Tissue Antibodies Experiment

## Homologous Neutralization Test

Serum Dilution Method

Rh. 886-Acute Serum - undiluted -

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
	34	✓
10-26-48	35	Observation terminated Monkey tag number changed to <u>886X</u> ; so that he may be used again
11-1-48	41	<u>DEAD</u> :- Autopsy: All viscera grossly normal. <u>TISSUES FOR SECTION</u> : 3 medulla, 5 cervical; 2 Thoracic, 4 lumbar (2A).
		<u>HISTOLOGY</u> : Above segments show no pathology.
		<u>DIAGNOSIS</u> : <u>NO POLIO</u>

Homologous Neutralization Test

Serum Dilution Method

Rh. 887-

Acute Serum - unclotted.

Sept. 21, 1948

Date	Day	Remarks
	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
	34	✓
10-26-48	35	Observation Terminated Monkey Tag number changed to <u>887X</u> so that he may be used again.

11-12-48 Rh 887X used for Thymus tissue Antibodies Experiment

## Homologous Neutralization Test

Serum Dilution Method

Rh. 888-Acute Serum 1:4

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	Part. par. both uppers; weakness both lowers; complete left facial paralysis.
	11	Compl. par. both uppers; part. par - both lowers; weak neck, voice, back. Compl. left facial paralysis.
	12	NO change.
	13	DEAD - discarded.

## Homologous Neutralization Test

Serum Dilution Method

Rh. 889-Aut & Serum 1:4

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓✓
	2	✓✓
	3	✓✓
	4	✓✓
	5	✓✓
	6	✓✓
	7	✓✓
	8	✓✓
	9	✓✓
	10	✓✓
	11	✓✓
	12	✓✓
	13	✓✓
	14	✓✓
	15	✓✓
	16	✓✓
	17	✓✓
	18	✓✓
	19	✓✓
	20	✓✓
	21	✓✓
	22	✓✓
	23	✓✓
	24	✓✓
	25	✓✓
	26	✓✓
	27	✓✓
	28	✓✓
	29	✓✓
30	✓✓	

10-22-48

31 SACRIFICED (oblongiform-erythematous)AUTOPSY: No gross lbrTISSUE FOR SECTION 2 midulla, cervical & thoracic & lumbar cord (Z.A.)

HISTOLOGY: Spinal Cord shows neuronal outfall, PV cuffing and root degeneration - most marked in the lumbar region. - Medulla shows PV cuffing chiefly in the reticular formation.

DIAGNOSIS: POLIO ('old-non-paralytic')

## Homologous Neutralization Test

Serum Dilution Method

Rh. 890-Acute Serum 1:4

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
30	✓	
10-22-48	31	SACRIFICED (chloroform- <del>exsanguination</del> )

AUTOPSY:

No gross the  
TISSUE FOR SECTION 2 medulla 3 cervical 2 thoracic and  
4 lumbar cord (Z.A.)

HISTOLOGY: Above segments reveal no pathology.

DIAGNOSIS: NO POLIO

Homologous Neutralization Test

Serum Dilution Method

Rh. 891-

Acute Serum 1:4

Sept. 21, 1948

Date

Day

Remarks

0 ✓  
 1 ✓  
 2 ✓  
 3 ✓  
 4 ✓  
 5 ✓  
 6 ✓  
 7 ✓  
 8 ✓  
 9 ✓  
 10 ✓  
 11 ✓  
 12 ✓  
 13 ✓  
 14 ✓  
 15 ✓  
 16 ✓  
 17 ✓  
 18 ✓  
 19 ✓  
 20 ✓  
 21 ✓  
 22 ✓  
 23 ✓  
 24 ✓  
 25 ✓  
 26 ✓  
 27 ✓  
 28 ✓  
 29 ✓  
 30 ✓

10-22-48

31

SACRIFICED (chloroform-exsanguination)

Autopsy: No gross lcs.

TISSUE FOR SECTIONS: 2 medulla 3 cervical 2 thoracic and 1 lumbar cord (2A)

HISTOLOGY: Shows segments free of pathology.

DIAGNOSIS: NO POLIO

## Homologous Neutralization Test

Serum Dilution Method

Ph. 892-

Acute Serum 1:16.

