

**CONSTRUCTIVE RESEARCH FOUNDATION**

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## I.

CONSTRUCTIVE RESEARCH FOUNDATION has delayed submitting a progress report since the brochure issued at the end of 1961. The Foundation felt in duty bound to concentrate its meager financial means on its main target: the further development and application of tissue therapy.

Tissue therapy, as elaborated in earlier reports, is devoted to renewing the regenerative abilities of the organism by means of intravenous or intramuscular injection of tissue homogenates derived from various types of cellular tissue, supplemented by hormones, vitamins and minerals in the treatment of neuro-degenerative diseases like multiple sclerosis.

The lapse of time and the importance of maintaining contact with those who have been supporting the work of the Foundation with generous financial and material gifts, as well as with patient work and imaginative advice, impel us to submit this long-delayed report now.

The goal we had hoped to reach many years ago -- to put the Foundation on a financially sound and established basis -- has unfortunately not yet been accomplished. During the period covered by this report all contributions have again been spent either directly for medical research or for activities indirectly supporting this research.

For a major part of the period physical conditions for the performance of the Foundation's work were even less satisfactory than previously. The move from 155 East 72nd Street to 8 East 83rd Street, where the new laboratory is now located, was preceded by a temporary move into crowded quarters. For an extended time the Foundation had only minimum and inadequate space available for its work. These problems have fortunately been solved and the physical continuation of the Foundation's work has been greatly facilitated.

whereas the reverse occurs in the sick organism. One of the reasons for the concentration of work in the area of multiple sclerosis and other neuromuscular degenerative diseases has been the expectation that a greater understanding of the problem might arise from an investigation of the damage caused by them to the autonomic and, to some extent, the central nervous system.

The selection of neuro-degenerative diseases for one of the major projects of the Foundation does not imply that the techniques developed and the medications used are limited to the treatment of these particular conditions. Similar treatments have in fact been devised for degenerative eye conditions such as macular degeneration, retinitis diabetica and retinitis pigmentosa. The results will be presented at a later point. Here we have two different and probably unrelated groups of diseases, neither of which -- in terms of accepted methods of treatment -- at present offers any hope of therapeutic response or complete remission and/or reversal. In many cases, however, both have responded well to treatments by the homogenates developed by the Foundation.

These homogenates, as explained in an earlier report, are designed to help the anabolic processes, in other words the ability of the body to build adequate supplies of healthy tissue from the nutrients available, as well as to insure that these nutrients are not diverted to nourish diseased or malignant tissue or supply sustenance to parasites and invaders from the outside.

Such assistance to the human organism and to its nerve cell structure is becoming more and more imperative as the environment in which men pursue their lives changes and the natural world of old in which men expect to function is transformed into a man-made world. On the horizon already looms a world of man-made men. The significance of these happenings is

undeniable: as the environment man creates and attempts to control experiences constant change and flux, man himself will become the victim of the resulting assaults on his nervous system and subject to ever-increasing and inescapable pressures. It is the Foundation's hope that the treatments developed and the homogenates utilized will represent a contribution in this area.

While the nature of the anabolic processes is still only imperfectly understood, perfect understanding is not always necessary for the utilization of natural processes. Farmers used fertilizers for centuries before the existence or the functions of nitrogen-fixing bacteria in the soil were even suspected.

Starting therefore from the empirical knowledge that the anabolic processes will normally take place only in the presence of certain glandular secretions — enzymes or other organic substances — the Foundation has operated on the theory that when these substances are no longer produced in sufficient quantity they can effectively be reintroduced from the outside into the human system without anaphylactic reaction or rejection. These substances may supply components to the body which it is currently unable to produce, essential to maintaining and rebuilding its tissue structure. They may act as a kind of primer in re-starting the processes of replacement and maintenance. In either case, their introduction from outside has been shown to be beneficial in the treatment of many conditions which often do not respond to other therapy.

