NERVE CONDUCTION VELOCITY - DOGS - rats

~~2 YEAR SACRIFICE~~

Manuscript

"~~WORKING~~" ~~SHEET~~

N37515

The left hind leg of the animal was obtained
death, but this time interval was highly variable: 12 ±
for the rats which were chloroformed, 3.5 ± 1 minute for the
decapitated, and 5 ± 3 minutes (range: 3.5 to 16.5 minute
of the nerve from a leg from a chloroformed rat was sometimes delayed, sinc
autopsy room resulted, at times, in two exps arrivi
a few minutes of each other.

start $CHCl_3$ to mount n. 28 ± 4 mins (range: 19 - 47 m
decap. to mount n. 14 ± 2 mins (range 11 - ~~17.5~~ 19 mins)
electrode " (range 19 - 31 mins)

DUP050043928

MR 787
Calc. Least Sig. Difference - (LSD)
of log means

	41.5336	↓
N=3	3	÷
	13.8445	A◊
		A/
	3.7208	A◊
	41.5336	↓
N=4	4	÷
	10.3834	A◊
		A/
	3.2223	A◊
	3.7208	↓
	2.201	X
LSD	8.1894	A◊
	3.2223	↓
	2.201	X
LSD	7.0922	A◊

DUP050043929

Dog nerves
Groups I-V ♀

N=4

```
        21.3846   ↓
              2   X
        42.7692   A◊
              4   ÷
        10.6923   A◊
                  A√
         3.2699   A◊
          2.160   X
LSD   →7.0629   A◊
```

N=2

```
        21.3846   ↓
              2   X
        42.7692   A◊
              2   ÷
        21.3846   A◊
                  A√
         4.6243   A◊
          2.160   X
LSD   →9.9884   A◊
```

Dog Nerves.

To find "least significant difference" (LSD). ♂ Inflection velocities

$$LSD = \sqrt{\frac{\text{mean square} \times 2}{N}} \times t_{05}$$

where, from F-test: t_{05} is for degrees of freedom for within columns or within treatment groups, and mean square is that for within treatment groups.

	GR II	III	IV	V
N	4	4	4	3

→ degrees of freedom = 3 + 3 + 3 + 2 = 11, mean square = printout after plug in 11.

(note: ~~#~~ no data group I males). $t_{05_{11}} = \underline{2.201}$

Inflection velocities, ♂ dogs. Average values -

	GR II	III	IV	V
av.	86.5	95.2	99.0	91.7
$+\frac{LSD}{2}$	90.0	98.7	102.5	95.8
$-\frac{LSD}{2}$	83.0	91.7	95.5	87.6

mean square (within groups) = 20.7668

$t_{05_{11}} = 2.201$

LSD for $N=4 = 2.201 \times \sqrt{\frac{2 \times 20.7668}{4}}$

$= 7.092$

LSD for $N=3 = 2.201 \times \sqrt{\frac{2.207668}{3}}$

$= 8.1894.$

Ranges: GR II : 83 – 90

III : 91.7 – 98.7

IV : 95.5 – 102.5

V : 87.6 – 95.8

For significance,

GR II Av. $+ \frac{LSD}{2}$ and Av. $- \frac{LSD}{2}$

must not overlap, same for Group III (eg)

∴ GR II is sign. dif. from GR III + from GR IV

not " " " GR IV.

however, groups III, IV, + V overlap, ∴ do not differ significantly from each other.

females next sheet

DUP050043931

Dry nerves & % inflection velocities

$LSD = \sqrt{\frac{\text{mean square} \times 2}{4}} \times 2.160 = 7.0629$ $N=4$ $\quad 2\overline{)7.0629}\ 3.53145$

$\sqrt{\frac{\text{mean square} \times 2}{2}} \times 2.160 = 9.9884$ $N=2$ $\quad 2\overline{)19.9884}\ 4.9942$

$t_{05}{}_{13} = 2.160$

mean square "within groups" = 21.3846

	GR I N=4	II N=4	III N=4	IV N=4	V N=2
average:	91.2	89.5	93.5	90.8	91.5
+ $\frac{LSD}{2}$	94.7	93.0	97.0	94.3	96.5
- $\frac{LSD}{2}$	87.7	86.0	90.0	87.3	86.5

Ranges (av - $\frac{LSD}{2}$ to Av + $\frac{LSD}{2}$)

Groups I	87.7 - 94.7	All treated groups (II-V) overlap GR I	
II	86 - 93	GR II - overlap all groups	
III	90 - 97	III .. all groups	
IV	87.3 - 94.3	IV .. all group	
V	86.5 - 96.5	V .. all groups.	

DUP050043932

Calc. least significant difference

for F-test

$\sigma^2 \sim MS \rightarrow$

CW

11

3

F

← use

$$LSD = t_{0.05_{11}} \times \sqrt{\frac{2 \times s^2}{n}}$$

mint-at dfn 11 (°Freedom)

Snedecor Ed. 6. p272

$$= 2.201 \times \sqrt{\frac{2 \times 20.7668}{3}} =$$

$$= 2.201 \times \sqrt{\frac{41.5336}{3\ (\text{or } 4)}}$$

$$= 2.201 \times \sqrt{13.8445} \quad \text{or} \quad 2.201 \times \sqrt{10.38340}$$

$$2.201 \times 3.1218$$

$$= 2.201 \times 3.620215$$

Old Gibson

Marshall

DUP050043933

Dog nerves.

Calculation of "Least significant difference" (LSD):

s^2 (stand. dev.^{2}) : print-out following input 11° Freedom (♂ dogs) [for within group variance]
actually mean square

ie DV
RV

CW : input: °F for columns
get print-out mean square ← use
input: °F for # groups (4 groups, → 3 °F)
get print-out ~~of~~ mean square
Then print out of F.

For t_{05} and 11 Degrees of Freedom : = 2.201

mean square : 20.7668 for ♂ dogs, groups II–V.

N = no. nerves/group. Most groups = 4
Gr. V = 3

Try: N=3, & N=4.

$$LSD = t_{0.05_{11}} \times \sqrt{\frac{2 \times s^2}{N}}$$

1. $LSD = 2.201 \times \sqrt{\frac{2 \times s^2}{3}} = 2.201 \times \sqrt{\frac{2 \times 20.7668}{3}} = 2.201 \times \sqrt{\frac{41.5336}{3}} = 2.201 \times 3.7208$
$= \underline{8.1894}$ LSD

2 $= 2.201 \times \sqrt{\frac{2 \times s^2}{4}} = 2.201 \times \sqrt{\frac{2 \times 20.7668}{4}} \quad 2.201 \times \sqrt{\frac{41.5336}{4}} = 2.201 \times 3.2223$
$= \underline{7.092}$ 2 LSD

	GROUP II N=4	III N=4	IV N=4	V N=3
aver:	86.5	95.2	99.0	91.7
+ LSD/2	90.0	98.7	102.5	95.8
− LSD/2	83.0	91.7	95.5	87.6

2 | 8.1894
4.0947

2 | 7.092
3.546

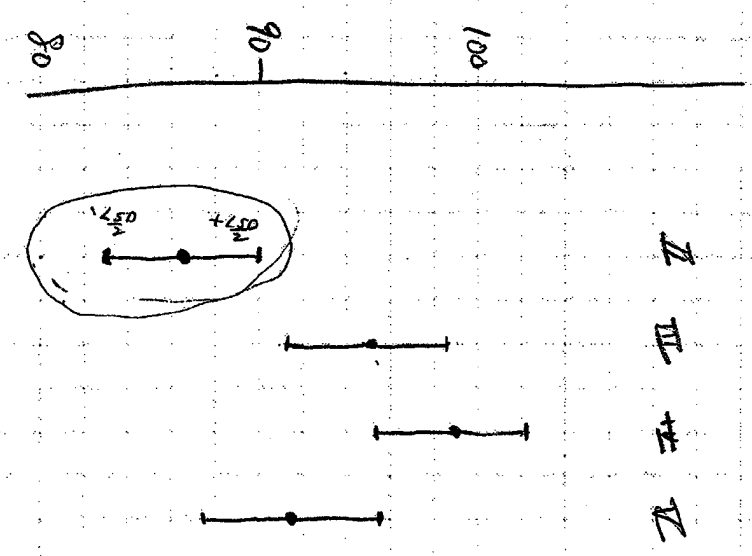
DUP050043934

$$\begin{array}{r} 86.5 \\ 3.5 \\ \hline 90.0 \end{array} \qquad \begin{array}{r} 86.5 \\ 3.5 \\ \hline 83.0 \end{array}$$

$$\begin{array}{r} 95.2 \\ +\ 3.5 \\ \hline 98.7 \end{array} \qquad \begin{array}{r} 95.2 \\ -\ 3.5 \\ \hline 91.7 \end{array}$$

$$\begin{array}{r} 99.0 \\ +\ 3.5 \\ \hline 102.5 \end{array} \qquad \begin{array}{r} 99.0 \\ -\ 3.5 \\ \hline 95.5 \end{array}$$

$$\begin{array}{r} 91.7 \\ +\ 4.1 \\ \hline 95.8 \end{array} \qquad \begin{array}{r} 91.7 \\ -\ 4.1 \\ \hline 87.6 \end{array}$$



DOG: TIBIALIS
Pb-FEEDING

FOR F TEST:
DEGREES OF FREEDOM: 24 FOR THE COLUMNS & 4 FOR TREATMENT

	TREATMENT GROUP I	II	III	IV	V			TREATMENT GROUP I	II	III	IV
	"INFLECTION" VELOCITY [STIMULUS ARTIFACT TO INFLECTION OF RESPONSE.							"PEAK" VELOCITY [STIMULUS ARTIFACT TO P			
♂	[illegible]	78	102	99	90		♂	[illegible]	46	58	57
	[illegible]	84	98	99	92			—	52	50	52
	—	87	92	105	93			—	50	52	53
	—	92	89	93	—			—	51	50	51
♀	93	84	92	85	91		♀	53	48	54	50
	87	88	91	93	92			51	47	53	55
	92	88	89	93	—			54	52	50	54
	93	98	102	92	—			52	56	52	52
ALL NERVES.	$\bar{x}$ = 92, S.D. = ± 5.6 M/SEC.							$\bar{x}$ = 52, S.D. = ± 2.6 M/SEC			
F TEST FOR TREATMENT EFFECT:	F = 3.0571 0.01 < P < 0.05							F = 1.2203.		INSIGNIFICANT.	
N = 33											
"INFLECTION" VELOCITY: MEASURED INFLECTION TO INFLECTION.								"PEAK" VELOCITY: MEASURED "PEAK TO PEA			
♂	—	98	99	63	103		♂	—	53	86	69
	—	106	71	46	108			—	76	64	66
	—	98	112	92	116			—	67	67	66
	—	90	95	84	—			—	74	73	? 62
♀	102	102	112	120	94		♀	64	64	73	57
	116	85	111	? 114	81			55	67	84	73
	? 90	97	90	109	—			93	70	84	76
	90	141	? 145	145	—			78	72	73	62
ALL NERVES.	$\bar{x}$ = 100, S.D. = ± 20.9 METERS/SEC							$\bar{x}$ = 69, S.D. = ± 9.1 METERS/			
F TEST FOR TREATMENT EFFECT:	F = 0.6899 INSIGNIFICANT							F = 1.7726.		INSIGNIFICANT	

DUP050043936

RATS. SCIATIC - TIBIALIS PREPARATION.
18 MONTH SACRIFICE.

VELOCITY MEASUREMENTS: FROM STIMULUS ARTIFACT TO 1) INFLECTION OF AND TO 2) PEAK OF RESPONSE.
CONDUCTION DISTANCE: 2.5 CM.

F TEST: DEGREES OF FREEDOM, COLUMNS = 60
[FOR EFFECT OF TREATMENT] TREATMENT = 5

TREATMENT GROUP

	I	IA	II	III	IV	V
	INFLECTION CONDUCTION VELOCITY. M/SEC.					
♂	76	65	63	83	72	89
	86	72	? 62	83	78	78
	77	83	83	83	? 74	81
	78	74	67	74	96	72
	89	83	83	74	76	69
	69	? 82	66	81	89	71
♀	76	78	49	62	69	? 76
	78	82	85	82	78	69
	89	76	76	? 82	74	? 78
	68	75	67	78	87	80
	78	71	86	76	81	80
	77	82	66	65	69	56
	PEAK CONDUCTION VELOCITY. M/SEC.					
♂	43	43	40	47	46	45
	42	44	45	44	45	44
	47	42	53	? 30	46	44
	44	43	42	39	53	40
	51	45	46	46	48	41
	48	45	? 35	42	42	42
♀	45	44	36	41	45	44
	45	44	46	47	45	41
	48	49	46	49	42	48
	42	42	45	45	47	42
	48	41	45	44	45	45
	45	42	45	40	44	45

ALL NERVES: $\bar{x}$ = 76, STAND. DEV. = ± 8.3 M/sec.
F = 1.3534 INSIGN.

°F : 30 for columns } test sign. of Groups II - V
3 for treatment }

Columns II, III & IV:
°F columns 15
°F Treatment 2

FOR ALL NERVES: $\bar{x}$ = 44, STAND. DEV. = 3.6 M/sec.
F = 1.3566 INSIGNIFICANT

36
3
72

DUP050043937

RAT. SCIATIC - TIBIALIS PREPARATION.
24 MONTH SACRIFICE

VELOCITY MEASUREMENTS: FROM STIMULUS ARTIFACT TO 1) INFLECTION OF RESPONSE AND TO 2) PEAK OF RESPONSE.
CONDUCTION DISTANCE: 2.97 CM [FEW NERVES; SHORTER].

F TEST FOR EFFECT OF TREATMENT: DEGREES OF FREEDOM : COLUMNS = ~~57~~ 140
TREATMENT : 5

	TREATMENT GROUP					
	I	I A	II	III	IV	V
	INFLECTION CONDUCTION VELOCITY. M/SEC.					
N = 62 ♂	56	72	? 54	68	60	
	56	74	65	67	64	
	? 65	70	71	68	64	
	? 41	65	? 48	64	? 67	
	62	66	68	70	61	
	71	64	63	56	63	
	63	74	65	67	62	
	67	71	65	65	73	
	71	? 69	68	61	63	
	100	71	71	57	70	
	72	53	65	? 59	61	
	59	63	76	66	65	
	12	65	68		1 missing	
		13	13	12	12	
For Columns	11	12	12	11	11	
N = 89 ♀	68	59	73	68	68	62
	68	59	60	60	86	54
	63	65	59	70	68	69
	61	58	59	59	61	? 58
	62	70	68	55	58	63
	? 62	64	59	? 57	56	65
	57	58	63	66	65	68
	69	68	? 65	61	68	64
	65	68	68	69	64	61
	69	65	68	66	67	64
	69	53	64	60	62	68
	56	73	63	63	56	72
	68		59	68	? 81	
	74		? 62	64	68	
	72		61	72	58	
	62		67	? 61	59	
					44	
	16	12	16	16	17	12

NOTE: 1 MEASUREMENT MISSING

NO MALE RATS GROUP V

ALL NERVES, MALES + FEMALES: $\bar{x}$ = 64 M/sec
STANDARD DEVIATION: ± 6.8 M/sec.
F = 0.2504 INSIGN.

FOR TREATMENT GROUPS:

	STAND DEV. + $\bar{x}$					
	I	I A	II	III	IV	V
♂	65 ± 14	67 ± 5.7	65 ± 7.3	64 ± 4.6	64 ± 3.9	—
♀	65 ± 5	63 ± 6	64 ± 4.3	64 ± 5.0	64 ± 9.7	64 ± 5.0

DUP050043938

KAT. SCIATIC-TIBIALIS PREPARATION.
24 MONTH SACRIFICE CONTINUED.

P-2

F TEST FOR EFFECT OF TREATMENT. DEGREES OF FREEDOM: COLUMNS = 58 / 41
TREATMENT : 5

	TREATMENT GROUP					
	I	IA	II	III	IV	V
	"PEAK"	CONDUCTION	VELOCITY	M/SEC.		
N=63 ♂	40	47	38	38	34	
	36	39	37	42	41	
	40	43	40	32	43	
	? 28	42	33	40	39	
	? 33	40	40	39	34	
	44	34	38	31	? 30	
	39	35	40	41	? 36	
	38	45	31	40	43	
	32	36	42	34	33	
	? 45	34	39	29	? 31	
	? 36	31	41	37	34	
	32	29	44	33	44	
		33	37		39	
	12	13	13	12	13	0
N= 89 ♀	? 32	34	39	40	33	36
	41	38	40	33	43	32
	38	31	34	46	37	41
	40	36	34	34	41	38
	35	42	38	27	38	37
	33	41	38	37	31	34
	37	26	40	42	42	42
	32	40	39	32	39	39
	33	37	42	44	38	37
	45	41	40	39	36	33
	37	? 26	39	40	36	43
	37	38	31	38	28	40
	41		33	42	40	
	42		41	38	41	
	44		37	45	38	
	41		38	42	39	
	16	12	16	16	31 17	12

NO MALE RATS GROUP V

♂

♀

ALL NERVES, MALE & FEMALE: $\bar{x}$ = 37 M/SEC
STAND. DEV. = ± 4.4 M/SEC.
F = 0.2946. INSIGN.

FOR TREATMENT GROUPS:
$\bar{x}$ ± STAND. DEV.

I	IA	II	III	IV	V

.11

12
16
13
12
13
16
12
16
13
17
12
152

DUP050043939

*CONDUCTION DISTANCE: 2.47 CM.

SPECIAL LEAD-FED RATS
6 MO. SACRIFICE.

INFLECTION VELOCITY		PEAK VELOCITY	
CONTROLS	TREATED	CONTROLS	TREATED
N=9	N=10	N=9	N=10
68.6	61.8	39.5	37.8
77.2	66.0	40.8	41.6
66.0	64.0	39.4	40.2
62.7	68.6	40.5	41.6
68.6	62.7	40.8	40.8
67.5	74.0	40.8	41.2
68.6	66.8	41.2	42.2
72.6	67.5	41.6	40.2
77.2	70.6	40.8	40.5
	71.4		44.1
$\bar{x}$ 69.9	67.3	$\bar{x}$ 40.6	41.0
±S.D. ± 4.9	± 3.9	±S.D. 0.72	1.6

DUP050043940

RAT (♂ ONLY)

SCIATIC - TIBIALIS PREPARATION.

SPECIALS. 5000 PPM - 6 MO. SACRIFICE.

ALL NERVES: F TEST -

DEGREES OF FREEDOM: COLUMNS = 17

TREATMENT = 1

MEASUREMENT: STIMULUS ARTIFACT TO 1) INFLECTION OF AND TO 2) PEAK OF RESPONSE.

CONDUCTION DISTANCE: 2.47 CM.

N = 9 CONTROLS | N = 10 TREATED

INFLECTION	VELOCITY M/SEC
69	62
77	66
66	64
63	69
69	63
68	74
69	67
73	68
77	71
	71

ALL NERVES: $\bar{x}$ = 69 STAND DEV = 4.41 M/SEC.

F = 1.75 1,8 INSIGN.

PEAK VELOCITY M/SEC.	
40	38
41	42
39	40
40	42
41	41
41	41
41	42
42	40
41	40
	44

ALL NERVES: $\bar{x}$ = 41 M/SEC. STAND. DEV. = 1.3 M/SEC.

F = 0.2982 INSIGN.

CONDUCTION DIST: 2.97 CM.

N = 9 CONTROLS | N = 10 TREATED

INFLECTION	VELOCITY M/SEC
66	63
68	71
66	65
67	73
70	68
71	70
71	68
71	73
82	71
	70

$\bar{x}$ = 70 STAND DEV = ± 4.0 M/SEC.

F = 0.2930 INSIGN.

PEAK VELOCITY M/SEC.	
42	41
44	46
43	43
43	45
46	44
43	43
44	46
45	45
47	44
	47

$\bar{x}$ = 44 STAND DEV. = 1.7 M/SEC.

F = 0.1363 INSIGN.

DUP050043941

RATS (♂ ONLY)
SCIATIC - TIBIALIS PREPARATION
SPECIALS: 5000 PPM Pb 12 MO. SACRIFICE

ALL NERVES: F-TEST;
DEGREES OF FREEDOM, COLUMNS = 17
TREATMENT = 1

MEASUREMENT: STIMULUS ARTIFACT TO 1) INFLECTION OF AND TO 2) PEAK OF RESPONSE.
COND. DISTANCE: 2.96 CM.

	N = 9 CONTROLS		N = 10 TREATED	
	INFLECTION CONDUCTION VELOCITY M/sec.			
	67		65	
	79		65	
	72		67	
	70		70	
	73		79	
	73		68	
	79		76	
	76		65	
	65		73	
			69	
	PEAK CONDUCTION VELOCITY. M/sec.			
	44		44	
	45		43	
	45		43	
	41		46	
	46		47	
	48		43	
	44		47	
	48		36	
	43		47	
			45	

ALL NERVES: $\bar{x}$ = 71, STAND. DEV. = ± 5 M/sec
F = 1.7538 INSIGN.

ALL NERVES: $\bar{x}$ = 44 M/sec., STAND DEV. = ± 2.8 M/sec.
F = 0.3585 INSIGN.

DUP050043942

2-YR. SACRIFICE. Pb-FED RATS. $CHCl_3$.

INFLECTION CONDUCTION VELOCITY (STIMULUS ARTIFAC

AUTOPSY DAY

TREATMENT GROUP	♂ DAY 1	DAY 2	DAY 3	DAY 4	♀ DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10	
I	56	[41]	63	100	68	63	61	65	69	56	
	56	62	67	72	68		62		69	68	
	[65]	71	71	59			[62]			74	18
							57			72	
							69			62	
I A.	72	65	71	53	59	58	58	65	73		16
	74	66	69	63	59	70	68	53			
	70	64	71	65	65	64	68				
		74									
II	[54]	68	65	65	73	59	63	68	63	[62]	19
	65	63	68	76	60	68	[65]	68	59	61	
	71	65	71	68	59	59		64		67	
	[48]										
III	68	70	65	61	68	59	[57]	61	63	72	18
	67	56		57	60	55	66	69	68	[61]	
	68	67		[59]	70			66	64		
	68			66				60			
IV	60	61	63	61	68	68	56	64	56	58	19
	64	63	70	65	86	61	65	67	81	59	
	64	[62]				58	68	62	68	44	
	[67]	73									
V					62	[58]	63	64	68	72	8
					54	58	65	61			
					69	63	68	64			

DUP050043943

TABLE I

IMPULSE CONDUCTION VELOCITIES: RATS

Treatment group	Lead Added to Diet ppm	N	Average Conduction Velocity ± 1 stand. deviation Inflection: M/sec Males	Inflection: M/sec Females	Peak: M/sec. Males	Peak: M/sec. Females
Killed by Decapitation						
After 6 months treatment. Silicone preparation. Stimulator: Grass® S4G						
I	0	9	70 ± 5.1	NONE	44 ± 1.5	NONE
II	5000	10	69 ± 3.2	NONE	44 ± 1.8	NONE
After 13 months treatment. Silicone preparation. Stimulator: Tektronix® unit						
I	0	9	73 ± 4.8	NONE	45 ± 2.3	NONE
II	5000	10	70 ± 5.0	NONE	44 ± 3.2	NONE
Killed by Chloroform						
After 18 months treatment. Ringer's solution. Stimulator: Grass® S4G.						2.5
I	0	6M 6F	79 ± 7.3	78 ± 6.8	46 ± 3.6	45 ± 2.1
IA	0	6M 6F	76 ± 7.5	77 ± 4.3	43 ± 1.1	44 ± 2.7
II	10	6M 6F	71 ± 9.8	71 ± 14.0	43 ± 6.4	44 ± 3.9
III	50	6M 6F	80 ± 4.7	74 ± 8.4	41 ± 6.0	44 ± 3.4
IV	100	6M 6F	81 ± 9.7	76 ± 7.4	47 ± 3.8	44 ± 1.8
V	500	6M 6F	77 ± 7.6	78 ± 5.5	42 ± 1.7	44 ± 2.6
After 24 months treatment. Silicone preparation. Stimulator: Tektronix® unit.						
I	0	12M 16F	65 ± 13.7	65 ± 5.3	37 ± 4.9	38 ± 4.1
IA	0	13M 12F	67 ± 5.8	63 ± 6.0	38 ± 5.6	36 ± 5.5
II	10	13M 16F	65 ± 7.3	64 ± 4.3	38 ± 3.6	38 ± 3.1
III	50	12M 16F	65 ± 4.6	64 ± 4.8	36 ± 4.4	39 ± 5.1
IV	100	12-13M* 17F	64 ± 3.9	64 ± 9.0	37 ± 4.8	37 ± 4.2
V	500	0M† 12F	—	63 ± 4.9	—	37 ± 4.1

* inflection velocity could not be determined in one photograph.

† males: sacrificed early.

DUP050043944

TABLE II
IMPULSE CONDUCTION VELOCITY: DOGS

GROUP	Lead Added to Diet ppm	N	Average Conduction Velocity ± 1 Standard Deviation. Inflection: M/sec males and females*	Peak: M/sec. males and females*
I	0	0M 4F	91 ± 2.9	53 ± 1.3
II	10	4M 4F	88 ± 5.0	51 ± 2.8
III	50	4M 4F	94 ± 5.5	52 ± 2.7
IV	100	4M 4F	95 ± 6.0	53 ± 2.3
V	500	3M 2F	92 ± 1.1	51 ± 2.2

* Variance Analysis: differences between sexes insignificant ($p > 0.05$).

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TABLE I

IMPULSE CONDUCTION VELOCITIES: RATS.

Rats		Cond. Dist 2.5				Cond Dist 8.0	
		Int.		Peri		Int.	Peri
Silicon oil #1	I	70		41		70	44
	II	67		41		69	44
#2	I					73	45
	II	Int		Peri		70	44
Rats		♂	♀	♂	♀		
	I	79	78	46	45		
	IA	76	77	43	44		
	II	71	71	43	44		
	III	80	74	41	44		
	IV	81	76	47	44		
	V	77	78	42	44		

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DOG / Nerves — data used for [illegible]

NERVE & PHOTO	Record. elec.	Shed act. to resp. INFL.	PK.	MINS & sec. shelf
9c	5-8	84	52 ←	15 55
29b	5-8	98	56	15
31b	5-8	91	53	15
10a	5-9	87	50	5
13c	5-9	98	50	15
17b	5-9	99	52	15 05
18b	5-9	105	53	15
19a	5-9	93	51	15
20a	5-9	93	53	15 45
21b	5-9	87 -	51	15
22b	5-9	92 -	54	14 55
23b	5-9	93	52	15
24b	5-9	91 -	50	15
25c	5-9	92 -	53	17
26b	5-9	84 -	48 ←	15
27b	5-9	88 -	47	15
28b	5-9	88 -	52	16
32b	5-9	89 -	50	15
33b	5-9	102 -	52	15
34b	5-9	85 -	50 ←	20
35b	5-9	93 -	55	15
36b	5-9	93 -	54	15
37b	5-9	92 -	52	20

NERVE & Photo #	Record. elec.	Shed act. to response INFL.	PK	MINS secs in shelf
5b	5-10	90	48	15 10
6b	5-10	92	53	15
7d	5-10	93	52	15
8b	5-10	[illegible] 83 ~~78~~	46	14 45 ←
11a	5-10	92	51	15
12a	5-10	102	58	15
14c	5-10	92	52	15
15a	5-10	89	50	15
16a	5-10	99	57	15
30b	5-10	92	54	16

low shelf temp but stem [illegible]

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SPECIAL LEAD FED RATS: DECAPITATED. C = control
T = treated

DECAPITATION: MIN-0.