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
10-22-48	30	✓
10-22-48	31	✓

SACRIFICED (chloroform-exsanguination)Autopsy: No gross lveTISSUE FOR SECTION 2 medulla, 4 cervical 2 thoracic and 4 lumbar cord (Z.A.)HISTOLOGY: All cord segments reveal no pathology.DIAGNOSIS NO POLIO

Homologous Neutralization Test

Serum Dilution Method

Rh. 893-

Acute Serum 1:16

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	Partial pos. both lowers.
	11	Compl. pos. rt. lower; part. pos. over 3 extremities.
	12	NO Change.
	13.	Compl. pos. both lowers; part. pos. both upper; weakness of neck, back, voice.
	14.	No Change
15	Same. <u>Sacrificed</u> Discarded	

Homologous Neutralization Test

Serum Dilution Method

Rh. 894-

Acute Serum 1:16

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
9-29-48	8	Complete Paralysis of right upper, Partial Paralysis of the other three extremities
	9	Quadriplegia. Monkey has feeble movement in left hand
	10.	Quadriplegia; " " " " " "
	11	Quadriplegia; weak voice.
	12.	Same.
	13	Same.
	14	No Change
	15.	Quadriplegia; aphonia. <u>Sacrificed - Discarded</u>

Homologous Neutralization Test

Rh. 895-

Serum Dilution Method

Acute Serum 1:16

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
30	✓	

10-22-48

31

SACRIFICED (chloroform-exsanguination)

AUTOPSY: No gross the

TISSUE FOR SECTION 2 midulla, 5 cervical, 1 thoracic and 1 lumbar cord (Z.A.)

HISTOLOGY: Above segments reveal no pathology.

DIAGNOSIS: NO POLIO

## Homologous Neutralization Test

Serum Dilution Method

Ph. 896-

Acute Serum 1:64

Date	Day	Remarks
Sept. 21, 1948	0	✓ (mild diarrhea).
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	Partial par. all 4 extremities; weak voice, neck, back.
	13	<u>DEAD</u> - discarded.

Homologous Neutralization Test

Serum Dilution Method

Rh. # 897-N (normal rheuma)

Acute Serum 1:64

Sept. 21, 1948

0 ✓  
 1 ✓  
 2 ✓  
 3 ✓  
 4 ✓  
 5 ✓  
 6 ✓  
 7 ✓  
 8 ✓  
 9 ✓  
 10 ✓  
 11 ✓  
 12 ✓  
 13 ✓  
 14 ✓  
 15 ✓  
 16 ✓  
 17 ✓  
 18 ✓  
 19 ✓  
 20 ✓  
 21 ✓  
 22 ✓  
 23 ✓  
 24 ✓  
 25 ✓  
 26 ✓  
 27 ✓  
 28 ✓  
 29 ✓  
 30 ✓  
 31 ✓  
 32 ✓

10-23-48

Sacrificed (chloroform-embalming) - NO gross TB.

TISSUES FOR HISTOLOGY: 2 medulla; 4 cervical; 2 thoracic; and 4 lumbar. (2-A)

HISTOLOGY: Above segments show no pathology.

DIAGNOSIS: NO POLIO

Hemologous Neutralization Test

Serum Dilution Method

Rh. 898-

Acute Serum. 1:64

Date	Day	Remarks
Sept. 21, 1943	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
	34	✓
10-26-48	35	<u>SACRIFICED</u> (chloroform-exsanguination) <u>AUTOPSY:</u> No gross the <u>TISSUE FOR SECTION</u> 4 lumbar and 5 cervical cord segments (2.A) 2 medulla and 2 thoracic

HISTOLOGIST: Above levels reveal no pathology.

DIAGNOSIS: NO POLIO

Homologous Neutralization Test

Serum Dilution Method

Rh. 899-

Acute Serum 1:64

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
9-30-48	8	✓
	9	Partial Paralysis of all extremities; Weakness of voice neck & back.
	10	Quadriplegia; aphonia.
10-3-48	11	" "
	12	DEAD :- Discarded

Homologous Neutralization Test

Serum Dilution Method

Rh. 900-

Convalescent Serum  
undiluted

Date Day Remarks

Sept. 21, 1948

0 ✓  
1 ✓  
2 ✓  
3 ✓  
4 ✓  
5 ✓  
6 ✓  
7 ✓  
8 ✓  
9 ✓  
10 ✓  
11 ✓  
12 ✓  
13 ✓  
14 ✓  
15 ✓  
16 ✓  
17 ✓  
18 ✓  
19 ✓

10-12-48 20  $T=97^{\circ}$  thin, mild diarrhea. General weakness, apathetic  
21 DEAD: - Autopsy: no gross Tbc; not entirely emaciated.