Anabolic processes supply healthy tissue to the body by the conversion of cellular materials and nutrients and prevent their diversion into nourishing diseased or malignant tissue. By thus preventing their diversion and by stimulating the body's ability to develop healthy tissue, tissue therapy endeavors to improve the repair of damaged tissue and to increase its resistance to the invasion of its cell structure by foreign organisms. Tissue therapy

To maintain and expand the work of the Foundation and also conserve what has already been accomplished, more will be needed than improved physical laboratory facilities. Equipment should be purchased so that the Foundation can further improve the techniques employed and test their results. Frequent testing of the results by an accredited outside laboratory, while costly, would greatly enhance their acceptability to the medical profession at large, its official agencies and such governmental bodies as the National Institute of Health. The established production procedures, the methods of treatment tested and many other functions should be delegated to a trained assistant to Dr. Max Jacobson, our medical research director, in order to free his time and imagination for further search and research.

It is upon these combined tasks that the Foundation expects to focus its future activities. The objective is to set a course and provide the means for its assured passage, in order to conserve and improve upon the past record of achievement.

## II.

The main objective of the Foundation's work has been to discover how the body develops greater resistance to infection and to make a major practical contribution to the improvement of health and the increased ability of the organism to resist disease. The basic principle of immunity is playing an increasingly important role in current medical investigations. The body that has acquired such immunity can be expected to counteract any invasion of foreign substances into its cell structure. Tissue damaged either by trauma or by the toxic effect of viruses, bacteria etc. can thus be repaired or replaced by healthy tissue.

The Foundation's work in the last analysis is directed towards ascertaining why, in the healthy human organism, sound tissue overcomes sick tissue,

performs these tasks by the injection of solubilized tissue homogenates, combined with vitamins, minerals and hormones, and refined to reduce to a minimum allergic, antigenic or anaphylactic reactions.

### III.

The processes and procedures followed in producing the homogenates used by the Foundation have been discussed in earlier communications. The techniques for purifying the components of the injectible materials used and thereby reducing the chance of allergic and antigenic side effects have been continuously refined. Since 1962 important improvements in the processes have been achieved. The basic substances used were exposed to cryogenic conditions utilizing liquid nitrogen at temperatures of  $-200^{\circ}$  Fahrenheit. After completion of the cryogenic process, the substances were subjected to the forces of a strong magnetic field, the goal being to eliminate the source of all antigenic or allergic reactions. Thus an ultra-fine homogenate was produced that could be injected intramuscularly or intravenously without negative reactions.

While in 1960-1961 experiments had been made with a microscope operating on laser principles, in subsequent years the research effort was concentrated on the interaction between crystals and ultra-short wave light rays. During the past few years a combination of the cryogenic process with ultra-short wave rays diffracted through quartz crystals has produced a far more purified solution than had any process previously developed. The improved process permits a decrease in the dosage of the solubilized material to be applied. At the same time it enables us to produce a smaller particle size for the ointment which the patient might be asked to apply between injections and treatments.

Essentially the Foundation's work is based on the fact that enzymes, energized by a bombardment with cobalt or gamma rays, are not destroyed but pick up energy. The enzymes reveal themselves as true catalysts, passing on energy and promoting specific metabolic processes in accordance with their specific structures. An element thus appears to exist in the human organism that picks up and transforms energy from the outside.

To sum up, the work designed to improve the processes used has been directed towards eliminating the allergic and antigenic properties of the homogenates. The goal has been partially achieved by amplifying and intensifying the ultrasonic beam used in the purification process and also by superimposing a magnetic field on the ultrasonic beam.

In general it may appear that the processes and procedures utilized — and particularly their combination and sequence — introduce an element of an arbitrary nature. On reflection, however, one will find an underlying logical structure. What appears at first sight as haphazard and without any visible coherence reveals on further inspection a unity of approach confirming a statement made recently by the Nobel Prize biologist, Joshua Lederberg: "I do not know of any scientific or technical advance of importance that did not make utterly unexpected demands on knowledge from unpredictable sources."