NERVE #		Received leg from MAR. MIN ①	SEC	Mounted in shelter MIN ②	SEC	from received to mounted MIN ③	SEC	For calc. avg. & SD. calc: From MAR MIN ①	Mounted MINS ②	receiv. to mount MINS ③
6 mo. sacrifice										
DAY 1										
1	C	2	15	11	30	9	15	2.25	11.5	9.25
2	C	2	30	12		9	30	2.50	12.0	9.5
3	C	2	50	11	45	8	55	2.8	11.75	9.0
4	C	2	40	12		9	20	2.7	12.0	9.3
5	C	2	35	13	15	11	20	2.5	13.25	11.3
6	T	2	42	12		9	18	2.7	12.0	9.3
7	T	2	45	12	30	9	45	2.75	12.5	9.75
8	T	2	55	11	45	8	50	3	11.75	8.8
9	T	3	10	13		9	50	3.17	13.0	9.8
10	T	2	30	13	45	11	15	2.5	13.75	11.25
DAY 2										
1		2	40	12		9	20	2.7	12.0	9.3
2		3	20	13	15	9	55	3.3	13.25	10.0
3		3	5	12	45	9	40	3.0	12.75	9.7
4		2	35	12	40	10	5	2.5	12.7	10.0
5		2	55	15	15	12	20	3.0	15.25	12.3
6		2	35	13	15	10	40	2.5	13.25	10.7
7		2	50	12	50	10		2.8	12.8	10.0
8		2	30	11	55	9	25	2.5	12.0	9.5
9		2	50	12	45	9	55	2.8	12.75	10.0
10		2	55	11	20	8	25	3.0	11.3	8.5
both days	$\bar{x}$							2.75	12.6	9.9
	σ							0.2683	0.9179	0.9196

		Rec. from MAR	Mounted	Rec. to Mount
ALL DATA: BOTH 6 mo. + 13 mo. sacrifices -	$\bar{x}$	3.4	14.1	10.7
	σ	0.7382	1.9700	1.4681
	call:	3.5 ± 1.0	14.0 ± 2.0	10.7 ± 1.5

nerve	Rec. from MAR M	SEC	Mounted in shelter M	SEC	from rec. to mount M	SEC
12 mo. sacrifice						
Day 1						
1	3	50	16	50	13	
2	3		15		12	
3	3	55	16	30	12	35
4	4	15	17	30	13	15
5	4	20	17	20	13	
6	4	10	19		14	50
7	4	10	15	50	11	40
8	4	15	15	45	11	30
9	4	15	14	25	10	10
10	4	10	14	45	10	35
DAY 2						
1	4		14	30	10	30
2	4	15	13	35	9	20
3	4	15	14	20	10	5
4	3	55	16	30	12	35
5	4	05	15	50	11	45
6	4	25	17		12	35
7	4	15	15	20	11	5
8	4	10	14		9	5
9	4	5	14	30	10	25
10	NERVE NOT RECE					

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DOG NERVES - INFLECTION VELOCITIES - BY SACRIFICE DAY.

	Nerve #	Dog #	Group #	Inflectic veloc. m/sec.	Inflec. vel. in groups ♂	N
11-20-67	1	515	I ♂	X	I: —	0
	2	451	I ♂		II: 83-92	4
	3	493	I ♂		III: 89-102	4
	4	510	I ♂		IV: 93-105	4
					V: 90-93	3
11-21-67	5	462	V ♂	90		
	6	506	V ♂	92	♀	
	7	511	V ♂	93	I 87-93	4
tangent	8	508	II ♂	83	II 84-98	4
			av	89.5	III 89-102	4
11-22-67	9	513	II ♂	84	IV 85-93	4
	10	503	II ♂	87	V 91-92	2
	11	509	II ♂	92		
	12	516	III ♂	102		
→ break			av	91.2		
11-27-67	13	507	III ♂	98		
	14	514	III ♂	92		
	15	491	III ♂	89		
	16	489	IV ♂	99		
			av	94.5		
11-28-67	17	450	IV ♂	99		
	18	512	IV ♂	105		
	19	517	IV ♂	93		
	20	470	I ♀	93		
			av	97.5		
11-29-67	21	519	I ♀	87		
	22	520	I ♀	92		
	23	527	I ♀	93		
	24	475	V ♀	91		
			av	90.8		

Date	Nerve #	Dog #	Group #	Veloc. Inflectic m/sec.
11-30-67	25	522	V ♀	92
	26	518	II ♀	84
	27	531	II ♀	88
	28	528	II ♀	88
			av	88
12-1-67	29	529	II ♀	98
	30	525	III ♀	92
	31	526	III ♀	91
	32	532	III ♀	89
→ break			av	92.5
12-4-67	33	533	III ♀	102
	34	530	IV ♀	85
	35	534	IV ♀	93
	36	537	IV ♀	93
			av	93.2
12-5-67	37	538	IV ♀	92

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ELEC 3 - 2.48
5 - 4.47
7 - 6.44
8 - 7.48
10 - 9.45

COND. Vel. = cond dist, cm. x 10 / conduction time - msec. = meters/sec

-1-

Dup

NERVE #	PHOTO #	SWEEP SPEED	RECORDING ELECTR #	INFLECTION DIVISIONS	INFLECTION mSec	INFLECTION M/sec	PEAK DIVISIONS	PEAK mSec	PEAK M/sec	RECORDING ELEC.	INFLECTION Div.	INFLECTION mSec	INFLECTION M/sec	PEAK Div.	PEAK mSec	PEAK M/sec	
1	1a	0.2	5	2.26	0.452	98.89	5.13	1.026	43.567	8	4.70	0.940	79.57	6.83	1.366	54.758	ground
	1b	0.5	5	1.13	0.565	79.11	2.06	0.412	43.398	8	1.88	0.940	79.57	2.77	1.385	54.007	ground
2	2a	0.2	5	3.05	0.610	73.28	5.05	1.010	44.257	8	4.43	0.886	90.406	6.68	1.336	55.988	gn
	2b	0.2	5	3.08	0.616	72.6	5.0	1.000	44.700	8	4.3	0.860	86.977	6.4	1.280	58.266	gn.
	2c	0.5	5	1.15	0.575	77.7	2.0	1.000	44.700	8	1.7	0.850	85.706	2.55	1.275	58.667	← gn.
	2d	0.5	5	1.13	0.565	79.1	2.0	1.000	44.700	8	1.65	0.825	90.667	? 2.48 / 2.61	1.240 / 1.305	? 60.322 / 57.318	← small gn.
	2e	0.2	5	2.78	0.556	80.4	4.73	0.946	47.251	8	4.53	0.906	82.562	6.37	1.274	59.649	gn.
	2f	0.2	5	2.67	0.534	83.7	4.47	0.894	50.000	10	4.87	0.974	97.022	7.14	1.428	66.176	gn
	2i	0.2	7	3.29	0.658	97.87	5.54	1.108	58.123	10	4.70	0.940	100.532	7.52	1.504	62.832	gn.
3	3a	0.2	5	2.88	0.576	77.	4.91	0.982	45.519	8	4.31	0.862	86.775	? 6.7	1.34	55.821	gn.
	3b	0.5	5	1.20	0.600	74.5	? 1.98 / 2.13	0.990 / 1.065	45.152	8	1.65	0.825	90.667	2.73	1.365	54.798	small gn
	3c	0.2	5	3.20	0.640	70.0	4.80	0.960	46.562	8	4.61	0.922	81.128	6.73	1.346	55.572	gn.
	3e	0.2	7	4.3	0.86	74.9	6.2	1.240	57.936	10	5.75	1.150	82.17	8.03	1.606	58.854	gn.
	3f	0.2	5	2.57	0.514	87.0	4.7	0.940	47.553	8	4.3	0.860	87.116	6.6	1.320	56.667	gn.
4	4a	0.2	3	1.63	0.326	135.75	3.23	0.646	38.39	5	2.53	0.506	88.34	4.83	0.966	46.273	gn
	4c	0.2	3	1.65	0.330	75.152	3.07	0.614	40.39	5	2.55	0.510	87.647	4.67	0.934	47.858	gn.
	4d	0.2	3	1.50	0.300	82.7 / 73.810	3.06	0.612	40.5	5	2.53	0.506	88.3	4.63	0.926	48.3	
	4e	0.2	3	1.68	0.336	133.64	3.08	0.616	40.26	5	2.58	0.516	86.627	4.61	9.22	48.482	gn.
5	5a	0.2	5	2.58	0.516	86.63	4.80	0.960	46.55	8	3.95	0.790	94.684	7.47	1.494	50.067	5 gn.
	5b	0.2	5	2.49	0.498	89.759	4.64	0.928	48.167	8	3.95	0.790	94.684	7.17	1.434	52.160	5 gn.
	5d	0.2	5	2.57	0.514	86.96	4.65	0.930	48.064	8	3.93	0.786	95.165	7.02	1.404	53.276	5 gn.
	5e	0.2	3	1.57	0.314	98.98	2.85	0.570	43.508	5	2.33	0.466	95.922	4.33	0.866	57.616	gn.
6	6a	0.2	5	? 2.34 / 2.4	0.468 / 0.480	93.12	4.3	0.860	51.977	8	? 3.63 / 4.0	0.726 / .80	103.03 / 93.5	? 6.63 / 7.0	1.326 / 1.40	552.410 / 53.428	gn.
	6b	0.2	5	2.43	0.486	91.975	4.2	0.840	52.952	8	3.83	0.766	97.65	6.7	1.340	55.821	gn.
	6d	0.2	5	2.32	0.464	96.55	4.2	0.840	52.952	8	4.02	0.804	93.034	6.55	1.310	57.099	gn.
	6e	0.2	3	1.2	0.240	103.33	2.6	0.520	47.69	5	2.23	0.446	100.224	3.8	0.760	58.816	gn.
7	7a	0.2	5	2.5													
	7b	0.2	5	2.5	0.500	89.40	4.37	0.874	51.144	8	3.72	0.744	100.538	6.37	1.354	59.649	5 gn.
	7c	0.2	5	2.46	0.492	90.853	4.28	0.856	52.220	8	3.78	0.756	98.915	6.28	1256	59.554	5 gn.
	7d	0.2	5	2.4 / 2.42	0.480	93.12	4.25	0.850	52.588	8	3.7	0.740	101.801	6.3	1.260	59.365	5 gn.
	7e	0.2	5	2.42	0.484	92.355	4.27	0.854	52.312	8	3.77	0.754	99.204	6.43	1.286	58.165	5 gn.
	7g	0.2	5	2.4 / 1.3	0.480	93.12	4.35	0.870	51.379	8	3.79	0.758	98.681	6.5	1.30	57.538	gn.
	7h	0.2	3	1.3	0.260	95.38	2.78	0.556	44.604	5	2.3	0.460	97.174	3.87	0.774	57.752	gn.

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NERVE NO.	PHOTO #	SWEEP SPEED	RECORD. ELEC. #	INFLECTION			PEAK			RECORDING ELECTRODE #	INFLECTION			PEAK			
				DIVISIONS	mSec	M/sec	DIVISIONS	mSec	M/sec		DIVISIONS	mSec	M/sec	DIVISIONS	mSec	M/sec	
8	8a	0.2	5	2.75	0.550	81.272	4.85	0.970	46.082	8	4.45	0.890	84.044	7.48	1.496	50.000	5 pr.
	8b	0.2	5	2.85	0.570	78.421	4.82	0.964	46.369	8	4.38	0.876	85.388	7.68	1.536	48.698	5 pr.
	8c	0.2	5	2.74	0.548	81.569	4.79	0.958	46.659	8	4.3	0.860	86.976	7.62	1.524	49.081	5 pr.
	8d	0.2	5	2.73	0.546	81.868	4.51	0.902	49.556	8	4.25	0.850	88.000	7.12	1.424	52.528	5 pr.
	8e	0.2	5	2.68	0.536	83.395	4.48	0.896	49.888	8	? 4.19	0.838	89.260	7.02	1.404	53.276	5 pr.
	8g	0.2	3	1.65	0.330	75.151	3.02	0.604	41.059	5	2.52	0.504	86.190	4.37	0.874	51.144	4 pr.
	8h	0.2	5	2.73	0.546	81.868	4.5	0.900	49.666	8	? 4.4 4.6	0.88 0.92	85.00 81.304	7.4	1.48	50.540	5 pr.
9	9a	0.2	5	2.6	0.520	85.961	4.39	0.878	50.911	7	? 3.51 3.27	? 0.714 0.784	? 90.196 ? 87.235	5.6	1.120	57.510	pr.
	9c	0.2	5	2.65	0.530	84.339	4.3	0.860	51.976	7	3.58	0.716	89.944	5.60	1.120	57.500	pr.
	9d	0.2	3	1.35	0.270	91.851	2.87	0.574	49.744	5	2.42	0.484	92.355	4.04	0.808	57.914	pr. ←
	9e	0.2	5	2.66	0.532	84.027	4.33	0.866	51.616	7	3.58	0.716	89.944	5.61	1.122	57.398	pr.
10	10a	0.2	5	2.59	0.518	86.873	4.48	0.896	50.337	7	→ 3.60	0.720	89.444	5.94	1.188	54.21	pr.
→	10c	(0.5)	3	—			1.12	0.224	110.714	5	? 0.75 0.90	0.375 0.450	116.333 99.333	1.6	0.800	55.875	pr.
	10d	0.2	3	1.35	0.270	91.85	2.83	0.564	43.971	5	2.48	0.496	90.121	4.05	0.810	55.185	pr.
11	11a	0.2	5	2.44	0.488	91.598	4.34	0.868	51.497	8	4.12	0.824	90.777	6.37	1.274	58.713	5 pr.
	11c	0.2	5	2.42	0.484	92.355	4.14	0.828	53.985	7	3.12	0.624	103.205	5.49	1.098	58.652	5 pr.
	11d	0.2	3	1.33	0.266	93.233	2.67	0.534	46.441	5	2.3	0.460	97.174	4.07	0.814	54.914	pr.
12	12a	0.2	5	2.2	0.440	101.590	3.82	0.764	58.587	8	3.72	0.744	100.538	5.57	1.114	67.145	5 pr.
	12c	0.2	5	2.17	0.434	102.995	3.77	0.754	59.283	7	? 3.15	? 0.630	? 102.222	5.13	1.026	62.768	5 pr.
	12d	0.2	3	0.98	0.196	12653	2.42	0.484	51.239	5	2.17	0.434	102.995	3.47	0.694	64.409	pr.

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ELEC. 3: 2.48cm
5: 4.47
7: 6.44
8: 7.48
10: 9.45

NERVE NO.	PHOTO NUMBER	SWEEP SPEED mSec/DIV.	RECORDING ELECTRODE #	INFLECTION DIVISIONS	INFLECTION mSec.	INFLECTION M/sec	PEAK DIVISIONS	PEAK mSec.	PEAK M/sec.	RECORDING ELECTRODE #	INFLECTION DIVISIONS	INFLECTION mSec	INFLECTION M/sec	PEAK DIVISIONS	PEAK mSec	PEAK M/sec.	
Single Fiber	13	13a	0.2	5	2.30	0.460	97.174	4.47	0.894	50.00	7	3.62	0.724	88.950	6.07	1.214	53.048	grounded
		13c	0.2	5	2.29	0.458	97.598	4.45	0.890	50.225	7	3.67	0.734	87.738	6.00	1.200	53.667	grounded
		13d	0.2	3	1.32	0.264	93.939	2.82	0.564	43.972	5	2.47	0.494	90.486	4.10	0.820	54.512	grounded
	14	14a	0.2	5	2.28	.456	98.026	4.28	.856	52.219	8	3.90	.780	95.897	6.53	1.306	57.274	grounded
		14c	0.2	5	2.42	.484	92.355	4.30	.860	51.976	8	3.77	.754	99.204	6.55	1.310	57.099	grounded
		14d	0.2	5	2.43	.486	91.975	4.07	.814	54.914	7	3.40	.680	94.705	5.50	1.100	58.545	grounded
		14e	0.2	3	1.20	.240	103.333	2.60	.520	47.692	5	2.32	.464	96.336	3.89	.778	57.455	grounded
	15	15a	0.2	5	2.52	.504	88.690	4.5	.900	49.666	8	4.1	.820	91.219	6.55	1.310	57.099	Sground
		15b	0.2	5	2.30	.460	97.173	4.24	.848	52.712	7	3.47	.694	92.795	5.69	1.138	56.590	Sground
		15c	0.2	3	1.37	.274	90.510	2.74	.548	45.2	5	2.48	.496	90.120	3.97	.794	56.297	grounded
	16	16a	0.2	5	2.25	.450	99.333	~~3.95~~ 4.48	~~0.790~~ .940	~~56.582~~ 45.151	8	4.63	.926	80.777	6.13	1.226	61.011	grounded
		16c	0.2	5	2.2	.440	101.590	3.88	.776	57.603	7	3.1	.620	103.870	5.3	1.060	60.754	Sground
		16d	0.2	3	1.2	.240	103.333	2.6	.520	47.692	5	2.2	.440	101.590	3.7	.740	60.405	grounded
	17	17b	0.2	5	2.26	.452	98.893	4.28	.856	52.219	7	4.38	.876	73.515	5.78	1.156	55.709	grounded
		17c	0.2	5	2.17	.434	102.995	4.27	.854	52.341	7	3.37	.674	95.548	5.17 — 5.162 —	1.034 — 1.124	62.282 — 57.295	grounded
		17d	0.2	3	1.14	.228	108.771	2.64	.528	46.969	5	2.25	.450	99.333	4.02	.804	55.597	grounded
	18	18b	0.2	5	2.13	.426	104.929	4.18	.836	53.468	7	3.20	.640	100.625	5.68	1.136	56.690	grounded
		18c	0.2	5	2.20	.440	101.590	4.15	.830	53.855	7	3.18	.636	101.257	5.55	1.110	58.018	grounded
		18d	0.2	3	1.20	.240	103.333	2.54	.508	48.818	5	2.22	.444	100.675	4.00	.800	55.875	grounded
	19	19a	0.2	5	2.40	.480	93.125	4.34	.868	51.497	7	3.57	.714	90.196	5.92	1.184	54.391	Sground
		19c	0.2	5	2.49	.498	89.759	4.29	.858	52.097	7	3.54	.708	90.960	5.20	1.040	61.923	Sground
		19d	0.2	3	1.34	.268	92.537	2.65	~~.530~~ .530	~~33.962~~ 46.792	5	2.42	.484	92.355	4.09	.818	54.645	grounded
	20	20a	0.2	5	2.40	.480	93.125	4.22	.844	52.962	7	3.37 — 4.22 —	.674 — .844	95.548 — 76.303	5.75	1.150	56.000	Sground
		20c	0.2	5	2.40	.480	93.125	4.15	.830	53.855	7	4.3 —	.860	74.883	5.33	1.066	60.412	Sground
		20d	0.2	3	1.34	.268	92.537	2.73	.546	45.421	5	2.25	.450	99.333	3.96	.792	56.439	grounded
		20e	0.2	5	2.30	.460	97.173	4.13	.826	54.116	7	3.55	.710	90.704	5.60	1.120	~~57.696~~ 57.500	grounded

DUP050043952

NERVE NUMBER	PHOTO NUMBER	SWEEP SPEED msec/Div.	RECORDING ELECTRODE NUMBER	INFLECTION Divisions	INFLECTION mSec.	INFLECTION M/sec	PEAK Divisions	PEAK mSec	PEAK M/sec	RECORDING ELECTRODE NUMBER	INFLECTION Divisions	INFLECTION mSec	INFLECTION M/sec	PEAK Divisions	PEAK mSec	PEAK M/sec.	
21	21 b	0.2	5	2.58	.516	86.627	4.40	0.880	50.795	7	3.43	0.686	93.877	6.18	1.236	52.103	S ground
I	21 c	0.2	5	2.56	.512	87.304	4.41	0.882	50.680	7	3.48	0.696	92.528	6.01	1.202	53.577	S "
	21 d	0.2	3	1.42	.284	87.323	2.79	0.558	44.444	5	2.40	0.480	93.125	4.19	0.838	53.341	grounded
	21 e	0.2	5	2.53	.506	88.339	4.4	0.880	50.795	7	? 3.7	0.740	87.027	6.1	1.226	52.786	grounded
22	22 b	0.2	5	2.43	.486	91.975	4.10	0.820	54.512	7	? 3.11 / 3.53	0.622 / 0.706	80.535 / 96.215	5.16	1.032	62.403	S ground
I	22 c	0.2	5	2.38	.476	93.907	4.14	0.828	53.985	7	? 3.24 / 3.54	0.648 / 0.708	99.382 / 90.960	4.98	0.996	64.658	S ground
	22 d	0.2	3	1.48	.296	83.783	2.93	0.586	42.320	5	2.35	0.476	95.106	3.96	0.792	56.439	grounded
	22 e	0.2	5	2.43	.486	91.975	4.15	0.830	53.855	7	3.47	0.694	92.795	? 5.27 / 5.38	1.054 / 1.076	61.100 / 59.851	S ground
23	23 b	0.2	5	2.41	.482	92.238	4.33	0.866	51.616	7	3.5	0.760	92.080	5.6	1.120	57.560	S ground
I	23 c	0.2	5	2.46	.492	90.853	4.35	0.870	51.379	7	3.58	0.716	89.944	5.25	1.056	61.333	S ground
	23 d	0.2	3	1.47	.294	84.353	2.80	0.560	44.285	5	2.47	0.494	90.485	4.24	0.848	52.712	grounded
	23 e	0.2	5	2.37	.474	94.303	4.33	0.866	51.616	7	3.60	0.720	89.444	5.6	1.120	57.560	S Ground
24	24 b	0.2	5	2.45	.490	91.224	4.50	0.900	49.666	7	3.50	0.700	92.600	6.10	1.220	52.786	S ground
	24 c	0.2	5	2.49	.498	89.759	4.52	0.904	49.446	7	3.48	0.696	92.528	5.82	1.164	55.326	S Ground
V	24 d	0.2	3	1.35	.270	91.851	2.82	0.564	43.971	5	2.42	0.484	92.355	4.17	0.834	53597	grounded
	24 e	0.2	5	2.45	.490	91.224	9.47	0.894	50.000	7	3.4	0.680	94.705	6.85	1.210	53.223	S ground
	24 f	0.2	5	2.48	.496	90.120	9.65	0.930	48.064	8	4.25	0.850	88.000	7.02	1.404	53.276	S ground
25	25 bc	0.2	5	2.43	.486	91.975	4.23	0.846	52.836	7	3.65	0.730	88.219	5.76	1.152	55.902	S ground
	25 d	0.2	5	2.6	0.526	85.561	4.4	0.880	50 795	7	3.8	0.760	84.736	5.63	1.126	57.193	S ground
	25 e	0.2 Can't read					X	—	—	?	X	—	—	X	—	—	S ground
V	25 g	0.2	5	2.65	0.530	84.339	4.50	0.900	49.666	7	3.85	0.770	83.636	5.75	1.150	56.000	S ground
	25 h	0.2	3	1.42	0.284	87.323	2.90	0.580	42.758	5	? 2.75 / 3.35	0.550 / 0.566	54.272 / 78.975	4.25	0.850	52.588	grounded
	25 i	0.2	5	2.88	0.576	77.604	4.68	0.936	47.756	7	? 4.23 / 4.33	0.846 / 0.866	52.836 / 51.616	6.13	1.226	52.528	grounded
	25 j	0.2	5	? 2.83 / 2.93	0.566 / 0.586	78.975 / 76.279	4.80	0.960	46.562	8	5.13	1.026	72.904	7.06	1.412	52.974	grounded
26	26 b	0.2	5	2.65	0.530	84.339	4.67	0.934	47.858	7	3.62	0.724	88.950	6.22	1.244	51.768	S ground
V	26 c	0.2	5	2.63	0.526	84.980	4.57	0.914	48.905	7	3.48	0.696	92.528	5.58	1.116	57.706	S ground
	26 d	0.2	3	1.45	0.290	85.517	2.97	0.594	41.750	5	2.45	0.490	91.224	4.2	0.840	53.214	grounded
	26 e	0.2	5	2.61	0.522	85.632	4.50	0.900	49.666	7	3.56	0.712	90.449	5.98	1.196	53.846	S ground
27	27 b	0.2	5	2.55	0.510	87.647	4.73	0.946	47.251	7	3.71	0.742	86.792	6.20	1.240	51.935	S ground
	27 c	0.2	5	2.50	0.500	89.400	4.74	0.948	47.151	7	3.74	0.748	86.096	6.10	1.220	52.786	S ground
V	27 d	0.2	3	1.45	0.290	85.517	2.82	0.564	43.971	5	2.40	0.480	93.125	4.37	0.874	51.144	grounded
	27 e	0.2	5	2.65	0.530	84.339	4.75	0.950	47.052	7	3.97	0.794	81.108	6.27	1.254	51.355	grounded
			5	—													

DUP050043953

Nerve No.	Photo Number	Sweep Speed	Recording Elec. #	Inflection Divisions	Inflection mSec	Inflection m/sec	Peak Divisions	Peak mSec	Peak m/sec	Recording Elec. #	Inflection Divisions	Inflection mSec	Inflection m/sec	Peak Divisions	Peak mSec	Peak m/sec	
28	28b	0.2	5	2.53	0.506	88.339	4.3	0.860	51.976	7	3.55	0.710	90.704	5.78	1.140	56.491	Spound
	28c	0.2	5	2.53	0.506	88.339	4.26	0.852	52.464	7	3.53	0.706	91.218	5.33	1.066	60.412	Spound
	28d	0.2	3	1.43	0.286	86.713	2.76	0.552	44.927	5	? 2.53 2.58	0.506 0.516	88.339 90.124	4.11	0.822	54.379	pounded
	28e	0.2	5	2.48	0.496	90.120	4.26	0.852	52.464	7	3.55	0.710	90.704	5.71	1.142	56.392	Spound
29	29b	0.2	5	2.28	0.456	98.026	3.98	0.796	56.155	7	2.98	0.596	108.053	5.35	1.070	60.186	Spound
	29c	0.2	3	1.4	0.280	88.571	2.67	0.534	46.441	5	2.3	0.460	97.173	3.85	0.770	58.051	pounded
	29d	0.2	5	2.34	0.468	95.512	4.07	0.814	54.914	7	3.27	0.654	98.470	5.47	1.094	58.866	Spound
30	30b	0.2	5	2.42	0.484	92.355	4.12	0.824	54.247	8	3.77	0.754	99.204	(.17	1.234	60.685	Spound
	30c	0.2	5	2.45	0.490	91.224	4.02	0.804	55.597	7	3.37	0.674	95.548	5.42	1.084	59.409	Spound
	30d	0.2	5	2.52	0.504	88.690	4.1	0.820	54.512	7	3.43	0.686 0.686	93.877	5.35	1.070	66.18	Spound
	30e	0.2	3	1.30	0.260	95.384	2.6	0.520	47.692	5	2.42 2.42	0.484	92.355	3.87	0.774	57.751	pounded
	30f	0.2	5	2.53	0.506	88.339	4.33	0.866	51.616	8	? 4.06 4.18	0.812 0.836	92.118 94.793	? 6.63 6.75	1.326 1.350	56.416 57.407	Spound
31	31b	0.2	5	2.46	0.492	90.853	4.18	0.836	53.468	7	3.35	0.670	92.119	5.36	1.072	60.074	Spound
	31c	0.2	3	1.32	0.264	93.939	2.74	0.548	45.255	5	2.40	0.480	93.125	3.84	0.768	58.203	pounded
	31d	0.2	3	1.32	0.264	93.939	2.77	0.554	44.765	5	? 2.40 2.54	0.480 0.508	93.125 97.992	4.20	0.840	53.214	pounded
	31e	0.2	5	2.45	0.490	91.224	4.2	0.840	53.214	7	3.48	0.696	92.528	5.43	1.086	59.300	Spound
32	32b	0.2	5	2.51	0.502	89.043	4.45	0.890	50.224	7	3.61	0.722	89.196	5.63	1.126	57.193	Spound
	32c	0.2	5	2.55	0.510	87.647	4.47	0.894	50.000	7	3.55	0.710	90.704	5.28	1.056	60.984	Spound
	32d	0.2	3	1.5	0.300	82.666	2.93	0.586	42.320	5	2.6	0.520	85.961	4.07	0.814	54.914	pounded
	32e	0.2	5	2.6	0.520	85.961	4.52	0.904	49.446	7	3.73	0.746	86.327	5.92	1.184	54.391	Spound
33	33b	0.2	5	2.19	0.438	102.054	4.27	0.854	52.341	7	? 2.87	0.574	112.195	5.62	1.124	57.295	Spound
	33c	0.2	5	2.30	0.460	97.173	4.25	0.850	52.588	7	3.45	0.690	93.333	5.05	1.010	63.762	Spound
	33d	0.2	3	1.33	0.266	93.233	2.82	0.564	43.791	5	2.27	0.454	98.458	3.9	0.780	57.367	pounded
	33e	0.2	5	2.15	0.430	103.953	4.3	0.860	51.976	7	3.45	0.690	93.333	5.63	1.126	57.193	Spound
34	34b	0.2	5	2.63	0.526	84.980	4.45	0.890	50.224	7	3.45	0.690	93.333	6.17	1.234	52.188	Spound
	34c	0.2	5	26	0.520	85.961	4.40	0.880	50.975	7	3.48	0.696	92.528	? 5.15 5.95	1.030 1.190	62.524 54.117	Spound
	34d	0.2	3	1.52	0.304	81.578	2.94	0.588	42.176	5	2.42	0.484	92.355	? 4.34	0.868	51.497	pounded
	34e	0.2	5	2.62	0.524	85.305	4.49	0.898	49.777	7	4.60	0.920	70.000	6.22	1.244	51.768	Spound
35	35b	0.2	5	2.4	0.480	93.125	4.03	0.806	55.459	7	? 3.20 3.25	0.652 0.650	98.773 100.625	5.38	1.076	59.581	Spound
	35c	0.2	5	2.38	0.476	93.907	3.98	0.796	56.155	7	3.25	0.650	99.676	5.37	1.074	59.962	Spound
	35d	0.2	5	~~1.37~~ 2.34	0.472	94.703	3.98	0.796	56.155	7	3.30	0.660	97.575	5.16	1.032	62.403	Spound
	35e	0.2	3	1.37	0.274	90.510	2.58	0.516	48.062	5	2.28	0.456	98.626	3.85	0.770	58.051	pounded
	35f	0.2	5	2.33	0.466	95.922	3.95	0.790	56.582	7	3.23	0.646	99.690	5.31	1.062	60.640	Spound