TISSUES FOR HISTOLOGY: Thalamus; midbrain; 2 medulla;  
4 cervical; 1 Thoracic; 3 lumbar cord. (ZA).  
(tissues very soft).

HISTOLOGY: No evidence of pathology.

DIAGNOSIS: NO POLIO

Homologous Neutralization Test

Serum Dilution Method

Rh. 901.

Cowalescent Serum - undiluted.

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
34	✓	
10-26-48	35	Observation terminated. Monkey tag number changed to 901X so that he may be used again

11-12-48 Rh 901X used for Nervous Tissue Antibodies Experiment

Homologous Neutralization Test

Serum Dilution Method

Rh. 902-

Convalescent Serum - undiluted.

Date	Day	Remarks	
Sept. 21, 1948	0	✓	
	1	✓	
	2	✓	
		3	✓
		4	✓
		5	✓
		6	✓
		7	✓
		8	✓
		9	✓
		10	✓ Thin serousy.
		11	✓ " "
		12	✓ " "
		13	✓ " "
		14	✓ thin serousy
		15	✓ " "
		16	✓ " "
		17	✓ " "
		18	✓ " "
		19	✓
		20	✓ Same condition
		21	✓ " "
		22	✓ " "
		23	✓ " "
		24	✓ " "
		25	✓ " "
		26	✓ " "
		27	✓ " "
		28	✓ " "
		29	✓ " "
		30	✓ " "
	31	✓ " "	
10-23-48	32	✓ <u>Sacrificed (chloroform exsanguination) Autopsy</u>	

TISSUES FOR HISTOLOGY:

2 mandible; Cervical; Thoracic; Lumbar. (2-A.)

11-19-48 Tissues Discarded

Homologous Neutralization Test

Serum Dilution Method

Rh. 903-

Convalescent - undiluted -  
Serum

Sept. 21, 1948

Date	Day	Remarks
	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
	34	✓

10-26-48

35

Observation Terminated Monkey tag number changed to 903X  
so that he may be used again

11-12-48 Rh 903X used for Nervous Tissue Antibodies Experiment

Homologous Neutralization Test

Serum Dilution Method

Rh. 904-

Cowalescent Serum 1:4

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
30	✓	
10-22-48	31	<u>FOUND DEAD</u>

AUTOPSY: No gross nec  
TISSUE FOR SECTION: 2 medulla, 8 cervical 3 thoracic and  
 4 lumbar cord (Z.A.)

HISTOLOGY: Above segments show no pathology.

DIAGNOSIS: NO POLIO

Homologous Neutralization Test

Serum Dilution Method

Rh. 905-

Convalescent Serum 1:4

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
10.7-48	16	Quadriplegia - full movement of both hands.
	17	No Change
		<u>Sacrificed</u> Discarded

Homologous Neutralization Test

Serum Dilution Method

Rh. 906-

Convalescent Serum 1:4

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
33	✓	

10-25-48 34 ✓ SACRIFICED (chloroform-exsanguination)  
AUTOPSY: Morgagni the  
TISSUE FOR SECTION 2 Medulla, 4 cervical 2 thoracic  
 and 4 lumbar end segments (Z.A.)

HISTOLOGY: Above levels reveal no pathological changes.

DIAGNOSIS: NB POLIO

Homologous Neutralization Test

Serum Dilution Method

Ph. 907-

Convalescent Serum 1:4

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
33	✓	

10-25-48

34 ✓ SACRIFICED (chloroform-exsanguination)  
 Autopsy: No gross the  
 TISSUE FOR SECTION 2 Medulla 4 cervical 2 thoracic and 3 lumbar  
 cord segments (Z.A.)

HISTOLOGY! Above segments reveal no pathology.