DUP05043954

Nerve Number	Photo Number	Sweep Speed	Recording Electrode	Inflection Divisions	Inflection mSec	Inflection m/sec	Peak Divisions	Peak mSec	Peak m/sec	Recording Electrode	Inflection Divisions	Inflection mSec	Inflection m/sec	Peak Divisions	Peak mSec	Peak m/sec	
36	36b	0.2	5	2.4	0.480	93.125	4.1	0.820	54.512	7	3.3	0.460	97.576	5.4	1.080	59.630	5 pounds
	36c	0.2	5	2.3	0.460	97.174	4.1	0.820	54.512	7	3.29	0.658	97.872	5.19	1.038	62.042	3 pounds
	36d	0.2	3	1.37	0.274	90.511	2.69	0.538	46.097	5	2.32	0.464	96.336	3.74	0.748	59.759	3 pounds
	36e	0.2	5	2.38	0.476	93.908	4.13	0.826	54.116	7	3.38	0.676	95.266	5.25	1.050	61.333	3 pounds
37	37b	0.2	5	2.42	0.484	92.355	4.27	0.854	52.342	7	3.10	0.620	103.81	5.85	1.170	55.043	5 pounds
	37c	0.2	5	2.43	0.486	91.975	4.35	0.870	51.379	7	3.38	0.672	95.833	5.6	1.120	57.5	5 pounds
	37d	0.2	3	1.25	0.250	99.200	~~4~~ 3.0	0.600	41.333	5	2.17	0.434	102.995	4.23	0.846	52.837	3 pounds
	37e	0.2	5	2.5	0.500	89.480	4.47	0.894	50.000	7	? 3.2 3.5	0.640 0.700	? 100.625 92.000	6.05	1.210	53.223	5 pounds

DUP050043955

✓ ALL NERVES: ± 5.66 m/sec; 0 ± 2.64 m/sec; 0 ± 9.10 m/sec

NERVE & PHOTO NO.	HASKELL DOG NO.	TREATMENT GROUP.	"INFLECTION" CONDUCTION VELOCITY. SHOCK ARTIFACT TO ELEC. # 5 m/sec	"INFLECTION" TO INFLECTION m/sec	"PEAK" SHOCK ART. TO ELEC #5 m/sec	PEAK TO PEAK m/sec.	BLOOD DATA: LEAD CONC. µg/100 ml FINAL VALUE [MO. # 24]	LEAD CONC. AVER. MONTHS 12-24	δ-ALA DEHYDRASE ACTIV. FINAL VALUE [MO. # 24] units/ml/hr	δ-ALA DEHYDRASE ACTIV. AVER. MONTHS # 12, 15, 18 & 24 units/ml/hr	Hb CONC. FINAL VALUE [MO. # 24] gms/100ml	Hb CONC. AVER. MONTHS 12-24 gms/100 ml	URINARY DATA: LEAD CONC. FINAL VALUE [MO. # 24] µg/mOsm	LEAD CONC. AVER. MONTHS 12-24 µg/mOsm	δ-ALA FINAL VALUE [MO. # 24] mgm/mOsm	δ-ALA AVER. MONTHS 15-24	FILAMENTS: GUIDE TUBE TO SHEATH TO SHEATH	SHELTER TEMP. °C
5b	462 ♂	I	90	103	48	60	91	76.2	6	4	16.7		0.382	0.425	0.00578	0.00600		36.8
6b	506 ♂	II	92	108	53	60	114	82.4	5	4.2	16.8		0.759	0.455	0.01355	0.01032	22½	36.8
7d	511 ♂	III	93	116	52	73	91	62.8	6	4.2	15.4		0.469	0.307	0.00629	0.00814	26	36.4
8b	508 ♂	II	78	98	46	53	19	19.4	16	15	16.3		0.0657	0.0746	0.00320	0.00347	△ 26¼	35
9c	513 ♂	II	84	106	52	76	19	18.2	20	21.8	14.7		0.0877	0.0716	0.00474	0.00393	23¾	37.1
10a	503 ♂	II	87	98	50	67	22	16.1	30	31.2	19.4		0.0483	0.0489	0.00327	0.00303	31¼	37.1
11a	509 ♂	II	92	90	51	74	13	8.8	27	31.2	17.3		0.0782	0.0773	0.00346	0.00295	25½	37.1
12a	506 ♂	III	102	99	58	86	31	28.6	15	15	15.4		0.1428	0.1120	0.00200	0.00320	□ 24½	
13c	507 ♂	III	98	71	50	64	33	30.6	17	23.8	16.3		0.1161	0.1100	0.00348	0.00288	25	36.9
14c	514 ♂	III	92	112	52	67	37	31.8	17	12.2	14.7		0.1818	0.1658	0.00207	0.00285	24½	36.8
15a	491 ♂	III	89	95	50	73	41	31.2	16	14.5	17.3		0.1630	0.1508	0.00328	0.00309	30	36.7
16a	489 ♂	IV	99	63	57	69	54	41.4	18	19.2	17.1		0.596	0.244	0.00989	0.00498	◇ 24	36.7
17b	450 ♂	IV	99	46	52	66	45	33.8	8	8.2	17.7		0.201	0.199	0.00308	0.00325	27½	36.6
18b	512 ♂	IV	105	92	53	66	54	39.8	11	9.8	17.0		0.393	0.210	0.00233	0.00259	27	36.8
19a	517 ♂	IV	93	84	51	?62	54	49.6	13	13	16.6		0.191	0.176	0.00283	0.00267	30	36.8
20a	470 ♀	I	93	102	53	64	11	8.2	11	12	14.8		0.0897	0.0837	0.00295	0.00350	⊠ 27¼	36.7
21b	519 ♀	I	87	116	51	55	11	9.2	22	30.5	17.6		0.0685	0.0400	0.00329	0.00301	22½	36.75
22b	520 ♀	I	92	? 90-?145	54	93	10	9.0	30	31	17.4		0.0909	0.0631	0.00319	0.00295	23½	36.7
23b	527 ♀	I	93	90	52	78	10	8.8	14	19.8	17.9		0.0511	0.0995	0.00292	0.00321	26½	36.8
24b	475 ♀	IV	91	94	50	62	54	43.2	5	4.2	14.1		0.5114	0.4263	0.00615	0.00481	▭ 23¾	36.75
25c	522 ♀	IV	92	81	53	64	52	46.6	5	4	17.6		1.3970	0.5385	0.01764	0.00847	24	36.7
26b	518 ♀	III	84	102	48	64	15	14.4	8	21.2	14.8		0.0672	0.0997	0.00285	0.00289	▰ 25¾ 24	36.7
27b	531 ♀	III	88	85	47	67	11	13.8	17	21	16.1		0.0686	0.0954	0.00331	0.00289	20½	36.7
28b	528 ♀	III	88	97	52	70	19	25.4	32	26.5	17.7		0.1012	0.1134	0.00370	0.00340	19	36.75
29b	529 ♀	III	98	141	56	72	15	19.4	11	10.8	16.0		0.0853	0.1194	0.00769	0.00397	20½	37
30b	525 ♀	III	92	112	54	73	29	22.0	39	32.5	17.3		0.0973	0.0964	0.00367	0.00285	▩ 23	36.9
31b	526 ♀	III	91	111	53	84	33	29.4	12	11.8	15.6		0.0276	0.1689	0.00137	0.00489	20½	36.9
32b	532 ♀	III	89	90	50	84	25	22.6	16	17.2	17.1		0.0631	0.1101	0.00607	0.00328	21¼	36.8
33b	533 ♀	III	102	?145	52	73	23	23.4	16	22.8	16.8		0.1393	0.1415	0.00214	0.00325	25	36.9
34b	530 ♀	IV	85	120	50	57	27	24.8	6	8.2	14.7		0.1506	0.1801	0.00325	0.00307	◆ 20	36.9
35b	534 ♀	IV	93	?114, ?123	55	73	35	32.2	11	13.2	15.6		0.2308	0.2209	0.00220	0.00366	22½	37
36b	537 ♀	IV	93	109	54	76	44	39.8	6	5.2	18.1		0.1905	0.2346	0.00402	0.00309	19	36.8
37b	538 ♀	IV	92	145	52	62	27	30.4	15	15.8	15.1		0.2000	0.1985	0.00400	0.00340	20¼	36.9

DUP050043956

NERVE MOUNTED IN SHELTER 15± MINS. EXCEPT WHERE BRACKETED [VALUES GIVEN]

2-YR LEAD STUDY
TIBIALIS PREP., DOG.

(c) 24
t 4

♂ ♀
t 3 + 4

NERVE & PHOTO #	HASKELL DOG #	TREATMENT GROUP #	"PEAK" CONDUCTION VELOCITY Shock ant. to elec. 5 σ = ± 2.64 m/sec.		"PEAK TO PEAK" MEASUREMENT OF CONDUCTION VELOCITY σ = ± 9.10 m/sec.			BLOOD DATA ✓				URINE DATA ✓ Note: not mixed w/ H				HbCOLC. Gas Ind.	MINS. ELECTROC. TO MOUNT IN SHELTER	SHELTER TEMP. °C
								LEAD CONC.		δ-ALA DEHYDRASE ACTIVITY		LEAD CONC.		δ ALA CONC.				
			CONDUCTION DISTANCE CMS	VELOCITY METERS/SEC.	RECORDING ELECTRODES	CONDUCTION DISTANCE CMS	VELOCITY METERS/SEC.	24 MONTH VALUE (FINAL) μG/100 ML	AVER. NO. 12-24 μG/100 ML	24 MONTH VALUE (FINAL) UNITS/ML/HR	AVER. NO. 12-24 UNITS/ML/HR		AVER NO. 15-24		AVER NO. 15-24	NO. 24		
5b	462 ♂	V	4.47	48	5 TO 8, 10	3.01	59.5	91	76.2	6	4				0.00600		16.7	27	36.8
6b	506 ♂	V	4.47	53	5 TO 8, 10	3.01	60	114	82.4	5	4.2				0.01632		16.8	32½	36.8
7d	511 ♂	V	4.47	52	5 TO 8, 10	3.01	73	91	62.8	6	4.2				0.00814		15.4	26	36.9
8b	508 ♂	II	4.47	46	5 TO 8, 10	3.01	76.53	19	19.4	16	15					△	16.3	26¼	35-
[9c] 15M SSS	513 ♂	II	4.47	52	5 TO 7, 8	1.97	76	19	17.2	20	21.8						14.7	23¼	37.1
[10a] 15M	503 ♂	II	4.47	50	5 TO 7, 9	1.97	67	22	16.1	30	31.2						19.4	31¼	37.1
11a	509 ♂	II	4.47	51	5 TO 8, 10	3.01	74	13	8.8	27	31.2						17.3	25½	37.1
12a	516 ♂	III	4.47	58	5 TO 8, 10	3.01	86	31	28.6	15	15					□	15.9	24½	
13c	507 ♂	III	4.47	50	5 TO 7, 9	1.97	64	33	30.6	17	23.8						16.3	25	36.9
14c	514 ♂	III	4.47	52	5 TO 8, 10	3.01	67	37	31.8	17	12.2						14.7	24½	36.8
15a	491 ♂	III	4.47	50	5 TO 8, 10	3.01	73	41	31.2	16	14.5						17.3	30	36.7
16a	489 ♂	IV	4.47	57	5 TO 8, 10	3.01	69	54	46.4	18	19.2				0.00498	◇	17.1	24	36.7
17b	450 ♂	IV	4.47	52	5 TO 7, 9	1.97	66	45	33.8	8	8.2				0.00325		17.7	27½	36.6
18b	512 ♂	IV	4.47	53	5 TO 7, 9	1.97	66	54	39.8	11	9.8				0.00259		17.0	27	36.8
19a	517 ♂	IV	4.47	51	5 TO 7, 9	1.97	? 62	54	45.6	13	13				0.00267		16.6	30	36.8
20a	470 ♀	I	4.47	53	5 TO 7, 9	1.97	64	11	8.2	11	12				0.00350	●	14.8		36.7
21b	519 ♀	I	4.47	51	5 TO 7, 9	1.97	55	11	9.2	22	30.5				0.00301		17.6		36.7
22b	520 ♀	I	4.47	54	5 TO 7, 9	1.97	93	10	9.0	30	31				0.00295		17.4		36.7
23b	527 ♀	I	4.47	52	5 TO 7, 9	1.97	78	10	8.8	14	19.8				0.00321		17.9		36.8
24b	475 ♀	V	4.47	50	5 TO 7, 9	1.97	62	54	43.2	5	4.2				0.00481	▬	14.1		36.75
[25c] 17M	522 ♀	V	4.47	53	5 TO 7, 9	1.97	64	52	46.6	5	4				0.00847		17.6		36.7
26b	518 ♀	II	4.47	48	5 TO 7, 9	1.97	64	15	14.4	8	21.2					▲	14.8		36.7
27b	531 ♀	II	4.47	47	5 TO 7, 9	1.97	67	11	13.8	17	21						16.1		36.7
[28b] 16M	528 ♀	II	4.47	52	5 TO 7, 9	1.97	70	19	25.9	32	26.5						17.7		36.8
29b	529 ♀	II	4.47	56	5 TO 7, 8	1.97	72	15	19.4	11	10.8						16.0		37
[30b] 16M	525 ♀	III	4.47	54	5 TO 8, 10	3.01	73	29	22.0	39	32.5					■	17.3		36.9
31b	526 ♀	III	4.47	53	5 TO 7, 8	1.97	84	33	29.4	12	11.8						15.6		36.9
32b	532 ♀	III	4.47	50	5 TO 7, 9	1.97	84	25	22.6	16	17.2						17.1		36.8
33b	533 ♀	III	4.47	52	5 TO 7, 9	1.97	73	23	23.4	16	22.8						16.8		36.9
[34b] 20M	530 ♀	IV	4.47	50	5 TO 7, 9	1.97	57	27	24.8	6	8.2				0.00307	♦	14.7		36.9
35b	534 ♀	IV	4.47	55	5 TO 7, 9	1.97	73	35	32.2	11	13.2				0.00366		15.6		37
36b	537 ♀	IV	4.47	54	5 TO 7, 9	1.97	76	44	39.8	6	5.2				0.00309		18.1		36.8
37b	538 ♀	IV	4.47	52	5 TO 7, 9	1.97	62	27	30.4	15	15.8				0.00340		16.1		36.9

DUP05004395?

DOG -2YR. ①

NERVE # + PHOTO ✓	MINS: ELECTROCUTION TO MOUNTING	MINS: MOUNTING TO PHOTO	MINS: ELECTROCUTION TO PHOTO	NERVE: Grounded = gr. Not grounded = ng	ACTIVE RECORDING ELECTRODE → DISTAL RECORD. ELEC. #	CONDUCTION DISTANCE: CMS.	INFLECTION CONDUCTION VELOCITY	PEAK COND. VELOCITY	ACTIVE RECORDING ELECTRODE → DISTAL RECORD. ELEC. #	CONDUCTION DISTANCE	LUPLESTON CONDUCTION VELOCITY	PEAK CONDUCTION VELOCITY	SKEGGA DB °Temp. °C		DOG # + Sex	Treatment group
1 a	51¼	2¼	53½	gr.	5 10	4.47	99	44	8 10	7.48	80	55	36.7°		515 ♂	I
b	Shave/Dr	3¾	55	gr.	5 10	4.47	79 ✓	43 ✓	8 10	7.48	80	54	36.7			
2 a	51¼ 46	7	53	gr.	5 10	4.47	73	44	8 10	7.48	?86 86	56	36.7		451 ♂	I
b		10½	56½	gr.	5 10	4.47	73	45	8 10	7.48	87	58				
c	Shave/Dr	12	58	gr.	5 10	4.47	78	45	8 10	7.48	86	59				
d	5	14⅓	60⅓	gr.	5 10	4.47	79 ✓	45 ✓	8 10	7.48	91	? 87 80				
e		20	66	gr.	5 10	4.47	80	47	8 10	7.48	82	60				
f		34	80 55	gr.	5 13	4.47	84	50	10 13	9.45	97	66				
i		42	88	gr.	7 13	6.44	98	58	10 13	9.45	100	63				
3 a	32	4	36	gr.	5 10	4.47	78	46	8 10	7.48	87	56	36.7		493 ♂	I
b	Shave	6	38	gr.	5 10	4.47	74	45	8 10	7.48	91	55				
c		8	40	gr.	5 10	4.47	70	46	8 10	7.48	81	56				
e		17¾	49¾	gr.	7 12	6.44	75 ?	52 ?	10 12	9.45	82	59				
f		29½	61½	gr.	5 10	4.47	87	48	8 10	7.48	87	57				
4 a	?		30¼	gr.	3 6	2.48	76	38	5 6	4.47	88	46			510 ♂	I
c	Shave		40	gr.	3 6	2.48	75	40	5 6	4.47	88	48				
d			40 89	gr.	3 6	2.48	83	40	5 6	4.47	88	48				
e			90½	gr.	3 6	2.48	74	40	5 6	4.47	87	48				
5 a	26 50	5 10	32	g	5 10	4.47	87	46	8 10	7.48	95	50	36.8		462 ♂	IV
b		15 10	42	g	5 10	4.47	90 ✓	48	8 10	7.48	95	52				
d		22½	49⅓	g	5 10	4.47	87	48	8 10	7.48	95	53				
e		28 10	55	gr.	3 6	2.48	79	44	5 6	4.47	96	52				
6 a	22½	5	27½	gr.	5 10	4.47	93	52	8 10	7.48	? 103	? 53 52	36.85		506 ♂	IV
b		15	37½	gr.	5 10	4.47	92	53	8 10	7.48	98	56				
d		25	47½	gr.	5 10	4.47	96	53	8 10	7.48	93	57				
e		30	52½	gr.	3 6	2.48	103	48	5 6	4.47	100	59				
7 a	26	5	31		5 10	4.47			8 10	7.48			36.4		511 ♂	IV
b		6½	32½	g	5 10	4.47	89	51	8 10	7.48	100	60				
c		8 10	34 10	g	5 10	4.47	91	52	8 10	7.48	99	60				
d		15	41	g	5 10	4.47	93	52	8 10	7.48	102	59				
e		18 10	44 10	g	5 10	4.47	92	52	8 10	7.48	99	58				
g		26	52	gr	5 10	4.47	93	51	8 10	7.48	99	58				
h		28¾	54¾	gr	3 6	2.48	95	45	5 6	4.47						

Urine spots floating Stool urine - Hydro

Scratch: 5½

DUP050043958

DOS - 2YR. ②

NERVE & PHOTO #	MINS: ELECTROCUTION TO MOUNTING	MINS: MOUNTING TO PHOTO	MINS: ELECTROCUTION TO PHOTO	NERVE: GROUNDED = gr NOT GROUNDED = g	ACTIVE RECORDING ELECTRODE #	DISTAL RECORDING ELECT. #	CONDUCTION DIST. CMS.	INFLECTION CONDUCTION VELOCITY	PEAK CONDUCTION VELOCITY	ACTIVE RECORDING ELECTRODE #	DISTAL RECORDING ELECT. #	CONDUCTION DIST CMS.	INFLECTION CONDUCTION VEL.	PEAK CONDUCTION VELOCITY	SKIN TEMP. °C		DOF # + SEX	TREATMENT GROUP
8 a	~~23 1/4~~ 24 1/4	5m 25s	31 2/3	g	5	10	4.47	81	46	8	10	7.48	84	50	36		508 ♂	II
b		4m 45s	41+	g	5	10	4.47	78	46	8	10	7.48	85	49	35-			
c		20	46 1/4	g	5	10	4.47	82	47	8	10	7.48	87	49	35-	Take	83 m/sec	as for
d		25m 50s	52m 10s	g	5	10	4.47	52	50	8	10	7.48	88	52	36.2		50	
e		33 3/4	60	g	5	10	4.47	83	50	8	10	7.48	89	53	36.8	←		
f		40m 22s	66m 37s	gr ?	3	6	2.48	75	41	5	6	4.47	89	51	36.9			
h		55m 5s	81 1/3	g	5	10	4.47	82	50	8	10	7.48	81 / 86	50	36.8			
9 a	23 1/4	9m 20s	32m 35s	gr	5	8	4.47	86	51	7	8	6.44	88 / 90	58	37.1		513 ♂	II
c		15m 55s	39m 10s	gr	5	8	4.47	84	52	7	8	6.44	90	58	37.1			
d		19m 15s	42m 30s	g	3	6	2.48	92	~~32~~ 43	5	6	4.47	92	55	37.1			
e		30m	53m 15s	g	5	8	4.47	84	52	7	8	6.44	90	57	37.1			
10 a	31 1/4	5m	36 1/4	g	5	9	4.47	87	50	7	9	6.44	70	~~46~~ 54	37.1		503 ♂	II
c	→	21m 35s	52m 50s	gr	3	6	2.48		~~44~~	5	6	4.47	? 99 / 116	56	37.1			
d		26m 15s	57 1/2	g	3	6	2.48	92	44	5	6	4.47	90	55				
11 a	25 1/4	15m	40 1/4	g	5	10	4.47	92	51	8	10	7.48	91	59	37.1		509 ♂	II
c		21	46 1/4	g	5	9	4.47	92	54	7	9	6.44	103	59	37.1			
d		24m 5s	49 1/3	gr	3	6	2.48	93	46	5	6	4.47	97	55	37.1			
12 a	24 1/2	15m	39 1/2	g	5	10	4.47	102	58	8	10	7.48	100	67			516 ♂	III
c		23m	47 1/2	g	5	9	4.47	103	59	7	9	6.44	102	63				
d		27 1/2	52	gr	3	6	2.48	126	51	5	6	4.47	103	64				
13 a	25	9m 5s	34m 5s	gr	5	9	4.47	97	58	7	9	6.44	89	53	36.8		507 ♂	III
c		15	40	gr	5	9	4.47	98	50	7	9	6.44	88	54	36.9			
d		20	45	gr	3	6	2.48	94	44	5	6	4.47	90	54	36.8			
14 e	24 1/2	10m 10s	34 2/3	gr	5	10	4.47	98	52	8	10	7.48	96	57	36.7		514 ♂	III
c		15m	39 1/2	gr	5	10	4.47	92	52	8	10	7.48	99	57	36.8			
d		20m	44 1/2	gr	5	9	4.47	92	55	7	9	6.44	95	58	36.8			
e		25m	49 1/2	gr	3	6	2.48	103	48	5	6	4.47	96	57	36.8			
15 a	30	15m	39 45	g	5	10	4.47	89	50	8	10	7.48	91	57	36.7		491 ♂	III
b		20	~~45m 50s~~	g	5	9	4.47	97	53	7	9	6.44	93	56	36.7			
c		25	55	gr	3	6	2.48	90	45	5	6	4.47	90	56	36.7			
16 a	24	15m	39	gr	5	10	4.47	99	~~NS66~~	8	10	7.48	81	61	36.7		489 ♀	IV
c		21m 10s	45m 10s	g	5	9	4.47	102	58	7	9	6.44	104	61	36.7			
d		26m	50	gr	3	6	2.48	103	48	5	6	4.47	102	60	36.6			

DUP050043959

DOG - 24K (3)

NERVE # / PHOTO #	MINS: ELECTROCUTION TO MOUNTING	MINS: MOUNTING TO PHOTO	MINS: ELECTROCUTION TO PHOTO	NERVE: Grounded = gr Not grounded = ng	ACTIVE RECORD. ELEC.	DISTAL RECORD. ELEC.	CONDUCTION DIST. cm	INFLECTION COND. VELOCITY	PEAK CONDUCTION VELOC.	ACTIVE RECORD. ELEC.	DISTAL RECORD. ELEC.	CONDUCTION DIST cm.	INFLECTION COND. VEL.	PEAK COND. VEL.	RECTAL O.B. TEMP. °C		DOG # & SEX	Treatment Group
17 b	27 1/2	15m 5s	42m 35s	gr	5	9	4.47	99	52	7	9	6.44	74	56	36.6		450 ♂	IV
c		20	47 1/2	gr	5	8	4.47	103	52	7	8	6.44	96	? 57 62	36.8			
d		25	52 1/2	gr	3	6	2.48	109	47	5	6	4.47	99	56	36.9			
18 b	27	15	42	gr	5	9	4.47	105	53	7	9	6.44	101	57	36.8		512 ♂	IV
c		21	48	gr	5	8	4.47	102	54	7	8	6.44	101	58	36.75			
d		28	55	gr	3	6	2.48	103	49	5	6	4.47	101	56	36.7			
19 a	30	15	45	s	5	9	4.47	93	51	7	9	6.44	90	54	36.8		517 ♂	IV
c		29	59	s	5	8	4.47	90	52	7	8	6.44	91	62	36.8			
D		35 1/2	65 1/2	gr	3	6	2.48	92	~~54~~ 46.8	5	6	4.47	92	55	36.8			
20 a	27 1/4	15 1/4	42 1/2	s	5	9	4.47	93	53	7	9	6.44	96	56	36.7		470 ♀	I
c		27 3/4	55	s	5	8	4.47	93	54	7	8	6.44	? 75 76	60	36.8			
d		35 1/4	62 1/2	gr	3	6	2.48	92	45	5	6	4.47	99	56	36.75			
e		40 1/4	67 1/2	gr	5	9	4.47	97	54	7	9	6.44	91	(32)	36.8			
21 b	22 1/2	15	37 1/2	s	5	9	4.47	87	51	7	9	6.44	94	52	36.75		519 ♀	I
c		22 1/2	45	s	5	8	4.47	87	51	7	8	6.44	92	54	36.8			
d		27 1/2	50	gr	3	6	2.48	87	44	5	6	4.47	93	53	36.9			
e		40	62 1/2	gr	5	9	4.47	88	51	7	9	6.44	87	53	36.7			
22 b	23m 35s	14m 55s	38 1/2	s	5	9	4.47	92	54	7	9	6.44	? 91 104	62	36.7		520 ♀	I
c		21m 25s	45	s	5	8	4.47	94	53	7	8	6.44	? 91 94	65	36.7			
d		30m 25s	54	gr	3	6	2.48	84	42	5	6	4.47	95	56	36.8			
e		41m 25s	65	s	5	9	4.47	92	54	7	9	6.44	93	? 60 61	36.75			
23 b	26 1/2	15	41 1/2	s	5	9	4.47	93	52	7	9	6.44	92	58	36.8		527 ♀	I
c		22	48 1/2	s	5	8	4.47	91	51	7	8	6.44	90	61	36.7			
d		29	55 1/2	gr	3	6	2.48	84	44	5	6	4.47	90	53	36.8			
e		39 1/2	66	s	5	9	4.47	94	52	7	9	6.44	89	58	36.75			
24 b	23 1/4	15	38 1/4	s	5	9	4.47	91	50	7	9	6.44	92	53	36.75		475 ♀	I
c		21m 45s	45	s	5	8	4.47	90	49	7	8	6.44	92	55	36.75			
d		36m 15s	53 1/2	gr	3	6	2.48	92	44	5	6	4.47	92	54	36.8			
e		36m 45s	60	s	5	9	4.47	91	50	7	9	6.44	95	53	36.8			
f		44m 45s	68	s	5	10	4.47	90	48	8	10	7.48	88	53	36.75			

DUP050043960

Nerve & Photo		Minutes: Electrocution to Incising	Minutes: Incising to Photo	Time: Electrocution to Photo	Nerve: Sensible = gr. Not sensible = S	Active Recording Electrode 4	Distal Recording Elec.	Conduction Dist. cms.	Inflection Conduction Velocity	Peak Conduction Velocity	Active Recording Electrode 6	Distal Recording Elec.	Conduction Dist. cms.	Inflection Cond. Velocity	Peak Cond. Velocity	DB Temp. of Skulk °C		Dog # & Sex	Treatment Group
25	c	24	17h	41	S	5	9	4.47	92	53	7	9	6.44	88	56	36.6 & 36.7		522 ♀	V
	d		24	48	S	5	8	4.47	86	51	7	8	6.44	85	57	36.6			
	f			53 3/4	S	5	8				7	8	6.44			36.7			
	g		31 1/2	55 1/2	S	5	8	4.47	84	50	7	8	6.44	84	56	—			
	h		41	65	gr	3	6	2.48	87	43	5	6	4.47	? 79 81	52	36.8			
	i		46	70	gr	5	9	4.47	78	48	7	9	6.44	? 52 53	52	36.8			
	j		52	76	gr	5	10	4.47	? 76 79	46	8	10	7.48	73	53	36.8			
26	b*	25 3/4	15	40 3/4	S	5	9	4.47	84	48	7	9	6.44	89	52	36.7		518 ♀	II
	c		22	47 3/4	S	5	8	4.47	85	49	7	8	6.44	92	58	36.8			
	d		30	55 3/4	gr	3	6	2.48	86	42	5	6	4.47	91	53	36.8			
	e		40	65 3/4	S	5	9	4.47	86	50	7	9	6.44	90	54	36.8			
27	b	20 1/2	15	35 1/2	S	5	9	4.47	88	47	7	9	6.44	87	52	36.7		531 ♀	II
	c		22	42 1/2	S	5	8	4.47	89	47	7	8	6.44	86	53	36.75			
	d		30	50 1/2	gr	3	6	2.48	86	44	5	6	4.47	93	51	36.75			
	e		36	56 1/2	gr	5	9	4.47	84	47	7	9	6.44	81	51	36.75			
28	b	19	16	35	S	5	9	4.47	88	52	7	9	6.44	91	56	36.75		528 ♀	II
	c		21	40	S	5	8	4.47	88	52	7	8	6.44	91	60	36.8			
	d		26	45	gr	3	6	2.48	87	45	5	6	4.47	? 57 58	54	36.9			
	e		31	50	S	5	9	4.47	90	52	7	9	6.44	91	56	36.9			
29	b	20 1/2	15	35 1/2	S	5	8	4.47	98	56	7	8	6.44	108	60	37		529 ♀	II
	c		22	42 1/2	gr	3	6	2.48	88	46	5	6	4.47	97	58	36.9			
	d		32h 5'	52h 35'	S	5	8	4.47	96	55	7	8	6.44	88	59	36.85			
30	b	23	16	39	S	5	10	4.47	92	54	8	10	7.48	99	61 41	36.9		525 ♀	III
	c		22	45	S	5	9	4.47	91	56	7	9	6.44	96	59	36.95			
	d		29 1/2	52 1/2	S	5	8	4.47	89	54	7	8	6.44	94	60	36.85			
	e		37	60	gr	3	6	2.48	95	48	5	6	4.47	92	58	36.85			
	f		44 1/2	67 1/2	S	5	10	4.47	88	52	8	10	7.48	? 52 92	? 53 56	36.8			
31	b	20 1/2	15	35 1/2	S	5	8	4.47	91	53	7	8	6.44	96	60	36.9		526 ♀	III
	c		22	42 1/2	gr	3	6	2.48	94	45	5	6	4.47	93	58	36.9			
	d		29 1/2	50	gr	3	7	2.48	94	45	5	7	4.47	? 88 93	53	36.8			
	e		37	57 1/2	S	5	8	4.47	91	53	7	8	6.44	92	59	36.85			

DUP05004396

Nerve # & Photo #	Minutes: Electrocution To mounting	Minutes: Mounting To photo	Minutes: Electrocution To photo	Nerves: Sprouted = SP, Not sprouted = S	Active recording electrode #	Distal recording elec.	Conduction Dist. Ch.	Inflection Conduction Velocity	Peak Conduction Velocity	Active recording electrode #	Distal recording elec.	Conduction Distance Ch	Inflection Conduction Velocity	Peak Conduction Velocity	Specific G. D.B. Temp. °C		DOG # & Sex	Treatment Group
32 b	21 1/4	15	36 1/4	S	5	9	4.47	89	50	7	9	6.44	89	57	36.8		532 ♀	III
c		22 1/4	43 1/2	S	5	8	4.47	88	50	7	8	6.44	91	61	37			
d		32	53 1/4	SP	3	6	2.48	83	42	5	6	4.47	86	55	36.8			
e		39	60 1/4	S	5	9	4.47	86	49	7	9		86	54	36.65			
33 b	25	15	40	S	5	9	4.47	102	52	7	9	6.44	112	57	36.9		533 ♀	III
c		22	47	S	5	8	4.47	97	52	7	8	6.44	93	64	37.0			
d		29	54	SP	3	6	2.48	93	44	5	6	4.47	98	57	37.0			
e		35	60	S	5	9	4.47	104	52	7	9	6.44	93	57	36.9			
34 b	20	20	40	S	5	9	4.47	85	50	7	9	6.44	93	52	36.9		530 ♀	IV
c		30	50	S	5	8	4.47	86	51	7	8	6.44	92	? 64 62	36.85			
d		37	57	SP	3	6	2.48	82	42	5	6	4.47	92	51	36.85			
e		45	65	S	5	9	4.47	85	50	7	9	6.44	70	52	36.85			
35 b	22 1/2	15	37 1/2	S	5	9	4.47	93	55	7	9	6.44	? 101 99	60	36.95		534 ♀	IV
c		18m 10^3	40m 40^3	S	5	9	4.47	94	56	7	9	6.44	99	60	—			
d		23 1/2	46	S	5	8	4.47	95	56	7	8	6.44	98	62	36.95			
e		32 1/2	55	SP	3	6	2.48	90	48	5	6	4.47	98	58	37			
f		39 1/2	62	S	5	9	4.47	96	56	7	9	6.44	100	61	36.95			
36 b	19	15	34	S	5	9	4.47	93	54	7	9	6.44	98	60	36.8		537 ♀	IV
c		21	40	S	5	8	4.47	97	54	7	8	6.44	98	62	36.9			
d		28 1/2	47 1/2	SP	3	6	2.48	90	46	5	6	4.47	96	60	36.95			
e		36	55	S	5	9	4.47	94	54	7	9	6.44	95	61	36.95			
37 b	20 1/4	20	40 1/4	S	5	9	4.47	92	52	7	9	6.44	104	55	36.9		538 ♀	IV
c		28	48 1/4	S	5	8	4.47	92	51	7	8	6.44	96	58	36.85			
d		35 1/4	55 1/2	SP	3	6	2.48	99	41	5	6	4.47	103	53	36.9			
e		42 1/4	62 1/2	S	5	9	4.47	89	50	7	9	6.44	? 101 92	53	36.9			

DUP050043962

DOGS. TIBIALIS PREP. Pb. 24

F TEST.

	I	II	III	IV	V
"INFLECTION" CONDUCTION VELOCITY [MEASURED: SHOCK ARTIFACT TO INFLECTION RESPONSE					
♂	—	78	102	99	90
	—	84	98	99	92
	—	87	92	105	93
	—	92	89	93	—
♀	93	84	92	85	91
	87	88	91	93	92
	92	88	89	93	—
	93	98	102	92	—
STAND. DEV. all NERVES		± 5.6 m/sec.			
	$\bar{x}$ = 92				
F TEST: F = 3.0571		0.01 < P < 0.05			
"INFLECTION" CONDUCTION VELOCITY [MEASURED: INFLECTION TO INFLECTION]					
♂	—	98	99	63	103
	—	106	71	46	108
	—	98	112	92	116
	—	90	95	84	—
♀	102	102	112	120	94
	116	85	111	?114	81
	?90	97	90	109	—
	90	141	?145	145	—
FREEDOM: TREATMENT = 4		ALL NERVES $\bar{x}$ = 100 STAN. DEV. = 20.9 m/sec.			
COLUMNS = 24					
		F = 0.6899 INSIGN.			

	I	II	III	IV
"PEAK" CONDUCTION VELOCITY [MEASURED: SHOCK				
♂	—	46	58	57
	—	52	50	52
	—	50	52	53
	—	51	50	51
♀	53	48	54	50
	51	47	53	55
	59	52	50	54
	52	56	52	52
ALL NERVES		$\bar{x}$ = 52		STAND.
F TEST: F = 1.2203.		INSIGN.		
"PEAK" CONDUCTION VELOCITY [MEASURED: PE				
♂	—	53	86	69
	—	76	64	66
	—	67	67	66
	—	74	73	?62
♀	64	64	73	57
	55	67	84	73
	93	70	84	76
	78	72	73	62
ALL NERVES.		$\bar{x}$ = 69.		STAND.
F = 1.7726		INSIGN.		

DUP05043963

RATS 18 MO. SACRIFICE
Pb-FED

MEASUREMENT: SHOCK ARTIFACT TO 1) INFLECTION 1) & TO 2) PEAK OF RESPONSE. COND. DIST: 2.5 CM

	"INFLECTION" CONDUCTION VELOCITY: M/sec						"PEAK" CONDUCTION VELOCITY: M/sec					
	I	IA	II	III	IV	V	I	IA	II	III	IV	V
♂	76	65	63	83	72	89	43	43	40	47	46	45
	86	72	62?	83	78	78	42	44	45	44	45	44
	77	83	83	83	?74	81	47	42	53	?30	46	44
	78	74	67	74	96	72	44	43	42	39	53	40
	89	83	83	74	76	69	51	45	46	46	48	41
	69	82?	66	81	89	71	48	45	35?	42	42	42
♀	76	78	49	62	69	76?	45	44	36	41	45	44
	78	82	85	82	78	69	45	44	46	47	45	41
	89	76	76	?82	74	?78	48	49	46	49	42	48
	68	75	67	78	87	80	42	42	45	45	47	42
	78	71	86	76	81	80	48	41	45	44	45	45
	77	82	66	65	69	56	45	42	45	40	44	45

60 = °F COLUMNS
5 = °F TREATMENT

ALL NERVES. $\bar{x}$ = 76.1 STAND. DEV. = ±8.3
F = 1.3534 INSIGN.

$\bar{x}$ = 44 STAND. DEV. = ±3.6 M/sec
F = 1.3566 INSIGN.

DUP050043964

MEASUREMENTS: FROM STIMULUS ARTIFACT TO 1) INFLECTION of ♂ to 2) PEAK OF RESPONSE. COND. DIST: 2.97 cm [few shorter]

	"INFLECTION" COND. VELOCITY M/sec.							"PEAK" CONDUCTION VELOCITY: M/sec				
	I	IA	II	III	IV	V		I	IA	II	III	IV
♂ N=62	56	72	?54	68	60			40	47	38	38	34
	56	74	65	67	64			36	39	37	42	41
	65 ?	70	71	68	64			40	43	40	32	43
	41 ?	65	?48	64	?67			?28	42	33	40	39
	62	66	68	70	61			?33	40	40	39	34
	71	64	63	56	63			44	34	38	31	?30
	63	74	65	67	62			39	35	40	41	?36
	67	71	65	65	73			38	45	31	40	43
	71	?69	68	61	63			32	36	42	34	33
	100	71	71	57	70			?45	34	39	29	?31
	72	53	65	?59	61			?36	31	41	37	34
	59	63	76	66	65			32	29	44	33	44
		65	68						33	37		39
♀ N=89	68	59	73	68	68	62		?32	34	39	40	33
	68	59	60	60	86	54		41	38	40	33	43
	63	65	59	70	68	69		38	31	34	46	37
	61	58	59	59	61	?58		40	36	34	34	41
	62	70	68	55	58	63		35	42	38	27	38
	?62	64	59	?57	56	65		33	41	38	37	31
	57	58	63	66	65	68		37	26	40	42	42
	69	68	?65	61	68	64		32	40	39	32	39
	65	68	68	69	64	61		33	37	42	44	38
	69	65	68	66	67	64		45	41	40	39	36
	69	53	64	60	62	68		37	?26	39	40	36
	56	73	63	63	56	72		37	38	31	38	28
	68		59	68	?81			41		33	42	40
	74		?62	64	68			42		41	38	41
	72		61	72	58			44		37	45	38
	62		67	?61	59			41		38	42	39
					44							31
	F=	0.2504	INSIGN.		all nerves	$\bar{x}$= 6.4 m/sec	σ= 6.8 m/sec		all nerves	$\bar{x}$=	37 m/sec	
										σ=	4.4 m/sec.	

GR. I, IA, ♂ + ♀: SD = ± 8.1 m/sec, $\bar{x}$ = 65 m/sec. N = 53

GR. I, IA, ♂ + ♀: SD = ± 5.7 m/sec, $\bar{x}$ = 37 m/sec.

♂ 57

F-TR. .5

Col. = 140

83 + 57 = 140

DUP050043965

RATS. SPECIALS. 6 MO. SACRIFICE
5000 PPM Pb as Pb ACETATE.

MEASUREMENT: SHOCK ARTIFACT TO 1) INFLECTION OF + TO 2) PEAK OF RESPONSE.

"INFLECTION" CONDUCTION VELOCITY: M/SEC.				"PEAK CONDUCTION VELOCITY.			
CONDUCTION DISTANCE: 2.47cm		CONDUCTION DISTANCE 2.97cm		CONDUCTION DISTANCE: 2.47cm		CONDUCTION DIST: 2.97cm	
CONTROLS (a)	TREATED (b)	CONTROLS	TREATED	CONTROLS	TREATED	CONTROLS	TREATED
69	62	66	63	40	38	42	41
77	66	68	71	41	42	44	46
66	64	66	65	39	40	43	43
63	69	67	73	40	42	43	45
69	63	70	68	41	41	46	44
68	74	71	70	41	41	43	43
69	67	71	68	41	42	44	46
73	68	71	73	42	40	45	45
77	71	82	71	41	40	47	44
	71		70		44		47
of $T_c > 1$	USING demand wheel at 6						
P_1 = col = 17	~~F = 0.0000 Pol~~	F = ~~0.0000 Pol~~					
	F = 1.75-1882	= 0.293029		F = 0.298243		F = 0.136348	
		F's all INSIGN.					
all means							
$\bar{x}$ =	69	$\bar{x}$ =	70	$\bar{x}$ = 41		$\bar{x}$ = 44	
σ =	± 4.4 m/sec	σ =	± 4.0 m/sec	σ = ± 1.30 m/sec		σ = 1.6 m/sec.	

DUP050043966

♂ RATS - SPECIALS 1 YR. SACRIFICE
5000 PPM Pb as Pb acetate

CONDUCTION DISTANCE: 296 CMS.

MEASUREMENT: STIMULUS [SHOCK] ARTIFACT TO 1) INFLECTION OF & TO 2) PEAK OF RESPONSE.

"INFLECTION" CONDUCTION VELOCITY: M/sec		"PEAK" CONDUCTION VELOCITY: M/sec.	
CONTROLS	TREATED	CONTROL	TREATED
9	10		
67	65	44	44
79	65	45	43
72	67	45	43
70	70	41	46
73	79	46	47
73	68	48	43
79	76	44	47
76	65	48	36
65	73	43	47
	69		45

combined data $\bar{x} = 71$

F = 1.753824

INSIGN

FS INSIGN.

all nerves $\bar{x} = 71$ $\sigma = \pm 5.0$ M/sec

combined $\bar{x} = 44.4$

F = 0.358505

all

$\bar{x} = 44$ M/sec $\sigma = \pm 2.8$ M/sec.

DUP050043967

NERVE IN SHELTER 15± MINUTES ; PHOTO 10 a [ ]: only 5 MINS. IN SHELTER

D065.

NERVE & PHOTO	GROUP	SEX			COND. DIST. 4.47 CM (45) INFLECTION	COND. DIST. 4.47 CM (45) PEAK			COND. DIST 6.44 CM (47) INFL.	COND. DIST 6.44 CM (47) PK			7.48 CM (46) INFL.	7.48 CM (46) PK		DOT
8b	II	♂			78	46							85	49		508
9c	II	♂	gr.		84	52			90	58						513
10a	II	♂			[87]	[50]			[70]	[54]						503
11a	II	♂			92	51							91	59		509
12a	III	♂			102	58							100	67		51
13a	III	♂	gr.		97	50			89	53						50
14c	III	♂	gr.		92	52							99	57		51
15a	III	♂			89	50							91	57		49
16a	IV	♂	gr.		99	57							81	61		489
17b	IV	♂	gr.		99	52			74	56						450
18b	IV	♂	gr.		105	53			101	57						512
19a	IV	♂			93	51			90	54						517
5b	V	♂			90	48							95	52		462
6b	V	♂	gr.		92	53							98	56		506
7d	V	♂			93	52							102	59		511

DUP050043968

LIGHT ( ): elec. 5,7 & 8 instead of 5,7 & 9

NERVE / PHOTO	GROUP	SEX	COND. DIST 4.47 cm (#5) INFLECTION	COND. DIST 4.47 cm (#5) PEAK	COND. DIST 6.44 cm (#7) INFLECTION	COND. DIST 6.44 cm (#7) PEAK	7.48 cm (#8) INFLECT.	7.48 cm (#8) PK.	DOG#
20a	I	♀	93	53	96	56			470
21 b	I	♀	87	51	94	52			519
22 b	I	♀	92	54	? 91 104	62			520
23 b	I	♀	93	52	92	58			527
26b	II	♀	84	48	89	52			518
27 b	II	♀	88	47	87	52			531
28 b	II	♀	88	52	91	56			528
29 b	II	♀	{98}	{56}	(108)	(60)			529
30 b	III	♀	92	54			94	61	525
31 b	III	♀	(91)	(53)	(96)	(60)			526
32 b	III	♀	89	50	89	57			532
33 b	III	♀	102	52	112	57			533
34b	IV	♀	85	50	93	52			530
35 b	IV	♀	93	55	? 99 101	60			534
36 b	IV	♀	93	54	98	60			537
37 b	IV	♀	92	52	104	55			538
24b	V	♀	91	56	92	53			475
25 c	V	♀	92	53	88	56			522

DUP050043969

74 Special Lead Fed Rat — 1st Sacrifice (6 mos) — MR 10 A G

EY BK 5-68 5000 PPM Lead as Lead Acetate — Research A 4154

Animal No.	Sex	Weight	Nerve Motor Distance	Electrodes	Stimulator Distance cms	Stimulator Voltage Used volts	Dry Bulb Temperature °C	Stimulus Intensity	Infection Duration Time m Sec.	Infection Conduction Velocity meters per sec.	Peak Duration Time m Sec.	Peak Conduction Velocity meters per sec.	Refractory Period Absolute All Nerves m Sec.	Refractory Period Absolute Main Wave m Sec.	Refractory Period Relative to Spike Interval m Sec.
Autopsy Day 1 : 11-16-66															
1 78858	C	24.5	5-8	2.47	1.0	36.7	1.8	0.360	68.6	3.13	0.626	39.5	0.505	0.50	0.64
			6-8	2.97	"		2.25	0.450	66.0	3.5	0.700	42.4			
			5 to 6	0.5	"		0.45	0.090	55.6	0.37	0.074	67.6			
2 78859	C	17	5-8	2.47	1.0	36.7	1.6	0.320	77.2	3.03	0.606	40.8	0.54	0.54	0.65
			6-8	2.97			2.2	0.440	67.5	3.4	0.680	43.7			
			5 to 6	0.5			0.6	0.120	41.7	0.37	0.074	67.6			
3 78862	C	16.75	5-8	2.47	1.0	36.7	1.87	0.374	66.0	3.13	0.626	39.4	0.650	0.50	0.67
			6-8	2.97			2.25	0.450	66.0	3.45	0.690	43.0			
			5 to 6	0.5			0.38	0.076	65.8	0.32	0.064	78.1			
4 78863	C	17	5-8	2.47	1.0	36.8	1.97	0.394	62.7	3.05	0.610	40.5	0.45	0.45	0.65
			6-8	2.97			2.23	0.446	66.6	3.45	0.690	43.0			
			5 to 6	0.5			0.26	0.052	94.2	0.40	0.080	62.5			
6 78888	T	17	5-8	2.47	1.48	36.8	2.0	0.40	61.8	3.23	0.646	38.2	—	—	—
			6-8	2.97			2.3	0.46	64.6	3.6	0.720	41.2			
			5 to 6	0.5			0.3	0.06	83.3	0.37	0.074	67.6			
6A	a	17.5	5-8	2.47	1.0	36.8	2.0	0.40	61.8	3.27	0.654	37.8	0.53	0.53	0.73
			6-8	2.97			2.35	0.470	63.2	3.63	0.726	40.9			
			5 to 6	0.5			0.35	0.070	71.4	0.36	0.072	69.4			
7 78881	T	17.5	5-8	2.47	1.0	36.8	1.87	0.374	66.0	2.97	0.594	41.6	0.037	0.54	0.85
			6-8	2.97			2.1	0.420	70.7	3.25	0.650	45.7			
			5 to 6	0.5			0.33	0.066	75.7	0.28	0.056	89.3			
7A		57	5-8	2.47	1.0	36.9	1.9	0.380	65.0	3.05	0.610	40.5	—	—	—
			6-8	2.97			2.13	0.426	69.7	3.40	0.680	43.7			
			5 to 6	0.5			0.23	0.046	108.7	0.35	0.070	71.4			
8 78882	T	16.75	5-8	2.47	1.5	36.9	1.93	0.386	64.0	3.0	0.600	41.2	—	—	—
			6-8	2.97			2.3	0.460	64.6	3.4	0.680	43.7			
			5 to 6	0.5			0.37	0.074	67.6	0.40	0.080	62.5			
8A			5-8	2.47	1.0	"	1.93	0.386	64.0	3.01	0.602	40.2	0.48	0.52	
			6-8	2.97			2.27	0.454	65.4	3.47	0.694	43.8			
			5-6	0.5			0.34	0.068	73.5	0.4	0.080	62.5			

DUP050043970

Special Lead Fed Rats
1st Sacrifice (6 mos)
UR 1006

PY BK 5-66

5000 PPM LEAD AS Pb Acetate-
Haskell B 4154

| | | |

76 Special Lead Fed Rats — 1st Sacrifice (6 mos) — MR10A6

PY BK 5-66 — 5000 PPM Lead as Pb-Acetate — Haskell # 4154

AUTOPSY DAY 2 [CONT.]

Nerve Fiber	Haskell No.	Number	C = Control T = Treated	Fiber No.	Minutes Deamination	To Electrodes	Recording Electrodes	Conduction Distance cms	Stimulator Current Used volts	Dry Bulb Temperature Shielded °C	Impulse Conduction Velocity: Inflection — Division	Inflection — Conduction Time mSec	Inflection — Velocity Meters per Sec	Peak — Division	Peak — Conduction Time mSec	Peak — Velocity Meters per Sec	Reference Peaks: Absolute All Waves mSec	Reference Peaks: Main Wave mSec	Reference Peaks: Relative to Spike Height mSec	Remarks
4	78878	C	48	—	5-8	2.47	1.0			2.65	0.53	466	5.65	1.130	218				
				—	6-8	2.97				4.3	0.86	345	6.4	1.280	232				
				—	5-6	0.5				1.65	0.26	25.6	0.75	0.150	323				
			4C	—	5-8	2.47	1.0	373		2.6	0.52	475	4.03	0.806	30.6				
					6-8	2.97				3.15	0.63	47.1	4.45	0.890	33.4				
					5-6	0.5				0.55	0.11	45.4	0.42	0.084	59.5				
5	78879	C	5	10.25	5-8	2.47	1.0	37.3		1.6	0.32	77.2	3.03	0.606	40.8	6.423	0.5	6.62	2nd Spike
					6-8	2.97				1.8	0.36	82.5	3.17	0.634	46.8				
					5-6	0.5				0.7	0.04	125.0	0.14	0.028	178.6				
6	78879	T	6	10.25	5-8	2.47	1.0	37.3		1.67	0.334	74.0	3.0	0.6	41.2	6.47	0.515	0.575	2nd Spike
					6-8	2.97				2.13	0.426	69.7	3.45	0.69	43.0				
					5-6	0.5				0.46	0.092	54.3	0.45	0.09	55.6				
			6A	10.25	5-8	2.47	1.5	—		1.67	0.334	74.0	3.0	0.6	41.2				
					6-8	2.97				2.1	0.42	70.7	3.47	0.694	42.8				
					5-6	0.5				0.93	0.186	58.1	0.47	0.094	53.2				
7	78880	T	7	12 3/4	5-8	2.47	1.0			1.85	0.37	66.8	2.93	0.586	42.2	6.47	20.51	0.59	2nd Spike
					6-8	2.97				2.2	0.44	67.5	3.23	0.646	46.0				
			7A	12 3/4	5-6	0.5	—	—		0.35	0.07	71.4	0.30	0.06	83.3				No Photo (Film Exposed)
					5-8	2.47	1.5												
					6-8	2.97													
					5-6	0.5													
8	78881	T	8	16 1/2	5-8	2.47	1.0			1.83	0.366	67.5	3.07	0.614	46.2	6.49	6.49	0.60	2nd Spike
					6-8	2.97				2.03	0.406	73.2	3.3	0.66	45.0				
			8A	16 1/2	5-8	2.47	1.5	—		0.49	0.68	69.5	6.23	0.696	16.87				
					6-8	2.97				1.87	0.374	66.0	3.03	0.606	40.8				
					5-6	0.5				2.0	0.4	74.2	3.3	0.66	45.0				
9	78882	T	9	17.75	5-8	2.47	1.0	37.2		0.13	0.026	192.0	0.27	0.054	92.6				
					6-8	2.97				1.75	0.35	70.6	3.05	0.66	46.5	6.51	6.51	0.71	2nd Spike
					5-6	0.5				2.1	0.42	76.7	3.1	0.65	49.1				
										0.35	0.07	71.4	0.35	0.07	71.4				

DUP050043972

Special Lead Fed Rats
1st Sacrifice (6 mos)
MR 1046

PY BK 5-66 5000 PPM LEAD As Pb Acetate
Haskell # 4154

| | | |

78 SPECIAL LEAD FED RATS PY BK 5-66 5000 PPM LEAD AS LEAD ACETATE
1st SACRIFICE [6 MOS] HASKELL # 4154
MR 10A6

SEE P. 81 FOR CALC STAND DEV.: CONDUCTION DIST 2.97 cm. MZM

NOTE: STIMULATOR VOLTAGE: 1.0 V MZM

NERVE #	INFLECTION VELOCITY: CONDUCTION DISTANCE OF 2.47 cm	2.97 cm	0.5 cm [INFL. TO INFL.]	PEAK VELOCITY: CONDUCTION DISTANCE OF 2.47 cm	2.97 cm	0.5 cm [PEAK TO PEAK]	REFRACTORY PERIODS ABSOLUTE ALL PEAKS mSec	ABSOLUTE PEAK mSec	RELATIVE [TO 50% OF SPIKE HT] mSec	
	METERS PER SECOND			METERS PER SECOND						
CONTROL RATS										
DAY 1 AUTOPSY										
1	68.6	66.0	55.6	39.5	42.4	67.6	0.50	0.50	0.64	AVG. 0.65
2	77.2	67.5	41.7	40.8	43.7	67.6	0.64	0.54	0.65	
3	66.0	66.0	65.8	39.4	43.0	78.1	0.50	0.50	0.67	
4	62.7	66.6	96.2	40.5	43.0	62.5	0.45	0.45	0.65	
DAY 2 AUTOPSY										
1	68.6	69.7	75.8	40.8	45.7	113.6	0.505	0.505	0.62	AVG. 0.602
2	67.5	70.7	92.6	40.8	43.3	62.5	0.50	0.50	0.60	
3	68.6	70.7	83.3	41.2	44.1	67.6	0.49	0.49	0.60	
4	72.6	70.7	62.5	41.6	45.4	83.3	0.435	0.51	0.57	
5	77.2	82.5	125.0	40.8	46.8	178.6	0.423	0.5	0.62	
	AVG:	70.04 ± 5.1			44.16 ± 1.5					
TREATED RATS										
DAY 1 AUTOPSY										
6	61.8	63.2	71.4	37.8	40.9	69.4	0.53	0.53	0.73	AVG. 0.65
7	66.0	70.7	108.7	41.6	45.7	89.3	?0.37	0.54	0.65	
8	64.6	65.4	73.5	40.2	42.8	62.5	0.45	0.52	0.62	
9	68.6	73.2	108.7	41.6	45.4	83.3	0.48	0.48	0.61	
10	62.7	67.5	108.7	40.8	44.3	78.1	0.525	0.525	0.64	
DAY 2 AUTOPSY										
6	74.0	69.7	54.3	41.2	43.0	55.6	0.47	0.515	0.575	AVG. 0.602
7	66.8	67.5	71.4	42.2	46.0	83.3	0.47	?0.51	0.59	
8	67.5	73.2	62.5	40.2	45.0	108.7	0.49	0.49	0.60	
9	70.6	70.7	71.4	40.5	43.7	71.4	0.51	0.51	0.71	
10	71.4	69.7	62.5	44.1	47.1	71.4	0.46	0.46	0.54	
	AVG.	69.1 ± 5.22			44.4 ± 1.83					

MZM

DUP050043974

6MO SACRIFICE
special Pb-FED- 5000 PPM PY BK 5-68 1-GRAPH 81

CALCULATION OF STANDARD DEVIATIONS FOR CONDUCTION DISTANCE 3.97 cm.