DIAGNOSIS: NO POLIO

## Homologous Neutralization Test

## Serum Dilution Method

Rh. 908-

Convalescent Serum 1:16

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
9/27/48.	5	✓
	6	12:00 A.M. Aphonia; breathing with difficulty; has some difficulty in swallowing; There is general weakness of head, neck and all 4 extremities; - no facial paralysis; probably bulbar polio; expression alert.
		3:00 p.m. Progression of above signs, getting weaker in all 4 extremities but no frank paralysis; breathing entirely abdominal.
		<u>Sacrificed</u> - <u>Autopsy</u> ; no gross nec
		<u>Tissues</u> : Nalamus; midbrain; 2 Medulla; 4 Cervical; 1 Thoracic; 4 Lumbosacral. (2A.)
		<u>HISTOLOGY</u> : Above sections do not reveal polio pathology.
		<u>DIAGNOSIS</u> : <u>NO POLIO</u>

## Homologous Neutralization Test

Serum Dilution Method

Rh. 909-Convalescent Serum 1:16

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
33	✓	

10-25-48 34 ✓ SACRIFICED (chloroform-exsanguination)  
AUTOPSY: No gross the  
TISSUE FOR SECTION 2 Medulla 5 cervical 2 thoracic and 4 lumbar  
 cord segments (Z.A.)

HISTOLOGY: Above segments reveal no pathology.

DIAGNOSIS: NO POLIO

## Homologous Neutralization Test

## Serum Dilution Method

Rh. 910-

Convalescent Serum 1:16

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
33	✓	
10-25-48	34	✓ SACRIFICED (chloroform-exsanguination)

AUTOPSY: No gross the  
TISSUE FOR SECTION 2 Medulla 2 thoracic 5 cervical  
 and 7 lumbar cord segments (2.A.)

HISTOLOGY: Above segments reveal no pathology.

DIAGNOSIS: NO POLIO

Homologous Neutralization Test

Serum Dilution Method

Rh. 911

Cowalescent Serum 1:16

Sept. 21, 1948

Date

Day

Remarks

- 0 ✓
- 1 ✓
- 2 ✓
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓
- 8 ✓
- 9 ✓
- 10 ✓
- 11 ✓
- 12 ✓
- 13 ✓
- 14 ✓
- 15 ✓
- 16 ✓
- 17 ✓
- 18 ✓
- 19 ✓
- 20 ✓
- 21 ✓
- 22 ✓
- 23 ✓
- 24 ✓
- 25 ✓
- 26 ✓
- 27 ✓
- 28 ✓
- 29 ✓
- 30 ✓
- 31 ✓
- 32 ✓
- 33 ✓

10-25-48

34

✓ SACRIFICED (chloroform-exsanguination)  
AUTOPSY: No gross Abn  
TISSUE FOR SECTION 2 Medulla @ cervical 2 thoracic and  
 2 lumbar cord segments (2.A.)

HISTOLOGY: Above levels show no pathology.

DIAGNOSIS: NO POLIO

Homologous Neutralization Test

Serum Dilution Method

Ph. 912

Convalescent Serum 1:64

Date Day Remarks

Sept. 21, 1948

0 ✓  
 1 ✓  
 2 ✓  
 3 ✓  
 4 ✓  
 5 ✓  
 6 ✓  
 7 ✓  
 8 ✓  
 9 ✓  
 10 ✓  
 11 ✓  
 12 ✓  
 13 ✓  
 14 ✓  
 15 ✓  
 16 ✓  
 17 ✓  
 18 ✓  
 19 ✓  
 20 ✓  
 21 ✓  
 22 ✓  
 23 ✓  
 24 ✓  
 25 ✓  
 26 ✓  
 27 ✓  
 28 ✓  
 29 ✓  
 30 ✓  
 31 ✓  
 32 ✓  
 33 ✓

10-25-48

34

✓ SACRIFICED (chloroform-exasanguination)  
AUTOPSY: No gross the  
TISSUE FOR SECTION 2 Medulla 5 cervical 2 thoracic  
 and 4 lumbar cord segments

HISTOLOGY: Above segments show no pathology.