	Σx	$\Sigma (x^2)$	$\bar{x}$	N	N(N-1)	σ^2	σ
INFLECTION CONDUCTION VELOCITY							
CONTROLS	630.4	44343.62	70.04	9	72	25.45	± 5.04
TREATED	690.8	47813.54	69.08	10	90	10.342	± 3.22
PEAK CONDUCTION VELOCITY							
CONTROLS	397.4	17565.04	44.16	9	72	2.2628	± 1.50
TREATED	443.9	19734.89	44.39	10	90	3.3521	± 1.83

DUP050043975

SPECIAL LEAD FED RATS — PY BK 5-66 — 5000 PPM LEAD AS Pb ACETATE — 179

HR 10AS — HASKELL H 4154

1 YEAR SACRIFICE

| DAY | ANIMAL | CAGE | | |

180 Special Lead Fed. Reg PY BK 5-66 5000 PPM LEAD AS Pb ACETATE
HR 10A5 Addeed H 4154

Rat No.	Histology Rpt No.	Exptl Designation	Shelter Temp °C	Absolute Refractory Period	Interval Conduction Velocity		Peak m/sec	Left Ventricle Early Systolic Pressure	Nerve Recovery in Seconds	Pharmacology Tracing	Comments
								After 5th min	Documentation		
CONTROLS											
6-21-67											
1	78870	1+1A	37	0.525	67.3	44.0	3 50	16 50	24 one eff. 30 Asphyx.		
2	78871	2	37	0.515	79.2	45.3	5 00	15 0	20 0		
6	78876	6	36.1	0.535	71.6	45.3	4 10	19 0	24 30	Fumes in	
7	78872	7	31.9	0.45	69.9	40.9	4 10	15 50	21 10	Control Room	
8	78875	8	37.3	0.925	72.6	46.0	4 15	15 45	21 30	Air cond. off	
6-22-67											
13	78877	13	37.2	0.515	73.0	48.2	4 15	14 20	19 36	IVB Rn 2	
14	78878	14	37.15	0.530	78.8	44.5	3 55	16 30	21 30	very thin "Ribbons"	
15	78879	15	37	0.485	75.6	48.1	4 05	15 50	20 50	SHELTER	
16A	78880	16A	36.8	0.460	65.3	42.9	3 25	17 0	21 50	very thin	
TREATED											
6-21-67											
3	78901	3	37	0.55	65.0	43.6	3 55	16 30	22 30		
4	78902	4	37.05	0.4	65.3	42.7	4 15	17 30	22 30		
5	78903	5	37.05	0.535	66.7	43.1	4 20	17 20	22 30		
9	78897	9A	36.9	0.550	70.5	46.3	4 15	14 25	21 20	"Fumes"	
10	78898	10	36.2	0.450	69.2	47.2	4 10	14 45	19 45	Fumes Pet. Rm Cond. Off	
6-22-67											
11	78903	11	37	0.465	68.0	42.9	4 0	14 40	19 30	IVB Rn 2 High — very thin Structure	
12	78904	12	37	0.565	76.0	46.6	4 15	13 35	18 45		
17	78905	17	36.9	0.385	64.5	36.4	4 15	15 20	20 25		
18	78906	18	31	0.535	73.3	46.6	4 10	14 0	19 10	Reaction to Pharm. Equipment	
19	78907	19	37	0.500	69.2	45.0	4 05	14 20	19 30	Control Room	

TREATMENT: I 6/5
9 controls
10 Treated

DUP050043977

180 SPECIAL LEAD FED RATS PY BK 5-66 5000 PPM LEAD AS Pb-ACETATE IN IDAS

HASKELL # 4154

DAY	No.	HANDLER INIT	No.	FED CONTROL DIET	SHELTER TEMP °C	ABSOLUTE HUMIDITY	RELATIVE HUMIDITY	PEAK	FED OBSERVED 1 HOUR AFTER MIDDLE OF LIGHT PERIOD	ZERO HOUR 1/2 SHELTER	DECONTAMINATED IN SHELTER	PHOTOGRAPH TAKEN	COMMENTS
CONTROLS													
6-21-67													
	1	78870	1+1A		37	0.565	67.3	94.0	13 50	16 50	24 HRS 30 DEAD		
	2	78871	2		37	0.515	79.2	95.3	5 00	15 0	20 0		
	6	78876	6		36.1	0.535	71.6	95.3	4 10	19 0	24 30	FURRED IN	
	7	78872	7		36.9	0.45	69.9	90.9	4 10	15 50	21 10	CONTROL RATS-	
	8	78875	8		37.3	0.425	72.6	96.0	4 15	15 45	21 30	ALL GOOD.	
6-22-67													
	15	78877	13		37.2	0.515	73.0	98.2	4 15	19 30	24 30	SUB #n 2 VERY HIGH	
	14	78878	14		37.15	0.550	78.8	94.5	15 55	16 50	21 50	"RAILING"	
	15	78879	15		37	0.415	75.6	98.1	4 05	15 50	20 50	INJECTED	
	16A	78880	16A		36.6	0.490	65.3	92.9	4 25	17 0	21 50	VERY HUMID	
TREATED													
6-21-67													
	3	78901	3		37	0.55	65.0	93.6	13 55	16 30	22 30		
	4	78900	4		37.05	0.4	65.3	92.7	4 15	17 30	22 30		
	5	78899	5		37.05	0.535	66.7	93.1	4 20	17 30	22 30		
	9A	78898	9A		36.9	0.550	70.5	96.3	4 15	19 25	21 10	"RABBITS"	
	10	78897	10		36.8	0.50	69.2	97.2	4 10	19 45	19 45	FURRING. LOOK OK	
6-22-67													
	11	78903	11		37	0.465	68.0	92.9	4 0	19 20	19 30	W3 #n 2 HIGH →	
	12	78904	12		37	0.565	76.6	96.6	4 15	19 35	19 45	VERY WET SKIN	
	17	78905	17		36.9	0.525	69.8	96.4	4 15	19 20	19 25		
	18	78906	18		37	0.575	73.3	96.6	4 10	19 0	19 10	RELECTRONE & "RABBITS" TAKEN	
	19	78907	19		37	0.560	69.2	95.2	4 05	19 20	19 30	PHOTOGRAPHED.	

427

DUP050043978

SPECIAL LEAD-FED RATS
MR 10A5

PY BK 5-66

5000 PPM LEAD AS Pb-ACETATE
HASKELL # 4154

181

DATA: FOR CALCULATION OF STANDARD DEVIATION (σ)

$$\sigma = \pm \sqrt{\frac{N\sum(x^2) - (\sum x)^2}{N(N-1)}}$$

	$\sum x$	$\sum(x^2)$	$\bar{x}$	N	N-1	N(N-1)	σ^2	σ	$(\sum x)^2$
CONTROLS: INFLECTION VELOCITY.									
6-21-67	360.6	26085.26	72.1	5	4	20	19.697	±4.44	
6-22-67	292.7	21517.89	73.2	4	3	12	33.189	±5.77	
BOTH DAYS	653.3	47603.15	72.6	9	8	72	22.604	±4.76	426800.8900
CONTROLS. PEAK VELOCITY									
6-21-67	221.5	9828.99	44.3	5	4	20	4.135	±2.04	
6-22-67	183.7	8457.51	45.9	4	3	12	7.029	±2.66	
BOTH DAYS	405.2	18286.50	45.0	9	8	72	5.437	±2.34	164187.0400
TREATED: INFLECTION VELOCITY									
6-21-67	346.7	24180.87	69.3	5	4	20	35.173	±5.94	
6-22-67	351.3	24760.57	70.3	5	4	20	19.558	±4.43	
BOTH DAYS	698.0	48941.44	69.8	10	9	90	24.560	±4.96	487204.0000
TREATED: PEAK VELOCITY									
6-21-67	222.4	9953.39	44.6	5	4	20	4.127	±2.04	
6-22-67	217.5	9533.49	43.5	5	4	20	18.060	±4.25	
BOTH DAYS	440.4	19486.88	44.0	10	9	90	10.185	±3.2	193952.160

SUMMARY: AVERAGE ± STANDARD DEVIATION

		INFLECTION VELOCITY METERS/SEC.	PEAK VELOCITY METERS/SEC.
CONTROLS:	6-21-67	72.1 ± 4.44	44.3 ± 2.04
	6-22-67	73.2 ± 5.77	45.9 ± 2.66
	BOTH DAYS	72.6 ± 4.76	45.0 ± 2.34
TREATED.	6-21-67	69.3 ± 5.94	44.6 ± 2.04
	6-22-67	70.3 ± 4.43	43.5 ± 4.25
	BOTH DAYS	69.8 ± 4.96	44.0 ± 3.2

T-TEST APPLIED TO DATA FOR BOTH DAYS: 17 SERIES OF [illegible] 6.25 0.769 BOTH INSIGNIFICANT. SEE NEXT PAGE

M2M

DUP050043979

182 SPECIAL LEAD-FED RATS PY BK 5-66 5000 PPM LEAD AS Pb ACETATE
HR 16AS HASKEW B 4154

T: TREATED $N_T = 10$
C: CONTROLS $N_C = 9$

CHECK TO DETERMINE WHETHER TO USE STANDARD OR MODIFIED T-TEST:

INFLECTION VELOCITY: $\sigma_C^2 = 22.604$ $\sigma_T^2 = 24.560$

$F = \frac{24.560}{22.604} = 1.08653$ WHICH IS LESS THAN 5.91 [1%] OR 3.39 [5%]

PEAK VELOCITY: $\sigma_C^2 = 5.437$ $\sigma_T^2 = 10.185$

$F = \frac{10.185}{5.437} = 1.87327$ ∴ USE STANDARD T-TEST

STANDARD T-TEST:

$$T = \frac{\bar{x}_C - \bar{x}_T}{\sqrt{\frac{\Sigma(x_C^2) - \frac{(\Sigma x_C)^2}{N_C} + \Sigma(x_T^2) - \frac{(\Sigma x_T)^2}{N_T}}{N_C + N_T - 2} \times \frac{N_C + N_T}{N_C \times N_T}}}$$

INFLECTION VELOCITY: DEGREES OF FREEDOM = $N_C + N_T - 2 = 19 - 2 = 17$

$$T = \frac{72.6 - 69.8}{\sqrt{\frac{47603.15 - 47422.32111 + 48941.44 - 48720.40000}{19-2} \times \frac{19}{90}}}$$

$$T = \frac{2.8}{\sqrt{4.99052}} = \frac{2.8}{2.24} = \underline{1.25}$$

PEAK VELOCITY: DEGREES OF FREEDOM = $N_C + N_T - 2 = 19 - 2 = 17$

$$T = \frac{45 - 44}{\sqrt{\frac{18286.50 - 18243.00444 + 19486.88 - 19395.21600}{19-2} \times \frac{19}{90}}}$$

$$T = \frac{1}{\sqrt{1.67845}} = \frac{1}{1.3} = \underline{0.769}$$

5541

DUP050043980

SPECIAL LEAD FED RATS
MR 10A5

5000 PPM LEAD AS PB-ACETATE
HASKELL # 4159

PY BK 5-66

189

COMPARISON OF RESULTS (CONDUCTION VELOCITY):

2-YR. SACRIFICE, LEAD FED RATS, MR787: KILLED BY CHLOROFORM P. 92 ff
6-MO. SACRIFICE, SPECIAL LEAD FED RATS: KILLED BY DECAPITATION P. 78 ff
13-MO. SACRIFICE, SPECIAL LEAD FED RATS: KILLED BY DECAPITATION P. 175 ff.

RATS	SEX	NUMBER OF NERVES	CONDUCTION VELOCITY AVERAGE ± STANDARD DEVIATION "INFLECTION" METERS/SEC.	"PEAK" METERS/SEC.
SPECIALS: 5000 PPM				
6 MO. SACRIFICE CONDUCTION DISTANCE: 2.97 CM				
CONTROLS	♂	9	70.04 ± 5.1	44.16 ± 1.5
TREATED	♂	10	69.08 ± 3.2	44.39 ± 1.8
13 MO. SACRIFICE CONDUCTION DISTANCE: 2.96 CM				
CONTROLS	♂	9	72.6 ± 4.8	45.0 ± 2.3
TREATED	♂	10	69.8 ± 5.0	44.0 ± 3.2
LEAD FED RATS MR 787 - 2-YEAR SACRIFICE: CONDUCTION DISTANCE 2.97 CM.				
GROUP I	♂	12	65.2 ± 13.7	36.8 ± 4.9
	♀	16	64.9 ± 5.3	37.9 ± 4.1
GROUP IA	♂	13	67.4 ± 5.8	37.5 ± 5.6
	♀	12	63.3 ± 6.0	35.8 ± 5.5
GROUP II	♂	13	65.1 ± 7.3	38.5 ± 3.6
	♀	16	63.6 ± 4.3	37.6 ± 3.1
GROUP III	♂	12	65.2 ± 4.6	36.3 ± 4.4
	♀	16	63.6 ± 4.8	38.6 ± 5.1
GROUP IV	♂	12*+13*	64.3 ± 3.9	37.1 ± 4.8
	♀	17	64.0 ± 9.6	37.2 ± 4.2
GROUP V	♀	14	63.4 ± 4.9	36.8 ± 4.1

* 13 NERVES: "INFLECTION" DATA NOT AVAILABLE FROM PHOTO OF RESPONSE OF 1 NERVE

DUP050043981

LAD FEEDING STUDY
(AUTOPSY #4)

18 MONTH SACRIFICE

NERVE MEMBER	BASAGIL RAT NUMBER	PHOTO NOTATION	O.B. TEMPERATURE OF SELECTOR °C	STIMULATOR VOLTAGE (Vox "THRESHOLD") VOLTS	CONDUCTION DISTANCE cm.	CONDUCTION VELOCITY — INTERPEAK CON-DUCTION TIME mSec	CONDUCTION VELOCITY — INTERPEAK VELOCITY Meters per Sec.	SECONDARY RESPONSE — ABSOLUTE LATENCY ALL PEAKS mSec	SECONDARY RESPONSE — ABSOLUTE LATENCY MAIN PEAK mSec	SECONDARY RESPONSE — REFRACTORY PERIOD mSec	TIMES AT NECROPSY — TIME IN CAGES DAYS	TIMES AT NECROPSY — TIME IN CAGES HRS.	TIMES AT NECROPSY — TIME OUT SAW TO RECEIVED BY TECHNICIAN MINS.	TIMES AT NECROPSY — TOTAL TIME IN PATH MINS.	TIMES AT NECROPSY — TIME FROM ACCIDENTAL SMEAR CUT TO CHOIS REMOVED, TO WHOLE MOUNTING MEDIUM IN SHARPIE SHEETTE MINS.	TIMES AT NECROPSY — TIME FROM ACCIDENTAL SMEAR CUT TO CHOIS REMOVED, TO WHOLE MOUNTING MEDIUM IN SHARPIE SHEETTE HRS.	PATHOL. BY
Autopsy Day 1																	
1	69181	1	37.2	4×1 ✓	2.5	5.33	75.8	0.58	431	3.44.1	—	0.95	3	7	10	16	26	6	23
2	69506	2	37.6	4.4×1	2.5	Inct	REAGH OLE						6	6	12	27	39	6	33
2'		2'	37.4	4.4×1	2.5	0.29	86.2	0.60	71.7	4.0×.1	—	0.77	3½	—	—	—	—		
3	69490	3	37.2	3.68×1	2.5	0.326	76.7	0.53	47.2	3.6×.1	—	0.661	2 3¼	8½	12	19	31	6	
4	69491	4	37.1	4.05×1 —	2.5	0.32	78.1	0.564	443	4.05×.1	—	0.80	3 4	8	20	18	38		
5	69445	5	37.1	4.05×1 —	2.5	.0.28	89.3	0.486	51.4	4.05×.1	—	0.71	3	9	12	11	31		
6	69435	6	37.1	4.9×1	2.5	0.36	69.4	0.52	48.1	4.21×.1	—	0.67	2	8	10	14	24		
7	69938	7	37.0	3.3×1	2.5	0.33	75.8	0.56	44.6	3.43×.1	—	0.60	2	8	10	20	30		
8	70085	8	37.2	4.0×1 —	2.5	0.32	78.1	0.56	446	3.45×.1	—	0.62	2	8	10	15	25		
9	69811	9	37.1	4.4×1	2.5	0.28	89.3	0.52	48.1	3.42×.1	—	0.60	3	10	13	15	28		
10	70093	10	37.0	4.4×1	2.5	0.346	68.3	0.59	42.4	3.85×.1	—	0.63	2	9	11	16	27		
11	70085	11	37.1	4.4×1 —	2.5	0.32	78.1	0.526	47.5	3.4×.1	—	0.585	3	11	14	17	31		
12	70099	12	37.0	3.3×1	2.5	0.328	76.7	0.56	44.6	3.41×.1	—	0.64	2	7	9	16	25		
13	69750	13	37.0	4.0×1 —	2.5	0.28	89.3	0.56	44.6	3.55×.1	—	0.82	3	9	12	14	26		
14	69755	14	37.2	4.6×1	2.5	0.32	78.1	0.570	43.8	4.24×.1	—	0.75	3	9	12	16	28		
15	69486	15	37.1	3.6×1	2.5	0.31	80.6	0.574	43.6	3.4×.1	—	0.67	3	8	11	16	27		
16	69453	16	37.0	3.9×1	2.5	0.346	72.2	0.62	40.3	3.35×.1	—	0.73	2	11	13	16	29		
17	69600	17	37.0	4.0×1 —	2.5	0.36	69.4	0.61	41.0	3.55×.1	—	0.63	2	10	12	15	27		
18	69463	18	37.1	4.2×1 ✓	2.5	0.354	70.6	0.60	41.7	3.7×.1	—	0.75	2	9	11	17	28		
19	70052	19	37.2	3.1×1	2.5	?0.33	?75.8	0.566	44.2	3.6×.1	—	0.62	3	8	11	15	26		
20	69644	20	37.1	3.8×1 —	2.5	0.36	69.4	0.61	41.0	3.8×.1	—	0.64	3	5	8	24	32		
Autopsy Day 2																			
21	70033	21	37.0	3.4×1	2.5	? 0.32 ; 0.32	; 78.1 ; 1136	0.52	48.1	0.355	—	0.59	4	4	8	19	20		
22	70045	22	37.1	3.85×1	2.5	0.314	79.6	0.60	41.7	0.33	—	0.6	4	8	12	20	32		
23	70091	23	37.6	3.5×1	2.5	0.314	796	0.56	44.6	0.385	—	0.62	2	9	11	18	29		
24	69999	24	37.0	3.6×1	2.5	0.29	86.2	0.55	45.4	0.38	—	0.6	4	6	10	17	27		
25	69538	25	37.1	5.0×1	2.5	0.346	72.2	0.54	46.3	0.382	—	0.62	3	9	12	15	27		

DUP050043982

10 LEAD FEEDING STUDY (AUTOPSY @ 4) PY BK 5-00

NERVE NUMBER	HASKELL RAT NUMBER	PHOTO NUMBER	D.B. TEMPERATURE OF SHELTER °C	STIMULATOR VOLTAGE [10x THRESHOLD] VOLTS	CONDUCTION DISTANCE CMS	CONDUCTION VELOCITY: INFLECTION — CONDUCTION TIME mSec	INFLECTION — VELOCITY METERS PER SEC.	PEAK — CONDUCTION TIME mSec	PEAK — VELOCITY METERS PER SEC	REFRACTORY PERIOD: ABSOLUTE — ALL "PEAKS" mSec	ABSOLUTE — MAIN PEAK mSec	RELATIVE (SCALED TO WEIGHT) mSec	TIMES IN PATHOLOGY: IN $CHCl_3$ MINS	OUT OF JAR TO RECEIVED BY PHYSIOLOGY MINS	TOTAL TIME IN PATHOLOGY MINS	TIME FROM RECEIVAL LEG TO MOUNT NERVE IN CHAMBER MINS.	TOTAL TIME: START $CHCl_3$ TO MOUNT NERVE IN CHAMBER MINS.	
AUTOPSY DAY 2 CONTINUED																		
IV ♂	26	69497	26	37	4.0 —	2.5	0.32	78.1	0.56	44.6	0.37	—	0.74	3	10	13	17	30	27
	27	69535	27	36.9	4.8	2.5	?0.28 ?0.34	?89.3 73.5	0.54	46.3	0.38	0.55	0.695	2	8	10	18	28	26
	28	69655	28	37.0	5	2.5	0.26	96.2	0.47	53.2	0.35	0.61	1.2	2	7	9	38	47	45
	29	69713	29	32.0	5.6	2.5	?0.25 0.35	?100.0 75.8	0.52	48.1	0.34	0.5	0.91	3	10	13	22	35	32
	30	69658	30	37.0	4.8	2.5	0.28	89.3	0.60	41.7	0.42	0.5	0.74	4	12	16	20	36	34
IV ♀	31	69794	31	37.0	4.0 —	2.5	0.36	69.4	0.56	44.6	0.36	0.5	0.66	84	7	11	21	32	28
	32	70060	32	37.0	3.8	2.5	0.32	78.1	0.56	44.6	0.35	0.49	0.58	4	8	12	15	27	23
	33	69954	33	37.1	3.8 —	2.5	0.34	73.5	0.60	41.7	0.33	0.5	0.66	3	14	17	19	36	32
	34	70076	34	37.1	3.6	2.5	0.286	87.4	0.53	47.2	0.35	0.5	0.6	3	8	11	15	26	23
	35	69941	35	37.0	3.2	2.5	0.31	80.6	0.56	44.6	0.34	0.52	0.6	5	10	15	16	31	26
	36	69984	36	37.0	3.4	2.5	0.36	69.4	0.574	43.6	0.35	0.5	0.62	3	8	11	27	38	32
III ♂	37	69492	37	37.0	4.2 —	2.5	0.30	83.3	0.534	46.8	0.40	0.53	0.70	3	8	11	17	28	25
	38	69756	38	37.0	3.8	2.5	0.30	83.3	0.574	43.6	0.34	0.52	0.82	4	12	16	16	32	28
	39	69975	39	37.3	5	2.5	0.30	83.3	?0.82	?30.5	0.36	0.54	0.85	42	8	10	17	27	25
	40	69482	40	37.1	5	2.5	0.34	73.5	0.64	39.1	0.38	0.52	1.0	4	11	15	27	42	36
	41	69551	41	37.1	4.2 —	2.5	0.34	73.5	0.546	45.8	0.35	0.52	0.6	6	9	15	21	36	30
	42	69498	42	37.1	4.4	2.5	0.31	80.6	0.60	41.7	0.35	0.53	0.7	3	9	12	29	41	38
AUTOPSY DAY 3																			
III ♂	43	69944	43	37.0	4.2 —	2.5	0.40	62.5	0.61	41.0	0.35	0.48	0.62	3	11	14	19	33	30
♀	44	69961	44	37.0	4.5	2.5	0.306	81.7	0.53	47.2	0.31	0.49	0.67	4	9	13	29	42	38
	45	70030	45	37.4	3.4	2.5	?0.21 ?0.306	?119.0 ?81.7	0.514	48.6	0.33	0.50	0.60	4	8	12	20	32	28
	46	69980	46	37.2	3.7	2.5	0.32	78.1	0.554	45.1	0.34	0.51	0.65	3	6	9	25	34	31
	47	69903	47	37.2	3.4	2.5	0.33	75.8	0.57	43.8	0.35	0.50	0.64	3	6	9	21	30	27
	48	69969	48	37.0	4.4	2.5	0.386	64.8	0.626	39.9	0.38	—	0.64	5	6	11	26	37	34
III ♂	49	69651	49	37.1	3.6	2.5	0.394	63.4	0.630	39.7	0.34	0.52	0.64	3	7	10	15	25	22
	50	69515	50	37.1	4.0 —	2.5	?0.310 0.40	?80.6 ?62.5	0.56	44.6	0.40	0.54	0.68	4	7	11	16	27	24
	51	69543	51	37.0	2.7	2.5	?0.214 0.30	?116.8 83.3	0.466	53.4	0.44	0.58	0.68	3	7	10	18	28	25

18 HOUR SACRIFICE

MSM

DUP050043983

LEAD FEEDING STUDY
(AUTOPSY A 4)

PX BK 5-CC

18 MONTH SACRIFICE

| | | |

12 LEAD FEEDING STUDY BY BK 5-66 18-MONTH SACRIFICE
(AUTOPSY A 4)

ALL DATA : CONDUCTION VELOCITIES

NOTE: WHERE 2 QUESTIONABLE CONDUCTION VELOCITIES RECORDED, ONLY THE 2ND ONE (LOWER) - USUALLY SLOWER - USED IN FOLLOWING CALCULATIONS.

TREATMENT GROUP & SEX		Σx	$\Sigma (x^2)$	$\bar{x}$ METERS/SEC.	N	STAND. DEVIATION METERS/SEC.
"INFLECTION" VELOCITY						
GROUP I	♂	475.5	37999.43	79.2	6	± 7.3
	♀	466.3	36467.13	77.7	6	± 6.8
GROUP IA	♂	458.8	35366.80	76.5	6	± 7.5
	♀	462.7	35 774.43	77.1	6	± 4.3
GROUP II	♂	425.1	30595.47	70.8	6	± 9.8
	♀	428.2	31593 96	71.4	6	± 14.0
GROUP III	♂	477.5	38117.53	79.6	6	± 4.7
	♀	444.6	33300.32	74.1	6	± 8.4
GROUP IV	♂	485.1	39689.27	80.8	6	± 9.7
	♀	458.4	35269.70	76.4	6	± 7.4
GROUP V	♂	460.2	35584.02	76.7	6	± 7.6
	♀	468.7	36764.37	78.1	6	± 5.5
"PEAK" VELOCITY						
GROUP I	♂	275.8	12742.40	46.0	6	± 3.6
	♀	271.8	12335.10	45.3	6	± 2.1
GROUP IA	♂	260.5	11316.55	43.4	6	± 1.1
	♀	261.0	11 390.10	43.5	6	± 2.1
GROUP II	♂	260.4	11503.48	43.4	6	± 6.4
	♀	264.2	11 768.10	44.0	6	± 3.9
GROUP III	♂	247.5	10386.79	41.2	6	± 6.0
	♀	265.6	11815.26	44.3	6	± 3.4
GROUP IV	♂	280.2	13159.28	46.7	6	± 3.8
	♀	266.3	11835.17	44.4	6	± 1.8
GROUP V	♂	255.0	10852.54	42.5	6	± 1.7
	♀	265.0	11737.46	44.2	6	± 2.6

DUP050043985

REFRACTORY PERIODS: ALL DATA.

TREATMENT GROUP & SEX	ABSOLUTE REFRACTORY PERIOD: FOR ALL "PEAKS" Σx	$\Sigma(x^2)$	$\bar{x}$ m Sec	N	ABSOLUTE REFRACTORY PERIOD: FOR MAIN PEAK Σx	$\Sigma(x^2)$	$\bar{x}$ m Sec.	N	RELATIVE REFRACTORY PERIOD [FOR 50% OF SPIKE HEIGHT] Σx	$\Sigma(x^2)$	$\bar{x}$ m Sec.	N
GROUP I ♂	2.351	0.924491	0.39183	6	—	—	—	—	4.561	3.525321	0.76016	6
♀	2.139	0.763015	0.35650	6	—	—	—	—	3.595	2.165925	0.59916	6
GROUP IA ♂	2.250	0.857900	0.37500	6	3.100	1.60340	0.51666	6	4.455	3.373225	0.74250	6
♀	2.090	0.729900	0.34833	6	3.070	1.57390	0.51166	6	3.960	2.641000	0.66000	6
GROUP II ♂	2.250	0.857300	0.37500	6	3.180	1.68900	0.53000	6	4.0000	2.687200	0.66666	6
♀	2.250	0.851500	0.37500	6	3.050	1.55150	0.50833	6	3.8400	2.549400	0.64000	6
GROUP III ♂	2.180	0.794600	0.36333	6	3.160	1.66460	0.52666	6	4.6500	3.702500	0.77500	6
♀	2.060	0.710000	0.34333	6	2.480	1.23060	0.49600	5	3.8200	2.435000	0.63666	6
GROUP IV ♂	2.379	0.951533	0.39650	6	2.160	1.17460	0.54000	4	4.945	4.281925	0.82416	6
♀	2.080	0.721600	0.34666	6	3.010	1.51050	0.50116	6	3.720	2.312000	0.62000	6
GROUP V ♂	2.160	0.782800	0.36000	6	—	—	—	—	4.350	3.176100	0.72500	6
♀	2.190	0.801550	0.36500	6	—	—	—	—	3.670	2.24650	0.61166	6

STANDARD DEVIATIONS.

	REFRACTORY PERIODS: m Sec. ABSOLUTE: ALL "CURVES" m Sec	ABSOLUTE: MAIN WAVE m Sec	RELATIVE TO 50% SPIKE HEIGHT m Sec
GROUP I ♂	± 0.0257	—	± 0.1079
♀	± 0.0096	—	± 0.0489
IA ♂	± 0.0532	± 0.0186	± 0.1144
♀	± 0.0194	± 0.0248	± 0.0740
II ♂	± 0.0521	± 0.0268	± 0.0641
♀	± 0.0394	± 0.0147	± 0.1355
III ♂	± 0.0225	± 0.0081	± 0.1405
♀	± 0.0234	± 0.0114	± 0.0242
IV ♂	± 0.0406	± 0.0523	± 0.2032
♀	± 0.0103	± 0.0098	± 0.0335
V ♂	± 0.0322	—	± 0.0669
♀	± 0.0210	—	± 0.0183

DUP050043986

14 LEAD FEEDING STUDY
(AUTOPSY #)

PY BK 5-68

18-MONTH SACRIFICE

SUMMARY: DATA ACCORDING TO TREATMENT GROUPS.

AVERAGE VALUES ± STANDARD DEVIATION

		CONDUCTION VELOCITY		REFRACTORY PERIODS		
				ABSOLUTE		RELATIVE: FOR 50% OF SPIKE HEIGHT
		INFLECTION meters/sec.	PEAK meters/sec.	ALL "PEAKS" mSec	MAIN PEAK mSec	mSec
GROUP I	♂	79.2 ± 7.3	46.0 ± 3.6	0.3918 ± 0.0257	—	0.7602 ± 0.1079
I	♀	77.7 ± 6.8	45.3 ± 2.1	0.3565 ± 0.0096	—	0.5992 ± 0.0489
IA	♂	76.5 ± 7.5	43.4 ± 1.1	0.3750 ± 0.0532	0.5167 ± 0.0186	0.7425 ± 0.1144
	♀	77.1 ± 9.3	43.5 ± 2.7	0.3483 ± 0.0194	0.5117 ± 0.0248	0.6600 ± 0.0740
II	♂	70.8 ± 9.8	43.4 ± 6.4	0.3750 ± 0.0521	0.5300 ± 0.0268	0.6667 ± 0.0641
	♀	71.4 ± 14.0	44.0 ± 3.9	0.3750 ± 0.0394	0.5083 ± 0.0147	0.6480 ± 0.1355
III	♂	79.6 ± 4.7	41.2 ± 6.0	0.3633 ± 0.0225	0.5267 ± 0.0081	0.7750 ± 0.1405
	♀	74.1 ± 8.4	44.3 ± 3.4	0.3433 ± 0.0234	0.4960 ± 0.0114	0.6367 ± 0.0242
IV	♂	80.8 ± 9.1	46.7 ± 3.8	0.3965 ± 0.0406	0.5400 ± 0.0523	0.8242 ± 0.2032
	♀	76.4 ± 7.4	44.4 ± 1.8	0.3467 ± 0.0103	0.5017 ± 0.0098	0.6200 ± 0.0335
V	♂	76.7 ± 7.6	42.5 ± 1.7	0.3600 ± 0.0322	—	0.7250 ± 0.0669
	♀	78.1 ± 5.5	44.2 ± 2.6	0.3650 ± 0.0210	—	0.6117 ± 0.0183

DUP050043987

104 LEAD FEEDING STUDY PY BK 5-66

2 HR SACRIFICE

MR '67 HASKELL A 41514

Fiche #	Lead # (Le Rat)	Animal No. #	Treatment Group #	Stimulator Dial Setting: Maximal Stimulus	Stimulator Dial Setting: For Cond. Veloc. Record	Shelter D.B. Temperature °C	Absolute Refractory Period m Sec	Conduction Velocity Data: Inflection: Division	Inflection: Conduction Time m Sec	Inflection: Conduction Velocity M/Sec	Peak: Division	Peak: Conduction Time m Sec	Peak: Conduction Velocity M/Sec	Preparation Times: In $CHCl_3$ Mins	Autopsy Time Mins	Total Time in Path. Mins	Start $CHCl_3$ to Hour in Shelter Mins	$CHCl_3$ to Photo Mins
APRIL 25, 1967 - DAY 1 AUTOPSY																		
1	1	69669	I ♂	30	50	37	0.55	2.6	0.52	56.5	3.75	0.750	39.6	3	6	9	18	20 34
2	2	69517	I ♂	20	50	37	0.43	2.6	0.52	56.5	4.15	0.830	35.8	3	5	8	16	21 31
3	3	69646	I ♂	35	50	37.3	0.25	2.2, 2.3	0.44, 0.46	67.5, 69.6	3.7	0.74	40.1	3	7	10	20	25 35
4	4	69562	IA ♂	35	50	37.3	0.3	2.05	0.41	72.4	3.15	0.630	47.1	2	7	9	18	22 32
5	5	69516	IA ♂	35	50	37.3	0.3	2.0	0.40	74.25	3.8	0.76	39.1	4	8	12	24	27 37
6	6	69701	IA ♂	30	50	37.2	0.3	2.18	0.426	69.7	3.45	0.690	43.0	4	4	8	22	32
7	7	69620	II ♂	30	50	37	0.37	2.43, 2.77	0.486, 0.554	61.1, 53.6	3.87	0.774	38.4	3	8	11	22	26 37
8	8	69501	II ♂	30	50	37.1	0.3	2.3	0.46	64.6	4.0	0.80	37.1	3	5	8	16	20 31
9	9	69576	II ♂	30	50	37.2	0.3	2.1	0.42	70.7	3.73	0.746	39.8	3	11	14	28	28 38
10	10	69633	II ♂	40	50	37.2	0.25	2.1, 3.1	0.42, 0.62	70.7, 47.91	4.5	0.90	33.0	2	10	12	24	26 36
11	11	69591	III ♂	40	50	37.1	0.35	2.2	0.44	67.5	3.87	0.774	38.4	6	9	15	27	38
12	12	69650	III ♂	35	50	37	0.27	2.23	0.446	66.6	3.53	0.706	42.1	3	9	12	27	37
13	13	69553	III ♂	35	50	37.4	0.4	2.2	0.44	67.5	4.7	0.94	31.6	3	7	10	22	31
14	14	69605	III ♂	40	50	37.3	0.375	2.17	0.434	68.4	3.7	0.74	40.1	3	5	8	20	30
15	15	69694	III ♂	40	50	37.5	0.475	2.47	0.494	60.1	4.33	0.866	34.3	3	12	15	27	42
16	16	69744	IV ♂	40	50	37.1	0.35	2.33	0.466	63.7	3.6	0.72	41.2	3	8	11	27	37
17	17	69477	IV ♂	47	50	37.1	0.375	2.33	0.466	63.7	3.47	0.694	42.8	3	9	12	28	38
18	18	69493	II ♂	45	50	37.3	0.375	1.9, 2.23	0.38, 0.446	78.2, 66.6	3.53	0.756	39.3	3	9	12	25	35
APRIL 26, 1967 - DAY 2 AUTOPSY																		
19	19	69609	I ♂	45	50	37.5	0.35	2.4, 3.63	0.487, 0.726	61.9, 40.91	?3.1, 5.27	?0.62, 1.054	?47.9, 28.21	2	9	11	22	32
20	20	69689	I ♂	40	50	37.2	0.35	2.4	0.48	61.9	?3.5, 4.45	?0.70, 0.890	?42.4, 33.41	3	6	9	27	37
21	21	69688	I ♂	34	50	37.2	0.3	2.1	0.42	70.7	3.4	0.68	43.7	2	13	15	27	37
22	22	69640	IA ♂	34	50	37.2	0.435	2.3 (0.5 m Sec)	0.46	64.6	3.57 (0.5 m Sec)	0.714	41.6	5	9	14	26	39
23	23	69511	IA ♂	25	50	37.5	0.4	0.9	0.45	66.0	1.5	0.75	39.6	2	9	11	25	37
24	24	69556	IA ♂	35	50	37.2	0.33	2.33	0.466	63.7	4.4	0.88	33.8	3	9	12	25	35
25	25	69697	IA ♂	37	50	36.7	0.35	2.0	0.40	74.25	4.23	0.846	35.1	3	9	12	28	38
26	26	69740	II ♂	45	50	37.2	0.325	2.2	0.44	67.5	3.73	0.746	39.8	3	9	12	25	35
27	27	69663	II ♂	42	50	37.2	0.365	2.35	0.47	63.2	3.95	0.790	37.6	3	14	17	30	40
28	28	69759	II ♂	39	50	37.2	0.35	2.3	0.46	64.6	3.7	0.74	40.1	3	6	9	26	38
29	29	69524	II ♂	40	50	37.2	0.35	2.13	0.426	69.7	3.85	0.770	38.6	9	8	17	37	47

DELAYED

STIMULATOR CONNECTIONS CORRECTED

NERVE LEGS ABNORMAL

DUP050043988

30	30	69724	III	↗	35	50	37	0.35	2.6	0.52	56.5	4.75	0.950	31.3	3	11	14	23	33
31	31	69719	III	↗	35	50	37.1	0.35	2.23	0.446	66.6	3.6	0.72	41.25	3	7	10	28	38
32	32	69637	IV	↗	35	50	37.5	0.35	2.43	0.486	61.1	4.3	0.86	34.5	3	16	19	30	40
33	33	69707	IV	↗	35	50	37.4	0.35	2.37	0.474	62.6	3.97 / 5.0	0.794 / 1.0	37.4 / 29.7	4	8	12	25	35
34	34	69683	III	↗	37	50	37.4	0.30	2.13 / 2.4	0.426 / 0.48	69.7 / 61.9	3.73 / 4.13	0.746 / 0.826	39.8 / 36.0	3	8	11	24	34
35	35	69558	IV	↗	32	50	37.4	0.325	2.03	0.406	73.2	3.45	0.690	43.0	4	7	11	24	34

INCL. BE DV

DELAYED -

APRIL 27, 1967 - DAY 3 AUTOPSY

36	36	69634	I	↗	35	50	37.3	0.35	2.35	0.47	63.2	3.85	0.770	38.6	3	7	10	21	31
37	37	69481	I	↗	48	50	37.1	0.375	2.23	0.446	66.6	3.93	0.786	37.8	2	11	13	25	35
38	38	69459	I	↗	35	50	37	0.485	2.1	0.42	70.7	4.7	0.94	31.6	3	14	17	29	39
39	39	69550	IA	↗	40	50	37.1	0.325	2.1	0.42	70.7	3.3+	0.66+	45.0	4	7	11	30	43
40	40	69499	IA	↗	40	50	37	0.365	2.15	0.43	? 69.1	4.1	0.82	36.2	4	6	10	20	30
41	41	69754	IA	↗	40	50	37	0.325	2.1	0.42	70.7	4.35	0.870	34.1	3	5	8	22	32
42	42	69582	II	↗	41	50	37	0.335	2.27	0.454	65.4	4.83	0.966	30.7	3	6	9	21	31
43	43	69672	II	↗	40	50	37	0.35	2.17	0.434	68.4	3.5	0.70	42.4	4	8	12	25	35
44	44	69574	II	↗	43	50	37.2	0.3	2.1	0.42	70.7	3.8	0.76	39.1	3	7	10	27	37
45	45	69561	III	↗	37	50	37.2	0.325	2.3	0.46	64.6	3.73	0.746	39.8	3	6	9	20	30
46	46	69664	IV	↗	37	50	37.2	0.315	2.37	0.474	62.6	4.5	0.90	33.0	3	7	10	24	34
47	47	69573	IV	↗	35	50	37	0.325	2.13	0.426	69.7	?3.37 4.8	?0.674 0.96	?44.1 30.9	5	12	17	29	39

← DISC. STIM. DURATION < 0.1 m Sec.

APRIL 28, 1967 - DAY 4 AUTOPSY PAINTER NEAR BY - PAINT FUMES - AFFECT NERVES NEAR SHELTER BEFORE MOUNTING. ? - Esophagus 5.8 cm.

48	48	69473	II	↗	35	50	37	0.55	1.0	0.2	99.5	1.9 / 2.23	0.36 / 0.446	52.9 / 44.6	3	9	12	23	33
49	49	69571	II	↗	28	50	37	0.5	2.07	0.414	71.7	?3.7 4.15	?0.74 0.83	?40.1 35.8	3	6	9	31	41
50	50	69585	I	↗	35	50	37.2	0.4	2.5	0.50	59.4	4.6	0.92	32.3	3	6	9	23	33
51	51	69682	IA	↗	43	50	37	0.35	2.8	0.56	53.0	4.8	0.96	30.9	3	8	11	23	33
52	52	69691	IA	↗	30	50	37.1	0.565	2.37	0.474	62.7	5.15	1.03	28.8	3	6	9	22	32
53	53	69730	IA	↗	32	50	37	0.365	2.3	0.46	64.6	4.5	0.90	33.0	3	7	10	24	34
54	54	69668	II	↗	33	50	37	0.35	2.3	0.46	64.6	3.6	0.72	41.25	3	7	10	24	34
55	55	69436	II	↗	30	50	37.2	0.365	1.95	0.390	76.2	3.4	0.68	43.7	4	11	15	28	38
56	56	69451	II	↗	34	50	37	0.365	2.17	0.454	68.9	4.0	0.80	37.1	3	6	9	30	40
57	57	69452	III	↗	37	50	37	0.4	2.43	0.486	61.1	4.37	0.874	34.0	4	7	11	20	30
58	58	69442	III	↗	47	50	36.8	0.45	2.6	0.52	57.1	5.1	1.02	29.1	5	12	17	29	39
59	59	69613	III	↗	35	50	37	0.335	?2.1 2.5	?0.421 ?0.503	?70.7 ?59.4	4.03	0.806	36.8	5	13	18	30	40
60	60	69604	III	↗	40	50	37	0.565	2.25	0.450	66.0	4.53	0.906	32.8	4	6	10	29	37
61	61	69448	IV	↗	43	50	36.9	0.30	2.43	0.486	61.1	4.3	0.86	34.5	3	188	211	25	35
62	62	69438	IV	↗	30	50	37	0.385	-	—	-	3.37	0.674	49.1	4	16	20	33	43
63	63	69611	IV	↗	32	50	37	0.335	2.27	0.454	65.4	3.77	0.754	39.4	5	10	15	34	44

CONDUCTION DIST 1.99 cm

DELAYED

MLM

PY BK 5-66

105

DUP050043989

106 LEAD FEEDING STUDY PY BK 5-66
2-YR. SACRIFICE
END 7.67 HASKELL & ULSH

PHOTO NO.	RECORD NO. (PERM.)	RAT NO.	TREATMENT GROUP NO.	STIMULATOR DIAL SETTING MAXIMAL STIMULUS	STIMULATOR DIAL SETTING FOR COND. VELOC. RECORD	SHELTER TEMPERATURE °C	ABSOLUTE REFRACTORY PERIOD, mSEC	CONDUCTION VELOCITY DATA INFLECTION DIVISIONS	CONDUCTION TIME mSec	CONDUCTION VELOCITY M/SEC	PEAK DIVISIONS	CONDUCTION TIME mSec	CONDUCTION VELOCITY M/SEC	PREPARATION TIMES IN $CHCl_3$ MIN.	AUTOPSY TIME MIN.	TOTAL TIME IN PATH. MINS	START $CHCl_3$ TO MOUNT IN SHELLAC MINS	CHOPS TO PHOTO MINS
AUTOPSY - DAY 5 - MAY 1, 1967																		
64	64	70051	I ♀	43	50	36.8	0.425	2.17	0.434	68.4	[3.5] 4.2	[0.700] 0.912	[142.9] 32.3	3	7	10	24	34
65	65	70062	I ♀	35	50	37.1	0.35	2.2	0.44	67.5	3.6	0.72	41.25	3	8	11	24	34
66	66	69818	IA ♀	37	50	37	0.35	2.53	0.506	58.7	4.35	0.870	34.1	3	9	12	23	33
67	67	69949	IA ♀	35	50	36.5	0.35	2.53	0.506	58.7	3.93	0.786	37.8	2	9	11	25	35
68	68	70070	IA ♀	35	50	37.2	0.4	2.3	0.46	64.6	4.8	0.96	30.9	2	9	11	25	35
69	69	69924	II ♀	31	50	37.1	0.3	2.03	0.406	73.2	3.8	0.76	39.1	3	7	10	25	35
70	70	69963	II ♀	31	50	37	0.35	2.47	0.494	60.1	3.75	0.750	40.1	4	9	13	28	38
71	71	69926	II ♀	33	50	37	0.4	2.53	0.506	58.7	4.43	0.886	33.5	3	16	13	33	43
72	72	69833	III ♀	35	50	37	0.35	2.2	0.44	67.5	3.7	0.74	40.1	2	17	19	30	40
73	73	69784	III ♀	35	50	37.2	0.35	2.47	0.494	60.1	4.45	0.890	33.4	4	4	8	26	36
74	74	69927	III ♀	36	50	37.2	0.325	2.13	0.426	69.7	3.26	0.652	45.6	3	8	11	24	34
75	75	69855	IV ♀	32	50	37	0.335	2.2	0.44	67.5	4.46	0.892	33.3	3	6	9	22	32
76	76	69915	IV ♀	37	50	37	0.415	1.43	0.286	86.4	2.88	0.576	42.9	3	13	16	26	36
77	77	69814	V ♀	25	50	37	0.4	2.4	0.48	61.9	4.1	0.82	36.2	3½	12½	16	24	34
78	78	69902	V ♀	36	50	36.9	0.325	2.76	0.552	53.8	4.63	0.926	32.1	5	17	22	30	40
79	79	69853	V ♀	35	50	37	0.365	2.15	0.430	69.1	3.6	0.72	41.2	2	6	8	25	35
MAY 2, 1967 - AUTOPSY DAY 6																		
80	80	69934	I ♀	29	50	37	0.385	2.37	0.474	62.7	3.95	0.790	37.6	2	11	13	25	35
81	81	69991	IA ♀	30	50	37.1	0.415	2.57	0.514	57.8	4.1	0.82	36.2	2	7	9	26 ~~25~~	36
82	82	69768	IA ♀	31	50	37	0.325	2.1	0.42	70.1	3.56	0.712	41.7	1	7	8	25 ~~26~~	35
83	83	69846	IA ♀	29	50	37.1	0.375	2.33	0.466	63.7	3.58	0.716	41.5	5	8	13	28	38
83A	83	[illegible]	II ♀	29	50	37.1	0.385	2.33	0.466	63.7	3.6	0.72	41.25	~~3½~~	~~12½~~	~~16~~	—	
84	84	69955	II ♀	34	50	37.1	0.385	2.5	0.50	59.4	4.35	0.870	34.1	~~2~~ 3	~~7~~ 10	~~9~~ 13	23	34
85	85	69777	II ♀	36	50	37	0.315	2.17	0.434	68.4	3.95	0.790	37.6	~~5~~ 2	~~7~~	~~9~~	25	35
86	86	69771	II ♀	36	50	37.1	0.35	1<3	0.506	58.7	3.88	0.776	38.3	~~3~~	~~7~~	~~10~~	32	42
87	87	[illegible]	III ♀	40	50	37.1	0.325	2.5	0.50	59.4	4.4	0.88	35.8	~~3~~	~~16~~	~~19~~	25	40
88	88	[illegible]	III ♀	41	50	37.3	0.475	2.7	0.54	55.0	5.52	1.104	26.9	~~5~~	13	18	33	43
89	89	69765	IV ♀	28	50	37	0.35	2.2	0.44	67.5	4.02	0.804	36.9	2	17	19	32	42
90	90	69893	III ♀	31	50	37.2	0.365	2.43	0.486	61.1	3.6	0.72	41.2	2	9	11	32	42
91	91	69845	III ♀	29	50	37	0.365	2.57	0.514	57.8	3.9	0.78	38.1	4	4	8	32	42
92	92	70057	V ♀	47	50	37.1	0.4	2.4 [2.57]	0.48 [0.514]	61.9 [57.8]	3.95	0.790	37.6	3	12	15	26	36

DELAYED

DELAYED

COND DIST 2.47 CM

REPEAT ABOUT 5 MINS. LATER

DELAYED

CHECK CONDUCTION LATER: NO CONDUCTION

DELAYED

DELAYED

MSH

DUP05004399O

93	93	69836	V	♀	39	50	36.9	0.30	2.55	0.510	58.2	4.36	0.872	34.1	4	8	12	25	33
94	94	70032	V	♀	?	50	36.8	0.35	235?	0.470	63.2?	5.20	1.040?	2286	4	6	10	24	34

MAKE ACROSS RECORD CHECK

Incl. PIR

MAY 3, 1967 AUTOPSY, DAY 7

95	95	69827	I	♀	31	50	37.2	0.335	2.43	0.486	61.1	3.73	0.746 0.75	39.8	2	8	10	24	34
96	96	69775	I	♀	36	50	37.2	0.335	2.4	0.48	61.9	4.2	0.84	35.4	3	11	14	29	39
97	97	69917	I	♀	33	50	37.2	0.335	2.17 2.4	0.434 0.48	70.1? 61.9	4.5	0.90	33.0	3	7	10	24	34
98	98	70097	IA	♀	36	50	37.2	0.4	2.55	0.510	58.2	5.77	1.154	25.7	3	10	13	30	40
99	99	69881	IA	♀	28	50	37.2	0.3	2.17	0.434	68.4	3.75	0.750	39.6	3	6	9	21	31
100	100	70044	II	♀	29	50	37.5	0.335	2.35	0.470	63.2	3.76	0.750	39.6	3	9	12	28	38
101	101	70013	II	♀	29	50	37.5	0.335	2.0 3.3	0.4 0.46	74.2 64.8	3.85	0.770	38.6	5	9	14	30	40
102	102	69863	III	♀	36	50	37.2	0.325	2.21 2.6	0.442 0.52	67.5 57.1	4.0	0.80	37.1	5	6	11	29	39
103	103	70059	III	♀	25	50	37.4	0.35	2.25	0.450	66.0	3.5	0.70	42.4	5	10	15	29	39
104	104	70053	III	♀	23	50	38.5	0.55	2.63	0.526	56.5	4.73	0.946	31.4	3	8	11	27	37
105	105	69933	IV	♀	27	50	37.2	0.35	2.3	0.46	69.6	3.53	0.706	42.1	3	6	9	31	44
106	106	70035	IV	♀	40	50	37.3	0.335	2.2+	0.44+	67.5-	3.77	0.754	39.4	3	8	11	31	44
107	107	69816	IV	♀	27	50	37.3	0.35	2.35	0.470	63.2	4.0	0.80	37.1	4	7	11	23	33
108	108	69817	IV	♀	33	50	37.3	0.4	2.27	0.454	65.9	4.33	0.866	34.3	4	12	16	30	40
109	109	69789	IV	♀	30	50	37.5	0.35	2.2+	0.44+	67.5-	3.5	0.70	42.4	3	5	8	26	41
110	110	69788	II	♀	31	50	37.3	0.35	2.6	0.52	57.1	3.97	0.794	37.4	3	6	9	23	33
111	111	69890	II	♀	41	50	37.5	0.35	2.15	0.430	69.1	4.63?	0.926	32.1	5	10	15	29	39
112	112	70039	IA	♀	40	50	37.5	0.35	2.2	0.44	67.5	4.05	0.810	36.7	4	7	11	27	37

MAY 4, 1967. AUTOPSY DAY 8.

113	113	69993	IA	♀	35	50	37.1	0.3	2.27	0.454	65.9	3.6	0.72	41.2	3	5	8	21	31
114	114	69995	IA	♀	35	50	37.3	0.365	2.8	0.56	53.0	4.07? 5.63?	0.814? 1.126?	36.5? 26.4?	3	10	13	28	38
115	115	70010	I	♀	30	50	37.1	0.35+	2.27	0.454	65.9	4.55	0.910	32.6	3	7	10	24	34
116	116	69981	II	♀	34	50	37.1	0.325	2.2+	0.44+	67.5	3.57	0.714	41.6	3	13	16	26	37
117	117	70098	II	♀	28	50	37	0.35	2.17	0.434	68.4	3.73	0.746	39.8	2	6	8	26	36
118	118	69942	II	♀	36	50	37.5	0.35	2.33	0.466	63.7	3.8	0.76	39.1	4	7	11	32	45
119	119	69928	III	♀	43	50	37.4	0.35	2.45?	0.490?	60.6	4.7	0.94	31.6	5	7	12	30	43
120	120	70039	III	♀	25	50	37.2	0.315	2.15	0.430	69.1	3.4+	0.68+	43.7	4	8	12	36	48
121	121	69992	III	♀	32	50	37	0.35	2.25	0.450	66.0	3.83	0.766	38.8	4	7	11	30	40
122	122	69837	III	♀	33	50	37	0.375	2.47	0.494	60.1	3.75	0.750	39.6	2	9	11	27	37
123	123	70056	IV	♀	27	50	37.1	0.35	2.33	0.466	63.7	3.87	0.774	38.9	2	7	9	30	42
124	124	70020	IV	♀	39	50	37.1	0.375	2.23	0.446	66.6	4.07	0.814	36.5	3	8	11	27	37
125	125	69959	IV	♀	33	50	36.8	0.35	2.4	0.48	61.9	4.07	0.814	36.5	5	6	11	26	36
126	126	69998	IV	♀	30	50	36.9	0.35	2.33	0.466	63.7	3.83	0.766	38.8	3	7	10	28	38

1 BROWN TIBIAL COT

SWOLLEN SPEED CHECKED OK

STRETCHED

DELAYED, GROWTH L. LEG

DELAYED

DELAYED

DELAYED

PY BK 5-66

STRETCHED

DELAYED

DELAYED

DELAYED

DELAYED GROWTH L. LEG?