DIAGNOSIS: NO POLIO

Homologous Neutralization Test

Serum Dilution Method

Rh. 913

Covalescent Serum 1:64

Sept. 21, 1948

Date	Day	Remarks
	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
10-25-48	34	✓ SACRIFICED (chloroform-exsanguination)

AUTOPSY: No gross the  
TISSUE FOR SECTION 2 Cervical 2 Thoracic and  
 3 lumbar cord segments (2.A.)

HISTOLOGY: Above segments free of pathology.

DIAGNOSIS: NO POLIO

## Homologous Neutralization Test

## Serum Dilution Method

Rh. 914-

Convalescent Serum 1:64

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	Paromotor +; excited.
	11	" " "
	12	Same; now weakness.
	13	" " "
	14	" " "
	15	Seems OK today.
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
	33	✓
10.25.48	34	✓ SACRIFICED (chloroform- <u>exsanguination</u> ) AUTOPSY: No gross the <u>TISSUE FOR SECTION 2</u> Medulla; 4 cervical 2 thoracic and 4 lumbar cord segments. (Z.A.) <u>HISTOLOGY:</u> These segments reveal no pathology. <u>DIAGNOSIS:</u> <u>NO POLIO</u>

## Homologous Neutralization Test

Serum Dilution Method

Rh. 915Convalescent Serum 1:64-

Date	Day	Remarks
Sept. 21, 1948	0	✓
	1	✓
	2	✓
	3	✓
	4	✓
	5	✓
	6	✓
	7	✓
	8	✓
	9	✓
	10	✓
	11	✓
	12	✓
	13	✓
	14	✓
	15	✓
	16	✓
	17	✓
	18	✓
	19	✓
	20	✓
	21	✓
	22	✓
	23	✓
	24	✓
	25	✓
	26	✓
	27	✓
	28	✓
	29	✓
	30	✓
	31	✓
	32	✓
33	✓	

10-25-48 BY ✓ SACRIFICED (chloroform-exsanguination)

AUTOPSY: No gross the  
 TISSUE FOR SECTION (3) Medulla 2 thoracic 5 cervical and 3  
 lumbar cord segments (Z.A.)

HISTOLOGY: Above segments reveal no pathology.

DIAGNOSIS: NO POLIO

Cont'd)

Number

Mean

Control

Medulla

Midbrain

Thalamus

Other

Diagnosis

NO NO LOGS: NEUTRALIZATION TEST (PLUS ALL IMMUNE SERUM) 10/28/48

SALINE Rx. 646

$10^{-2}$  647.

SAL.  $10^{-3}$  648

649

650.

SAL.  $10^{-4}$  651

652

653.

ADULT SERUM  $10^{-1}$  654

655

656-

ADULT SERUM  $10^{-2}$  657

658

659-

ADULT SERUM  $10^{-3}$  660

661

662

POLIO - 1947. - MONKEY HISTOLOGY.

Mk. #. Number. Tissue. Serial. Module. McLean Thalwos. Hypod. Op. Bull. PHENOLS

PRIMARY ISOLATION.

Rh. #1 NHI: Pt. NT. NHI: Pt. NT. NHI: Pt. NT. POLIO.

Rh. 897 O (isolated (ABS) 8.20.48.) O O O — (Hemolytic No Pct's (No cell in 3 specimens.))

GENERATION II

Rh. 17 NHI: Pt. NHI: Pt. NHI: Pt. NHI: Pt. POLIO.

Rh. 18 NHI: Pt. NHI: Pt. NHI: Pt. NT. POLIO

TITRATION OF GENERATION II VIRUS.

<sup>10<sup>-2</sup></sup> Rh. 435 436

<sup>10<sup>-3</sup></sup> 437 438 O O O O O O O O No Pct's.

439 O O O O O O O O No Pct's

<sup>10<sup>-4</sup></sup> 440 441 O O O O O O O O No Pct's.

442 O O O O O O O O No Pct's.

<sup>10<sup>-5</sup></sup> 443 O O O O O O O O No Pct's.

444 O O O O O O O O No Pct's

445 O O O O O O O O No Pct's

446 O O O O O O O O No Pct's

No Pct's.  
No Pct's

No Pct's.

No Pct's.

No Pct's

(Hemolytic No cell in 3 specimens.)