Point FUNES STRONG

107

MEN

DUP050043991

PHOTO NO.	NERVE NO. [IN RAT]	HASKELL RAT NO.	TREATMENT GROUP NO.	STIMULATOR DIAL SETTING: MARGINAL STIMULUS	STIMULATOR DIAL SETTING: FOR COND. VELOC. RECORD	SHELTER D.B. TEMPERATURE °C	ABSOLUTE REFRACTORY PERIOD m SEC.	CONDUCTION VELOCITY DATA: INFLECTION: DIVISIONS	INFLECTION: CONDUCTION TIME m SEC	INFLECTION: CONDUCTION VELOCITY M/SEC	PEAK: DIVISIONS	PEAK: CONDUCTION TIME m SEC	PEAK: CONDUCTION VELOCITY M/SEC	PREPARATION TIMES: IN $CHCl_3$ MINS	AUTOPSY TIME MINS	TOTAL TIME IN PATH MINS	START $CHCl_3$ TO FRONT IN SHELTER MINS	$CHCl_3$ TO PHOTO MINS
						X	X			X			X			X		X
MAY 4. AUTOPSY DAY 8 [CON'T]																		
127	127	70069	V ♀	28	50	37.1	0.35	2.45	0.490	60.6	4.02	0.804	36.9	4	11	15	25	35
128	128	70023	V ♀	46	50	37.2	0.30	2.33	0.466	63.7	4.55	0.910	32.6	4	11	15	26	36
MAY 5. AUTOPSY DAY 9.																		
129	129	69974	I ♀	33	50	36.7	0.35	2.15	0.430	69.1	3.33	0.666	44.6	2	6	8	19	29
130	130	70094	I ♀	32	50	36.8	0.35	2.15	0.430	69.1	4.0	0.8	37.1	3	7	10	24	34
131	131	70000	I ♀	32	50	37.2	0.3	2.03	0.406	73.2	3.95	0.790	37.6	3	7	10	22	32
132	132	70050	II ♀	28	50	37	0.45	2.35	0.470	632	4.75	0.950	313	4	9	13	26	36
133	133	69892	II ♀	30	50	37	0.35	2.53	0.506	58.7	4.5	0.90	33.0	2	5	7	19	29
134	134	69960	III ♀	30	50	36.9	0.3	2.37	0.474	62.6	3.93	0.786	37.8	2	14	16	29	39
135	135	70103	III ♀	29	50	37	0.4	2.2	0.44	67.5	3.53	0.706	42.1	3	9	12	24	34
136	136	69869	III ♀	30	50	36.8	0.35	2.33	0.466	63.7	3.87	0.774	38.4	4	8	12	25	35
137	137	69831	IV ♀	30	50	36.8	0.415	2.65	0.530	56.0	5.3	1.06	28.0	3	6	9	22	32
138	138	69907	IV ♀	30	50	36.8	0.365	?1.83	0.366?	?81.1	3.75	0.750	39.6	4	4	8	25	35
139	139	70056	IV ♀	31	50	37	0.335	2.2	0.44	67.5	3.6	0.72	41.25	2	9	11	25	35
140	140	70074	V ♀	30	50	37.2	0.375	2.2	0.44	67.5	3.47	0.694	42.8	9	7	16	30	40
MAY 8 - AUTOPSY DAY 10																		
141	141	69898	I ♀	27	50	37.4	0.365	2.15	0.530	56.0	4.03	0.806	36.8	2	6	8	22	32
142	142	70001	I ♀	37	50	37.3	0.35	2.2	0.44	67.5	3.63	0.726	40.9	5	6	11	27	37
143	143	69864	I ♀	27	50	37.3	0.35	2.0	0.40	74.25	3.57	0.714	41.6	3	6	9	24	34
144	144	70007	I ♀	30	50	37.3	0.35	2.05	0.410	72.4	3.4	0.68	43.7	3	12	15	29	39
145	145	69997	I ♀	28	50	37	0.385	2.4	0.48	61.9	3.65	0.730	40.7	2	6	8	23	33
146	146	69786	II ♀	27	50	36.7	0.4	2.13 / 2.4	0.426 / 0.48	69.7 / 61.9	3.6	0.72	41.25	2	8	10	25	35
147	147	69875	II ♀	31	50	37.2	0.315	2.43	0.486	61.1	4.0	0.80	37.1	2	8	10	24	34
148	148	69936	II ♀	27	50	37.2	0.365	2.23	0.446	66.6	3.87	0.774	38.4	3	13	16	27	37
149	149	69809	III ♀	30	50	37.1	0.35	2.07	0.414	71.7	3.3	0.66	45.0	5	10	15	30	40
150	150	69922	III ♀	32	50	37.1	0.335	2.1 / 2.43	0.42 / 0.486	?70.7 / 61.1	3.87	0.714	41.6	4	5	9	27	37
151	151	69987	IV ♀	34	50	37.2	0.335	2.55	0.510	58.2	3.95	0.790	37.6	3	10	13	26	36
152	152	69961	IV ♀	28	50	37.2	0.365	2.5*	0.50*	59.4	3.83	0.766	38.8	3	9	12	27	37

MEM

DUP050043992

LEAD FEEDING STUDY — 2-YR SACRIFICE

HR 787 Haskew # 4154 PY BK 5-66

| | | |

LEAD FEEDING STUDY PY BK 5-66 VOL 787 HANKE & 4/15/67 1 TABLE

2-YR. SACRIFICE

DATA ACCORDING TO TREATMENT GROUP

TREATMENT GROUP #	RAT EXPERIMENT #	SHELTER DB TEMP °C	Absolute REFRACTORY PERIOD m Sec	CONDUCTION VELOCITY INFLECTION M/Sec	CONDUCTION VELOCITY PEAK M/Sec	PREPARATION TIMES IN CHCl3 Mins.	PREPARATION TIMES AUTOPSY TIME mins.	PREPARATION TIMES TOTAL TIME IN PATHOLOGY MIN.	PREPARATION TIMES START CHCl3 TO MOUNT MINS.	PREPARATION TIMES START CHCl3 TO PHOTO MINS.	PATHOLOGY TO MOUNT MINS	CLASSIFICATION OF PREPARATIONS BASED ON TYPE & FORM OF RESPONSE *	RESPONSE: MONOPHASIC (M) OR DIPHASIC (D)
I 0↗	1	37	0.55	56.5	39.6	3	6	9	20	34	11	G	D
	2	37	0.43	~~56.5~~	~~35.8~~	3	5	8	21	31	13	P	? M
	3	37.3	0.25	67.5} 64.6}	40.1	3	7	10	25	35	15	M+	D+
	19	37.5	0.35	61.9} 40.9}	? 47.9} 29.2}	2	9	11	22	32	11	M+ G	D+
	20	37.2	0.35	~~61.9~~	~~33.4~~ (43.4)	3	6	9	27	37	18	P	D M mm
	21	37.2	0.30	70.7	43.7	2	13	15	27	37	12	G-	D
	36	37.3	0.35	63.2	38.6	3	7	10	21	31	11	M-M+	D ## mm
	37	37.1	0.375	66.6	37.8	2	11	13	25	35	12	G	D M mm
	38	37.	0.485	~~70.7~~	~~31.6~~	3	14	17	29	39	12	P	D
	48	37.	0.55	SHORT COND. DIST. 54.4 54.5	~~44.6~~ ? 40.1	3	9	12	23	33	11	P-M	D M mm
	49	37.	0.50	71.7	358	3	6	9	31	41	22	M-M+	D-
	50	37.2	040	~~59.4~~	~~32.3~~	3	6	9	23	33	14	P	D-
Ia 0↗	4	37.3	0.3	72.4	47.1	2	7	9	22	32	13	G	D+
	5	37.3	0.3	74.25	39.1	4	8	12	27	37	15	M+	D+
	6	37.2	0.3	69.7	43.0	4	4	8	22	32	14	G	D+
	22	37.2	0.435	64.6	41.6	5	9	14	26	39	12	M+	D-
	23	37.5	0.4	66.0	39.6	2	9	11	25	37	14	G-	D
	24	37.2	0.33	63.7	33.8	3	9	12	25	35	13	M+ G	D
	25	36.7	0.35	74.25	~~35.1~~	3	9	12	28	38	16	P	D
PY BK 5-66 p 110	39	37.1	0.325	70.7	45.0	4	7	11	30	43	19	G	D-
	40	37.0	0.365	? 69.1	36.2	4	6	10	20	30	10	M+	D-
	41	37.0	0.325	70.7	34.1	3	5	8	22	32	14	M	M
	51	37.0	0.35	~~53.0~~	~~30.9~~	3	8	11	23	33	12	P	D
	52	37.1	0.565	~~62.7~~	~~28.8~~	3	6	9	22	32	13	P	M
	53	37.0	0.365	~~64.6~~	~~33.0~~	3	7	10	24	34	14	P-M hmb	D+

* Good = G

DUP050043994

LEAD FEEDING STUDY
MR 787 HASKELL 4154

PY BK 5-66

2-YEAR SACRIFICE
1 TABLE

111

TREATMENT GROUP #	RAT EXPERIMENT #	SHELTER D.B. TEMP. °C	ABSOLUTE REFRACTORY PERIOD MSEC	CONDUCTION VELOCITY INFLECTION M/SEC	CONDUCTION VELOCITY PEAK M/SEC	PREPARATION TIMES IN $CHCl_3$ MINS	PREPARATION TIMES AUTOPSY TIME MINS.	PREPARATION TIMES TOTAL TIME IN PATHOLOGY MINS.	PREPARATION TIMES START $CHCl_3$ TO MOUNT MINS	PREPARATION TIMES $CHCl_3$ TO PHOTO. MINS	PATHOLOGY TO MOUNT MINS	CLASSIFICATION OF PREPARATION BASED ON WAVE FORM OF RESPONSE*	RESPONSE: MONOPHASIC (M) or DIPHASIC (D)
II ♂	7	37.0 ~~33~~	0.37	61.1 / 53.6	~~38.4~~	3	8	11	26	37	15	P-M	D^-
	8	37.1	0.3	64.6	37.1	3	5	8	20	31	12	M^+	D^+
	9	37.2	0.3	70.7	39.8	3	11	14	28	38	14	M	D^+
	10	37.2	0.25	70.7 / 47.9	~~33.0~~	2	10	12	26	36	14	P-M	D^-
	26	37.2	0.325	67.5	39.8	3	9	12	25	35	13	M^+	M
	27	37.2	0.365	63.2	37.6	3	14	17	30	40	13	G	D
	28	37.2	0.35	64.6	40.1	3	6	9	26	38	17	M^+	D
	42	37.0	0.335	65.4	30.7	3	6	9	21	31	12	M^-	M
	43	37.0	0.35	68.4	42.4	4	8	12	25	35	13	G	D
	44	37.2	0.3	70.7	39.1	3	7	10	27	37	17	P-M	D^+
	54	37	0.35	64.6	41.25	3	7	10	24	34	14	G	D
	55	37.2	0.365	76.2	43.7	4	11	15	28	38	13	M^+	D
	56	37	0.365	68.4	37.1	3	6	9	30	40	21	M^+	D^+
III ♂	11	37.1	0.35	67.5	38.4	6	9	15	27	38	12	G	D
	12	37.0	0.27	66.6	42.1	3	9	12	27	37	15	G	D^+
	13	37.4	0.40	67.5	31.6	3	7	10	22	31	12	P	D^-
	14	37.3	0.375	68.4	40.1	3	5	8	20	30	12	P	D^-
	29	37.2	0.335	69.7	38.6	9	8	17	31	41	14	M^+	M
	30	37.0	0.35	56.5	31.3	3	11	14	23	33	9	M-M^+	M
	31	37.1	0.35	66.6	41.25	3	7	10	28	38	18	M^+-G	D
PY BK	45	37.2	0.325	64.6	39.8	3	6	9	20	30	11	G	D
5-66	57	37.0	0.40	61.1	34.0	4	7	11	20	30	19	M^+	D
P.M.	58	36.8	0.45	57.1	29.1	5	12	17	29	39	12	P	M
	59	37.0	0.335	70.7 / 59.4	36.8	5	13	18	30	40	12	P-M	D
	60	37.0	0.565	66.0	32.8	4	6	10	27	37	17	P-M	D^-

DUP050043995

112 LEAD FEEDING STUDY PY BK 5-66

MR 787 HASKELL A 4154

2-YR SACRIFICE

TABLE

TREATMENT GROUP #	RAT EXPERIMENT #	SHEITER D.B. TEMP °C	ABSOLUTE REFRACTORY PERIOD MSEC	CONDUCTION VELOCITY INFLECTION M/SEC	CONDUCTION VELOCITY PEAK M/SEC	PREPARATION TIME IN $CHCl_3$ MINS.	PREPARATION TIME AUTOPSY TIME MINS	PREPARATION TIME TOTAL TIME IN PATHOLOGY MINS	PREPARATION TIME START $CHCl_3$ TO MOUNT MINS	PREPARATION TIME $CHCl_3$ TO PHOTO MINS.	PATHOLOGY TO MOUNT MINS	CLASSIFICATION OF PREPARATION BASED ON WAVEFORM OF RESPONSE*	RE RESPONSE: MONOFINASIC (M) or DIFINASIC (D)
IV ♂	15	37.5	0.475	60.1	34.3	3	12	15	27	42	12	P	D^-
	16	37.1	0.35	63.7	41.2	3	8	11	27	37	16	G	D^+
	17	37.1	0.375	63.7	42.8	3	9	12	28	38	16	G	D
	18	37.3	0.375	78.2 / 66.6	39.3	3	9	12	25	35	13	M	D
	32	37.5	0.35	61.1	34.5	3	16	19	30	40	11	M^+	D^+
	33	37.4	0.35	~~62.6~~	~~37.4 / 29.7~~	4	8	12	25	35	13	M^-	M
	34	37.4	0.30	69.7 / 61.9	39.8 / 36.0	3	8	11	24	34	13	P-M	D^-
	35	37.4	0.325	73.2	43.0	4	7	11	24	34	13	M^+-G	D
	46	37.2	0.315	62.6	33.0	3	7	10	24	34	14	M	D^+
	47	37.0	0.325	69.7	44.1 / 30.9	5	12	17	29	39	12	P	D^-
PY BK	61	36.9	0.30	61.1	34.5	3	8	11	25	35	14 ?	M^+	D^-
5-66 →	62	37.0	0.385	—	44.1	4	16	20	33	43	13	P	D^-
p. 112	63	37.0	0.335	65.4	39.4	5	10	15	34	44	19	G	D

bmB

PY BK 5-66 2-YR SACRIFICE 1 TABLE 113

LAD-FEEDING STUDY
DR 787 HASKELL A 4154

Treatment Group #	Rat Experiment #	Shelter D.B. Temp. °C	Absolute Refractory Period m sec	Conduction Velocity Inflection M/sec.	Conduction Velocity Peak M/sec.	Preparation Time In CHCl3 mins.	Preparation Time Autopsy Time mins	Preparation Time Total Time Pathology mins.	Preparation Time Start CHCl3 to Mount mins.	Preparation Time CHCl3 to Photo mins	Pathology to Mount mins	Classification of Preparation Based on Wave Form	Response: Monophasic (M) or Diphasic D
I ♀	64	36.8	0.425	~~68.4~~	{42.4? ~~32.3~~	3	7	10	24	34	14	P	D+
	65	37.1	0.35	67.5	41.25	3	8	11	24	34	13	G	M
	80	37.0	0.385	62.7	37.6	2	11	13	25	35	12	G	D-
	95	37.2	0.335	61.1	39.8	2	8	10	24	34	14	G-	M
	96	37.2	0.335	61.9	35.4	3	11	14	29	39	15	G	M
	97	37.2	0.335	{70.7?? 61.9	33.0	3	7	10	24	34	14	M	M
	110	37.3	0.35	57.1	37.4	3	6	9	23	33	14	G	D
	111	37.5	0.35	~~69.1~~	~~32.1~~	5	10	15	29	39	14	P	D--
	115	37.1	0.35+	67.5	32.6	3	7	10	24	34	14	M-M+	M
	129	36.7	0.35	60.6	44.6	2	6	8	19	29	11	G	D--
	130	36.8	0.35	69.1	37.1	3	7	10	24	34	14	M+	D
	141	37.4	0.365	56.0	36.8	2	6	8	22	32	14	G	D+
	142	37.3	0.35	67.5	40.9	5	6	11	27	37	16	G	D
	143	37.3	0.35	74.25	41.6	3	6	9	24	34	15	G	D+
	144	37.3	0.35	72.4	43.7	3	12	15	29	39	14	G	D
	145	37.0	0.385	61.9	40.7	2	6	8	23	33	15	G	D+
Ia ♀	66	37.0	0.35	58.7	34.1	3	9	12	23	33	11	G	D
	67	36.5	0.35	58.7	37.8	2	9	11	25	35	14	G	D-
	68	37.2	0.4	64.6	30.9	2	9	11	25	35	14	M+	D
PY BK 5-66	81	37.1	0.415	~~57.8~~	~~36.2~~	2	7	9	26	36	17	P	M
	82	37.0	0.325	70.1	41.7	1	7	8	25	35	17	G	M
P 113	83 83 83A	37.1 37.1	0.375 0.385	63.7 63.7	{41.5? 41.25	5	8	13	28	38	15	G	D--
	98	37.2	0.40	58.2	25.7	3	10	13	30	40	17	M	M
→	99	37.2	0.30	68.4	39.6	3	6	9	21	31	12	G	D
	112	37.5	0.35	67.5	36.7	4	7	11	27	37	16	M-M+	M
	113	37.1	0.3	65.4	41.2	3	5	8	21	31	13	M+	D
	114	37.3	0.365	53.0	{36.5? 26.4	3	10	13	28	38	15	P-M	M
	131	37.2	0.30	73.2	37.6	3	7	10	22	32	12	M+	[illegible]

114 LEAD FREEZING STUDY PY BK 5-66

(1978) Haskell # 4154

2-YEAR SACRIFICE

1 TABLE

Treatment Group #	Animal #	Dynamic Lab. Temp. °C	Dynamic Laboratory Period m sec	Isometric Tension Developed kg/cm²	Relaxation Time: Time to 2nd CaCl2 mins.	Relaxation Time: Autopsy Time mins	Relaxation Time: Total Time Pathology mins	Start CaCl2 to Maint mins	CaCl2 to Photo mins	Pathology To Mount mins	Discoloration of Tissue (Blue to White Patch)	Response: Normal (N) or Diseased (D)
IV G+	69	37.1	0.3	39.1	3	7	10	25	35	15	G	D+
	70	37.0	0.35	40.1	4	9	13	28	38	15	G	D+
	71	37.0	0.4	33.5	3	10	13	33	43	20	G	D
	84	37.1	0.385	34.1	3	10	13	23	34	10	M+	M
	85	37.0	0.315	37.6	2	7	9	25	35	16	M	D
	86	37.1	0.35	38.3	3	7	10	32	42	22	G	D
	100	37.5	0.335	39.6	3	9	12	28	38	16	G	D-
	101	37.5	0.335	38.6	5	9	14	30	40	16	G	M
	116	37.1	0.325	41.6	3	13	16	26	37	10	G	M
	117	37.0	0.35	39.8	2	6	8	26	34	15	K+	D
	118	37.5	0.35	39.1	4	7	11	32	45	21	M	M
	132	37	0.345	~~43.3~~ 37.3	4	9	13	26	36	13	M	M
	133	37	0.35	33.0	2	5	7	19	29	12	G	D
	146	36.7	0.4	41.25	2	8	10	25	35	15	M	D
	147	37.2	0.345	37.1	2	8	10	24	34	14	M	D
	148	37.2	0.365	38.4	3	13	16	27	37	11	G	D
IV G+	72	37.1	0.35	40.1	2	17	19	30	40	11	G	D-
	73	37.2	0.35	33.4	4	4	8	26	36	18	M	D-
	74	37.2	0.325	45.6	3	8	11	24	34	13	G	D+
	87	37.1	0.325	33.8	3	6	9	25	40	16	M+	D
	88	37.3	0.425	26.9	5	13	18	33	43	15	M	D
	102	37.2	0.325	37.1	5	6	11	29	36	18	M+	D-
	103	37.4	0.35	42.4	5	10	15	29	39	14	G	M
	119	37.4	0.35	31.6	5	7	12	30	43	18	M+	D-
	120	37.2	0.315	43.2	4	8	12	36	48	24	G	D
	121	37.0	0.35	38.8	4	7	11	30	40	19	G	D
	122	37.0	0.375	39.6	2	9	11	27	37	16	G	G
	134	36.9	0.3	37.8	2	14	16	29	39	13	G	M
	135	37.0	0.4	43.1	3	9	12	24	34	12	M	M
	136	36.8	0.35	38.4	4	8	12	25	35	13	G	D
	149	37.1	0.35	45.0	5	10	15	30	40	15	G	bmB D-
	150	37.1	0.335	41.6	4	5	9	27	37	18	G	D-

PY BK 5-66 P. 114

DUP050043998

LEAD FEEDING STUDY
PR 787 MASTER #4154

PY BK 5-66

2-YEAR SACRIFICE
1 TABLE

115

Treatment Group #	Rat Experiment #	Shelter D.B Temp. °C	Absolute Refractory Period m sec	Conduction Velocity Inflection M/sec	Conduction Velocity Peak M/sec	Preparation Time In CHCl3 mins.	Preparation Time Autopsy Time mins	Preparation Time Total Time Pathology mins.	Preparation Time Start CHCl3 to Mount mins.	Preparation Time CHCl3 to Photo mins.	Pathology to Mount mins	Classification of Preparation Based on Wave-form	Response: Monophasic (M) or Diphasic [D]
IV ♀	75	37	0.335	67.5	33.3	3	6	9	22	32	12	M	D
	76	37	ca 0.415	86.4	42.9	3	13	16	26	36	10	M+	M
	89	37	0.35	67.5	36.9	2	17	19	32	42	13	M+	M
	90	37.2	0.365	61.1	41.2	2	9	11	32	42	21	G	D-
	91	37.0	0.365	57.8	38.1	4	4	8	32	42	24	G	D+
	104	37.5	0.55	56.5	31.4	3	8	11	27	37	16	M	M
	105	37.2	0.35	64.6	42.1	3	6	9	31	44	22	G	M
	106	37.3	0.335	67.5	39.4	3	8	11	31	44	20	G	M
	123	37.1	0.35	63.7	38.4	2	7	9	30	42	21	G	M
	124	37.1	0.375	66.6	36.5	3	8	11	27	37	16	G	D+
	125	36.8	0.35	61.9	36.5	5	6	11	26	36	15	G	D-
	137	36.8	0.415	56.6	28.0	3	6	9	22	32	13	M	D-
	138	36.8	0.365	? 81.1	39.6	4	4	8	25	35	17	M	M
	139	37.0	0.335	67.5	41.25	2	9	11	25	35	14	M	D+
	151	37.2	0.335	58.2	37.6	3	10	13	26	36	13	G	D
	152	37.2	0.365	59.4	38.8	3	9	12	27	37	15	G	D+
	153	37.2	ca 0.4	44.06	30.6	3	9	12	25	35	13	G	D+
V ♀	77	37.	0.4	61.9	36.2	3 1/2	12 1/2	16	24	34	8	G	D--
	78	36.9	0.325	53.8	32.1	5	17	22	30	40	18	M+ G	M
	79	37.0	0.265	69.1	41.2	2	6	8	25	35	17	G	D
	92	37.1	0.400	61.9 57.8	37.6	3	12	15	26	36	11	G	D
	93	36.9	0.35	58.2	34.1	4	8	12	25	35	13	M+	D
	94	36.8	0.35	63.2 ?	28.6	4	6	10	24	34	14	P	D-
PY BK 5-66 p. 115	107	37.3	0.35	63.2	37.1	4	7	11	23	33	12	M+ G	D-
	108	37.3	0.40	65.4	34.3	4	12	16	30	40	14	M-M+	M
	109	37.5	0.35	67.5	42.4	3	5	8	26	41	18	G	M
	126	36.9	0.35	63.7	38.8	3	7	10	28	38	18	G	D+
	127	37.1	0.35	60.6	36.9	4	11	15	25	35	10	G	D
	128	37.2	0.30	63.7	32.6	4	11	15	26	36	11	M	D
	140	37.2	0.375	67.5	42.8	9	7	16	30	40	14	[illegible]	D
	154	37.3	0.335	72.4	40.1	3	10	13	27	37	14	[illegible] G	D

DUP050043999

SUMMARY

AVERAGE VALUES ± STANDARD DEVIATION

TREATMENT GROUP #		CONDUCTION VELOCITY: INFLECTION METERS/SEC.	CONDUCTION VELOCITY: PEAK METERS/SEC.	ABSOLUTE REFRACTORY PERIOD MILLISECONDS
I	♂	65.2 ± 13.7	36.8 ± 4.9	0.408 ± 0.097
	♀	64.9 ± 5.3	37.9 ± 4.6	0.357 ± 0.023
IA	♂	67.4 ± 6.8	37.5 ± 5.1	0.362 ± 0.073
	♀	63.3 ± 6.0	35.8 ± 5.5	0.352 ± 0.041
II	♂	min 53.5 ± 7.3	38.5 ± 3.6	0.333 ± 0.036
	♀	63.6 ± 4.3	37.6 ± 3.1	0.355 ± 0.038
III	♂	65.2 ± 4.6	36.3 ± 4.4	0.375 ± 0.075
	♀	63.6 ± 4.8	38.6 ± 5.1	0.352 ± 0.040
IV	♂	64.3 ± 3.9	37.1 ± 4.8	0.357 ± 0.046
	♀	64.0 ± 9.6	37.2 ± 4.2	0.374 ± 0.052
V	♀	63.4 ± 4.9	36.8 ± 4.1	0.360 ± 0.038

420

LEAD-FED DOGS. 2-YEAR SACRIFICE.

PY BK 5-66

MR 787
HASKELL # 4154

201

EQUIPMENT: STIMULATION AND RECORDING: THIS BOOK p. 92.

NERVE: SCIATIC - TIBIALIS. : NOTE - NERVE 4 = ONLY TIBIALIS ONLY - STIMULATOR INADEQUATE FOR LARGE SCIATIC NERVE STIM, SCIATIC TOO LARGE TO STIMULATE WITH ELECTRODES FLAT DISSECTION AT KNEE VERY DIFFICULT.

DOG: ELECTROCUTED - MINUTE 0.0

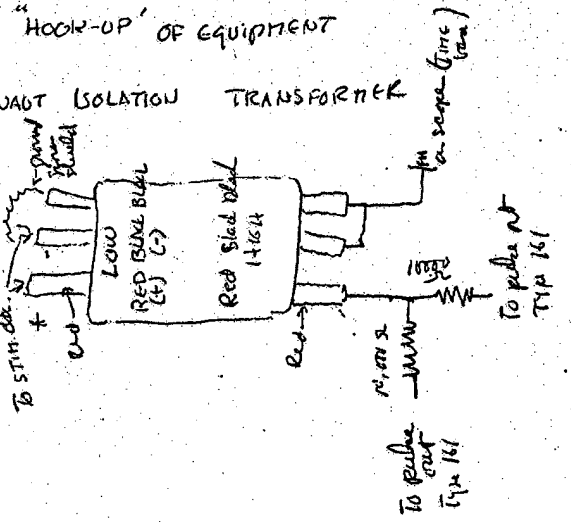
TIMING: ALWAYS FROM MINUTE 0 [WHEN DOG ELECTROCUTED] - CORRECTION GIVEN (TIME LOST) IF ELECTROCUTION TOOK PLACE PRIOR TO STARTING STOP-WATCH.

ENVIRONMENT RM. # 2: USED TO SUPPLY CONTINUOUS SOURCE OF WARM air (fan by inlet into shelter)
DB 109½ WB 104½ : save excellent condition - very moist. ABLE TO KEEP OPENING INTO "OUTER" Part of shelter almost full, open.

WHEN NERVE HAS GROUND: ON electrode # 2 - all NERVES.

NOTES ON "HOOK-UP" OF EQUIPMENT

ARGONAUT ISOLATION TRANSFORMER



Measurement: post-experimental : 12-5-67

S1 TO RECORDING ELECTRODE

# 3	:	2.49,	2.49, 2.49:	AVG. 2.49 cms.
5	:	4.475,	4.48, 4.48:	4.48
7	:	6.42,	6.44, 6.43:	6.43
8	:	7.50,	7.50, 7.50	7.50
10	:	9.46,	9.46, 9.46:	9.46

NOTE: STIMULATOR - ALL NERVES STIMULATED WITH MAX. OBTAINABLE STIM. OF 0.1m Sec dur.
NERVE 4 = after

DUP050044001

202 LEAD-FED DOGS. 2-YEAR SACRIFICE

PY BK 5-66

MR 787

HASKELL # 4154

HASKELL DOG NUMBER	NERVE NUMBER	PHOTOGRAPH NUMBER	TIME NERVE MOUNTED IN SHELTER	RECORDING ELECTRODES (DIST AT AT)	DIAL READING MAX. RESPONSE	DIAL READING STIMULATOR VOLTAGE FOR PHOTO	TIME PHOTO TAKEN	DB TEMP. OF SHELTER °C	SWEEP SPEED	
NOVEMBER 20, 1967										
515	1	–	MEM 39M 45S	~~14, 12, 9~~						STIM. 0.7×1
		1a	51M 15S	10 8 5	?	Fas as p 50+	53' 30"	36.7	0.2 ~~0.5~~ mSec/DIV	NERVE REMOUNTED
		1b	~~55~~ MEM				55		0.5 ~~0.2~~ " "	
		1c					61		0.5 mSec/DIV.	FOR ABSOL. REFR. PERIOD
451	2	2a	46	10 8 5	39	39	53	36.7	0.2 mSec/DIV.	
		b		10 8 5		Fas as p 50+	56½		0.2 mSec/DIV	
		c		10 8 5		"	58		0.5 mSec/DIV.	
		d		10 8 5			61M 20S		0.5 mSec/DIV.	
		e		10 8 5 ~~13 10 5~~		Repeat 2b	66M 0S		0.2 mSec/DIV.	
		f		13 10 7 50K MEM			80		0.2 mSec/DIV.	
		g		13 10 7			82M 30S		0.2 mSec/DIV.	BAD PHOTO – DISARDED. MEM 4-24-68
		h		13 10 7		Repeat 28	85		0.2 mSec/DIV.	NO PHOTO - Looked cleared. DIST.
		i		13 10 7		Repeat 28	88M 5S		0.2 mSec/DIV.	
493	3	3a	32M	10 8 5		50+	36M 0S	36.7	0.2 mSec/DIV.	
		3b		10 8 5		50+	38M 0S		0.5	
		3c		10 8 5	38	38	40M 0S		0.2	
		3d		10 8 –		50+	45M 0S		0.5	For Absol. refr. period
		3e		12 10 7		50+	49M 45S		0.2	
		3f		10 8 5		50+	61M 30S		0.2	
510	4	4a		6 5 3	12	12	30M 15S		0.2	Tibialis only - STIM. 0.1×1
		4b		6 5 –		15	40M		0.5	absol. refr. period
		4c		6 5 3	0.2M ~~15~~	15	60M		0.2	
		4d		6 5 3		15	? 89M		0.2	grounded - not shock artifact
		4e		6 5 3		15	? 90½		0.2	or + [illegible]

NERVES 1, 2 & 3: STIM. PROBABLY < MAXIMUM. MEM

MEM

DUP050044002

LEAD FEEDING STUDY. DOGS. **PY BK 5-66** MR 787
2-YEAR SACRIFICE HASKELL # 4154 **203**

Animal Log Number	Nerve Number	Photograph Number	Time Nerve Mounted in Shelter (mins)	Recording Electrodes (D A = A)	Dial Reading for Maximal Response	Dial Stimulator Reading - for Photo	Time Photo Taken (min)	DB Temperature Shelter (°C)	Sweep Speed (mSec/Div.)	
DECEMBER 21, 1967 STIMULUS DURATION: 0.1 x 1 mSec.										
462	5	5a	26'50"	10 8 5	26	30	32	36.8	0.2	TIBIALIS ONLY. STIM. DUR. 0.1 x 1 mSec.
		5b		10 8 5		30	42		0.2	
		5c		10 8 5 again		30	47m50s	36.85	0.5	Abs. Refr. period - upper
		5d		10 8 5		30	49m40s		0.2	
		5e		6 5 3		30	55+		0.2	New Film
506	6	6a	22'35"	10 8 5	25	30	27m30s	36.5	0.2	TIBIALIS ONLY. STIM. DUR: 0.1 x 1 mSec. Ground to nerve.
		6b		10 8 5	210	30	36m30s		0.2	
		6c		10 8 -		30	42m15s		0.5	ABS. REFR. PERIOD
		6d		10 8 5		30	1h7m30s		0.2	
		6e		6 5 3		30	52m30s		0.2	
11	7	7a	26'	10 8 5	3/10	30	31'	36.4	0.2	Discarded - CAN'T MEASURE. MLR 4-25-68
		7b		10 8 5		30	32m30s		0.2	Repeat - shock artif. w. speed. 7a
		7c		10 8 5		30	34m10s		0.2	" - higher sens. Curve.
		7d		10 8 5		30	41'		0.2	
		7e		10 8 5		30	44m10s		0.2	
		7f		10 8 -		30	47m50s		0.5	For Abs. Ref. period.
		7g		10 8 5		30	52		0.2	
		7h		6 5 3		30	56m45s		0.2	NERVE ground
508	8	8a	26m15s	10 8 5	ca 20	30	31m40s	36	0.2	SHELTER TEMP dropping.
		8b		10 8 5	ca 20	30	41m+	35-	0.2	BOTH LEGS OUT OF H2O.
		8c		10 8 5		30	46m15s	35-	0.2	New fixed
		8d		10 8 5		30	52m10s	36.2	0.2	
		8e		10 8 5		30	60m	36.8	0.2	
		8f		10 8 -		30	63 15"	36.7	0.5	For Abs. refr. period
		8g		6 5 3		30	66 37"	36.9	0.2	
		8h		10 8 5		30	81 20"	36.8	0.2	Temp. appears stable at 36.8°C - almost 10h

MLR

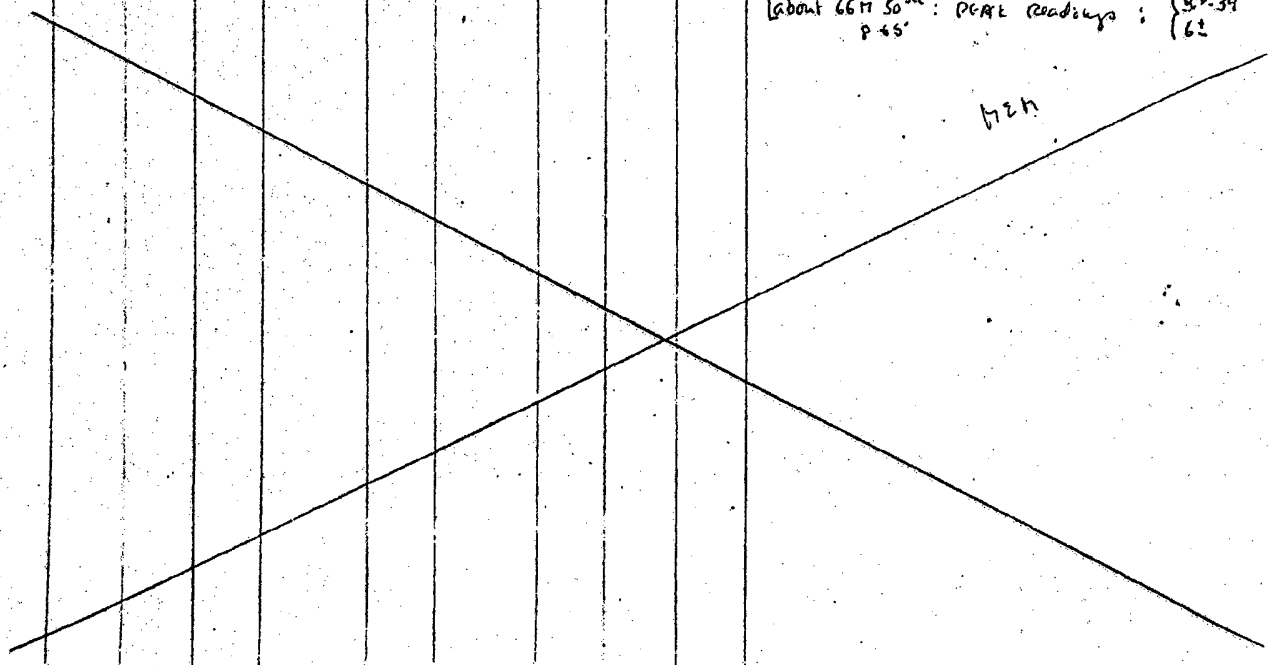
DUP050044003

204 LEAD FEEDING STUDY DOGS PY BK 5-66
2-YEAR SACRIFICE

MR 787
Haskell # 4154

Haskell Dog Number	Nerve Number	Photograph Number	Time Nerve Mounted in Shelter (Mins.)	Recording Electrodes D	A	A	Dial Reading for Maximal Response	Dial Reading for Photographic	Time Photo Taken (Mins)	DB Temperature of Shelter (°C)	Sweep Speed (10 Sec/Div)	
NOVEMBER 22, 1967 STIMULUS DURATIONS 1x0.1 mSec												
513	9	9a	23h 15s	8	7	5	10-12	30	32h 35s	37.1	0.2	
		9b		8	7	–		30	36h 30s		0.5	Abs. Refs. Period
		9c		8	7	5		30	39h 10s	37.1	0.2	
		9d		6	5	3		30	42h 30s	37.1	0.2	
		9e		8	7	5		30	53h 15s	37.1	0.2	[About 30 mins after 9e, peak readings: {4.3 Div, 5.5-5.6 Div.
503	10	10a	31 15	9	7	5	ca 10	30	36h 15s	37.1	0.2	
		10b		9	7	–		30	48h 50s		0.5	Abs. Refs. Period
		10c		6	5	3		30	52h 50s	37.1	0.5	
		10d		6	5	3		30	57h 30s		0.2	[about 83 mins: peak readings: {4.5 Div, 6.3
509	11	11a	25h 15s	10	8	5	ca 13	30	40h 15s	37.1	0.2	
		11b		10	8	–		30	43h 15s		0.5	Abs Refs Period
		11c		9	7	5		30	46h 15s	37.1	0.2	
		11d		6	5	3		30	49h 20s	37.1	0.2	[about 55 mins. PEAK READINGS: {4.35 Div, 6.2
												[about 75 " " " {4.4 Div, 6.5
516	12	12a	24h 30s	10	8	5	ca 10?	30	39h 30s		0.2	
		12b		10	8	–		30	42h 50s		0.5	Absol. Refs. Period
		12c		9	7	5		30	47h 30s		0.2	
		12d		6	5	3		30	52h 0s		0.2	
												[about 66 m 50 sec: peak readings: {3.5-3.9, 6±

MEM



LEAD FEEDING STUDIES - DOGS
2-YEAR SACRIFICE

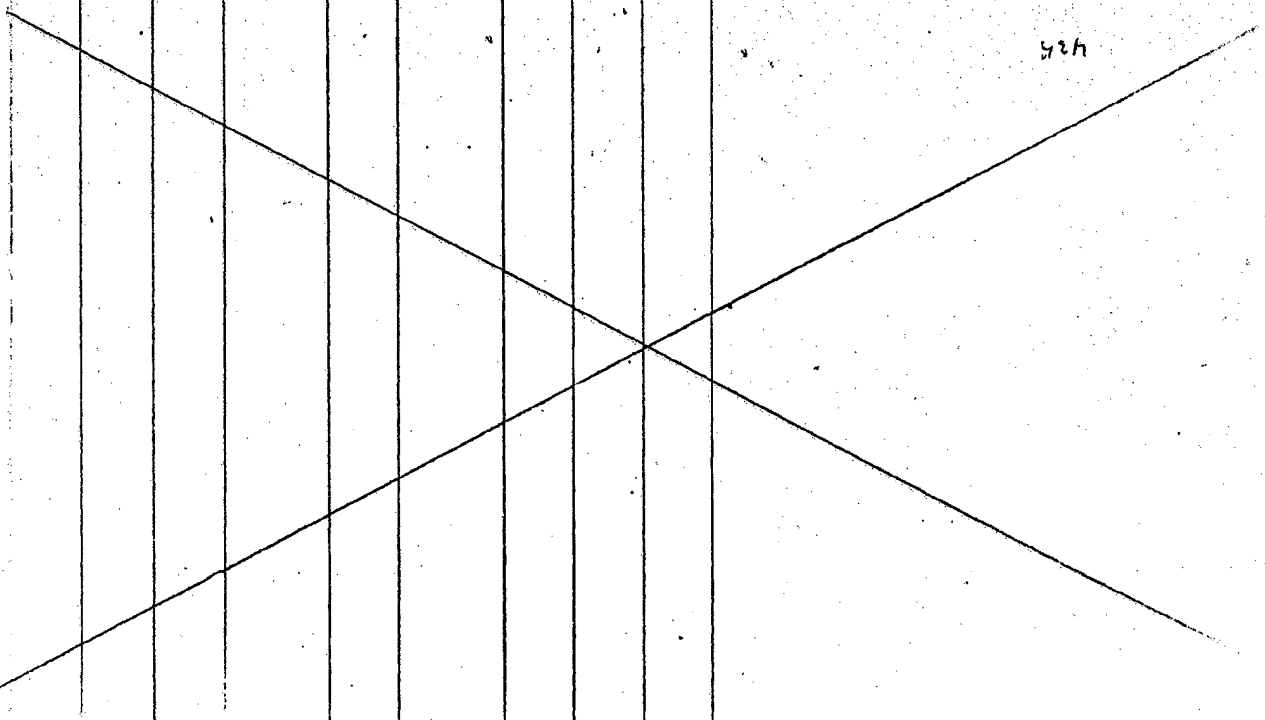
PY BK 5-66

MR 787
HASKELL # 4154

205

HASKELL DOG NUMBER	NERVE NUMBER	PHOTOGRAPH NUMBER	TIME NERVE MOUNTED IN SHELTER (MIN)	RECORDING ELECTRODES D A A	STIMULATOR DIAL READING FOR MAXIMAL RESPONSE	STIMULATOR DIAL READING FOR PHOTOGRAPH	TIME PHOTOGRAPH TAKEN (MINS)	DB TEMPERATURE OF SHELTER (°C)	SWEEP SPEED (mSec/DIV)	
NOVEMBER 27, 1967				STIMULUS DURATION 0.1×1 mSec.						
514	13	13a	25m	9 7 5	ca 10	30	34m 5s	36.8	0.2	
507		13b		9 7 -		30	37 50		0.5	Abs. Refr. Period
		13c		9 7 5		30	40	36.9	0.2	
		13d		6 5 3		30	45	36.8	0.2	87.88m DIV: #3 3.1 + 5 4.6 at 37°C
514	14	14a	24m 30s	10 8 5	ca 10	30	34m 40s	36.7	0.2	
		14b		10 8 -		30	31m 15s	36.8	0.5	Abs. Refr. Period.
		14c		10 8 5		30	39m 30s	36.8	0.2	
		14d		9 7 5		30	44m 30s	36.8	0.2	
		14e		6 5 3		30	49m 30s	36.8	0.2	69m 2.65 + 4.0 m #3 + #5 at 36.8°C, 116m ca. 2.75 4.25 " at 36.7
491	15	15a	25m	10 8 5	ca 12	30	45m	36.7	0.2	MOUNTING TROUBLES
		15b		9 7 5		12m ~~30~~ 30	50m	36.7	0.2	
		15c		6 5 3		12m ~~15~~ 30	55m	36.7	0.2	
		15d		6 5 -		15	52m 10s		0.5	Abs. Refr.
489	16	16a	24m	10 8 5	ca 12	30	39m	36.7	0.2	
		16b		10 8 -		15	41m 20s		0.5	Refr. Period [ABSOL.]
		16c		9 7 5		30	45 10s	36.7	0.2	
		16d		6 5 3		30	50m	36.6	0.2	ca 50m 3.9 + 5.3 Rec. elec. 5 + 7. at 36.8°C
										ca 102½m 3.75 + 5.35 " " 36.7°C

42m



206 LEAD FEEDING STUDY - DOG 2-YEAR SACRIFICE PY BK 5-66 MR 787 Haskell # 415.4

Haskell Dog Number	Nerve Number	Photograph Number	Time Nerve Mounted in Shelter (Mins)	Recording Electrodes D	A	A	Stimulator Dial Reading for Maximal Response	Stimulator Dial Reading for Photograph	Time Photo Taken (Mins)	D.B. Temperature of Shelter (°C)	Sweep Speed (msec/div.)	
November 28, 1967 : Stimulus Duration: 0.1 x 1 msec.												
450	17	17a	27m 30s	9	7	5 m2m	ca 20	30 20 m2m	39m		0.5 m2m 0.2	Absol. Refr. Period
		17b		9	7	5	m2m	30	42m 35s	36.6	0.2	
		17c		8	7	5		30	47m 30s	36.8	0.2	
		17d		6	5	3		30	52m 30s	36.9	0.2	4.2 & 5.6 # 7,9 36.9°C - ca 82m.
512	18	18a	27m	9	7	5 m2m	ca 12	30 15 m2m	38m		0.5	Abs. Refr. Period
		18b		9	7	5		30	42m	36.8	0.2	
		18c		8	7	5		30	48m	36.75	0.2	
		18d		6	5	3		30	55	36.7	0.2	4.15 & 5.65 # 7,9 ca. at 85m & 36.8°C
517		19a	30m	9	7	5	ca 7	30	45m	36.8	0.2	
		19b		9	7	—		20	52m 30s	36.8	0.5	Absol. Refr. Period
		19c		8	7	5		30	59m	36.8	0.2	
		19d		6	5	3		30	65m 30s	36.8	0.2	
470	20	20a	27m 15s	9	7	5	7-10	30	42m 30s	36.7	0.2	FEMALES - HERF ON
		20b		9	7	—		15	48m 45s	36.8	0.5	Abs. Refr. Period
		20c		8	7	5		30	55	36.8	0.2	
		20d		6	5	3		30	62m 30s	36.75	0.2	
		20e		9	7	5		30	67 30	36.8	0.2	
November 29, 1967 : Stimulus Duration: 0.1 x 1 msec.												
519	21	21a	22m 30s	9	7	—	ca 12	15	31m	36.7	0.5	Abs. Refr. Period. First leg not "skinned"
		21b		9	7	5		30	37m 30s	36.75	0.2	
		21c		8	7	5		30	45m	36.8	0.2	
		21d		6	5	3		30	50m	36.9	0.2	
		21e		9	7	5		30	62m 30s	36.7	0.2	
520	22	22a	23m 35s	9	7	—	ca 8	17½	33m 30s	36.7	0.5	Abs. Refractory Period
		22b		9	7	5		30	38m 30s	36.7	0.2	
		22c		8	7	5		30	45m	36.7	0.2	P. elec. as indicated
		22d		6	5	3		30	54m	36.8	0.2	
		22e		9	7	5		30	65m	36.75	0.2	Nerve position slightly altered - to no more "twist".
527	23	23a	26m 30s	9	7	—	ca 10	10	37m 30s	36.9	0.5	
~~527~~		23b		9	7	5		30	41m 30s	36.8 m2m	0.2	
		23c		8	7	5		30	48m 30s	36.7	0.2	
		23d		6	5	3		30	55m 30s	36.8	0.2	
		23e		9	7	5		30	66m	36.75	0.2	
475	24	24a	23m 15s	9	7	—	ca 12	15	33m 30	36.75	0.5	
		24b		9	7	5		30	38m 15s	36.75	0.2	
		24c		8	7	5		30	45m	36.75	0.2	
		24d		6	5	3 m2m		30	5[illegible]m 30s	36.8	0.2	
		24e		9	7	5		30	60m	36.8	0.2	
		24f		10	8	5		30	68m	36.75	0.2	

m2m

DUP050044006

	Needle Number	Photograph Number	Time Needle Mounted in Shelter (Min)	Recording Electrodes D A A	Stimulator Dial Reading for Minimal Response	Stimulator Dial Reading for Photograph	Time Photograph Taken (Min)	Dial Temperature of Shelter °C	Sweep Speed msec/div	
OCTOBER 30, 1967										
22	25	25a	24m	9 7 –	ca 12	15	24m	36.7	0.5	Absol Refr. Period
		25b		9 7 5		30	39m	36.7	0.2	DISCARD: ARTIFACT OFF SCREEN.
		25c		9 7 5		30	41m		0.2	Repeat of 25b
		25d		8 7 5		30	48m	36.6	0.2	
		25e		8 7 5		30	51m 45s		0.2	– DISAPPEARED BUT NO LOSS! FILM(?) TROUBLES.
		25f		8 7 5		30	53 45	36.7	0.2	BAD PHOTOGRAPH – Discarded 4-25-68 MLH
		25g		8 7 5		30	58 30		0.2	
		25h		6 5 3		30	65m	36.8	0.2	
		25i		9 7 5		30	70m	36.8	0.2	
		25j		10 8 5		30	76h	36.8	0.2	
18	26	26a	15m 45s	9 7 –	ca 12	13	33m 30s	36.7	0.5	Absol. Refr. Period
		26b		9 7 5		30	40m 45s	36.7	0.2	
		26c		8 7 5		30	47m 45s	36.8	0.2	
		26d		6 5 3		30	55m 45s	36.8	0.2	
		26e		9 7 5		30	65m 45s	36.8	0.2	
31	27	27a	20m 30s	9 7 –	ca 13	15	26m 15s	36.7	0.5	Absol. Refr. Period
		27b		9 7 5		30	35m 30s	36.7	0.2	
		27c		8 7 5		30	42m 30s	36.75	0.2	
		27d		6 5 3		30	50m 30s	36.75	0.2	
28		27e		9 7 5		30	58m 30s	36.75	0.2	
28	28	28a	19m 0s	9 7 [illegible]		13	24m 30s	36.8	0.5	Absol. Refr. Period
		28b		9 7 5		30	35m 0s	36.75	0.2	
		28c		8 7 5		30	40m 0s	36.8	0.2	
		28d		6 5 3		30	45m 0s	36.9	0.2	
		28e		9 7 5		30	50m 0s	36.9	0.2	

MLH

DUP050044007

208 2YR LEAD-FEEDING STUDY PY BK 5-66

24 MO. SACRIFICE DOGS

HR 787
HASKELL # 4154

HASKELL DOG NUMBER	NERVE NUMBER	PHOTOGRAPH NUMBER	TIME NERVE MOUNTED IN SHELTER MIN	RECORDING ELECTRODES D	A	R	STIMULATOR DIAL READING FOR MAXIMAL RESPONSE	STIMULATE FOR RECORDING FOR PHOTOGRAPH	TIME PHOTOGRAPH TAKEN MIN	DB. TEMPERATURE OF SHELTER °C	SWEEP SPEED msec/DIV	
DECEMBER 1, 1967												
529	29	29a	25m 38s	8	7	–	ca 12	15	27m	36.9	0.5	Absol. Refr. Period
		29b		8	7	5		30	35m 30s	37.0	0.2	
		29c		6	5	3		30	42m 30s	36.9	0.2	
		29d		8	7	5		30	52m 30s	36.85	0.2	
525	30	30a	23m 0s	10	8	5	ca 13	15	29m 0s	37.0	0.5	Absol. Refrac. Period
		30b		10	8	5		30	37m 0s	36.9	0.2	
		30c		9	7	5		30	45m 0s	36.95	0.2	
		30d		8	7	5		30	52m 30s	36.85	0.2	
		30e		6	5	3		30	60m 0s	36.85	0.2	
		30f		10	8	5		30	67m 30s	36.8	0.2	
526	31	31a	20m 30s	8	7	–	ca 10	15	25m 30s	36.8	0.5	Absol. Refractm Period
		31b		8	7	5		30	35m 30s	36.9	0.2	
		31c		6	5	3		30	42m 30s	36.9	0.2	
		31d		7	5	3		30	50m 0s	36.8	0.2	
		31e		8	7	5		30	57m 30s	36.85	0.2	
532	32	32a	21m 15s	9	7	–		15	30m	36.8	0.5	Absol. Refs. Period
		32b		9	7	5		30	36m 15s	36.8	0.2	
		32c		8	7	5		30	43m 30s	37	0.2	
		32d		6	5	3		30	51m	36.75	0.2	NO PHOTO
		32d		6	5	3		30	53m 15s	36.8	0.2	
		32e		9	7	5		30	60m 15s	36.65	0.2	

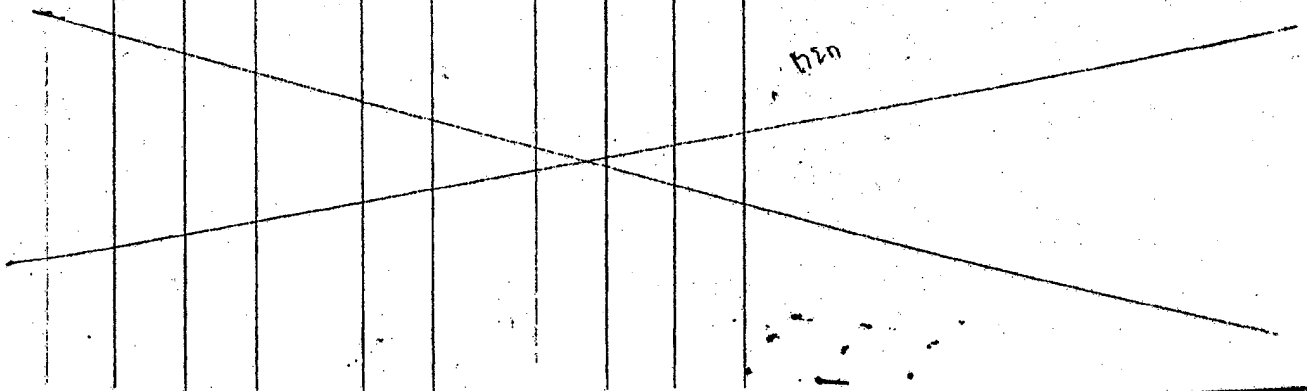
HEM

DUP050044008

2 YR. LEAD FEEDING STUDY- DOG
24 MO. SACRIFICE

PY BK 5-66 [illegible] HR 787
HASKELL # 4154

HASKELL DOG NO	NERVE NUMBER	PHOTOGRAPH NUMBER	TIME NERVE MOUNTED IN SHELTER (MINS.)	RECORDING ELECTRODES D	A	A	STIMULATOR DIAL READING FOR MAXIMAL RESPONSE	STIMULATOR DIAL READING FOR PHOTOGRAPH	TIME PHOTOGRAPH TAKEN (MINS)	D.B. TEMPERATURE OF SHELTER °C	SWEEP SPEED m/sec/DIV	
DECEMBER 4, 1967												
33	33	33a	25 m	9	7	–	cc 12	15	32m 30s	37.1	0.5	NERVE: NICKED a. elec #2. Abs. Refr Period
		33b		9	7	5		30	40m	36.9	0.2	
		33c		8	7	5		30	47m	37.0	0.2	
		33d		6	5	3		30	54m	37.0	0.2	
		33e		9	7	5		30	10m	36.9	0.2	
30	34	34a	20m	9	7	–	cc 12	12	27 30	36.95	0.5	Remounted 24m 30s Ab. Refr Period; yellow extra 5 m below 34b.
		34b		9	7	5		30	40m	36.9	0.2	← ATTEMPTED TO STRAIGHTEN NERVE – ? TWIST
		34c		8	7	5		30	50m	36.85	0.2	
		34d		6	5	3		30	57m	36.85	0.2	CHECK: ē Good placement ñ new e/k 35e still had 2 pk – looked like round 35e. ∴ NOT Twitch
34		35e		9	7	5		30	45m	36.85	0.2	
4	35	35a	22m 30s	9	7	–	cc 13	15	29m	36.9	0.5	Absol. Refr. Period
		35b		9	7	5		30	37m 30s	36.95	0.2	
		35c		9	7	5		30	40m 40s		0.2	Repeat 35b
		35d		8	7	5		30	46m min	36.95	0.2	
		35c		6	5	3		30	55m	37	0.2	
37		35f		9	7	5		30	12m	36.95	0.2	
37	36	36a	19m	9	7	–	cc 13	15	24m 30s	37	0.5	Absol Refractory Period ? cut-between elec #4.
		36b		9	7	5		30	24m	36.8	0.2	
		36c		8	7	5		30	40m	36.9	0.2	
		36d		6	5	3		30	47m 30s	36.95	0.2	
		36e		9	7	5		30	55m	36.95	0.2	
DECEMBER 5, 1967												
38	37	37a	20m 15s	9	7	–	cc 13	15	cc 29m 30s	36.9	0.5	Absol. Refr. Period. Readj. NERVE TO CLEAR END CUT & TIM. ELECTRODES: Small bit fat & fibrous tissue BETTER POSITION across STIM. e/k.
		37b		9	7	5		30	40m 15s	36.9	0.2	
		37c		8	7	5		30	48m 15s	36.85	0.2	
		37d		6	5	3		30	55m 30s	36.9	0.2	
		37e		9	7	5		30	62 30	36.9	0.2	



DUP050044009