#### IV.

As has been noted, a major part of the work of the Foundation during the period covered by this report has been in the area of neuro-degenerative diseases with special emphasis on multiple sclerosis.

More than 150 patients have been treated, including some 15-20 suffering from other degenerative ailments closely related to multiple sclerosis. In a substantial number of these cases (including several apparent victims

of muscular dystrophy, not completely confirmed by diagnosis) application of tissue therapy resulted in the restoration of a high degree of lost function.

A statistical summary of the results of the Foundation's work with multiple sclerosis and related conditions of neuro-muscular degeneration is presented on pages 9-12 of this report. The summary covers only 100 cases (88 multiple sclerosis and 12 related neuro-muscular disease cases) since only those cases have been included where it was possible to obtain copies of the original diagnostic and neurological reports or authoritative statements from the previous physicians.

Although the Foundation's experience in this area is far less extensive, its tissue therapy has proven highly effective in the treatment of patients suffering from macular degeneration, retinitis pigmentosa and retinitis diabetica. In a total of six cases, according to examinations made by independent practitioners, patients recovered a substantial amount of their lost visual capacity.

The summary tables that follow record, for the years 1956-1966, the experiences of patients with multiple sclerosis and other neuromuscular diseases who were treated during those years with the homogenates developed by the Foundation under the direction of Dr. Max Jacobson. (Only cases where neurological reports from an outside diagnosing source were available have been included. Thus several cases of probable muscular dystrophy which have responded well to this therapy, as well as many other multiple sclerosis cases, have necessarily been omitted.)

In the presentations, patients are grouped according to the severity of their symptoms, in categories from 0 to 4, both before and after treatment.

As an aid in interpreting the figures presented in these tables, we offer the following illustration. In Table 3, Effect of Treatments on Severity of

Symptoms, let us look at the effect on Motion Control among the 88 Multiple Sclerosis patients (Group I). Before treatment, 14 of them had no problem ("0" in the Severity of Symptom index) and 18 only a slight problem ("1"), while 42 had a moderate problem ("2") and 11 a serious problem ("3"). After treatment, 27 of those having a moderate or serious problem were able to be reclassified as having either no problem or a slight problem. In other words, the number of patients in "0" went up from 14 to 29, in "1" from 18 to 37; whereas those in "2" and "3" went down respectively from 42 and 11 to 15 and 4.

JULIAN GUMPERZ, *President*

December, 1967

TABLE I  
 SUMMARY REPORT ON MULTIPLE SCLEROSIS AND OTHER NEUROMUSCULAR DISEASES PROJECT  
 (Period: 1956-1965)

	Total No. of Patients:	By Sex:		By Ages, at Initial Symptoms:				
		M	F	Under 21	21-26	27-35	36 and Over	N.A.*
<b>I. MULTIPLE SCLEROSIS DISEASES</b>								
Multiple Sclerosis:								
Positive Diagnosis	72	29	43					
Qualified Diagnosis	11	3	8					
Disseminated Sclerosis:								
Positive Diagnosis	3	1	2					
Qualified Diagnosis	2	1	1					
Totals, I	88	34	54	19	19	28	18	4
<b>II. OTHER NEUROMUSCULAR DISEASES</b>								
Amyotrophic Lateral Sclerosis	2	1	1					
Primary Lateral Sclerosis	1	0	1					
Postero Lateral Sclerosis	1	1	0					
Subacute Dorsal Lateral Sclerosis	1	0	1					
Peripheral Neuritis	1	0	1					
Demyelinating Disease	1	0	1					
Progressive Spinal Cord Degen. Dis.	2	1	1					
Undetermined Neuromusc. Ailments	2	0	2					
Cerebellar Degeneration	1	0	1					
Totals, II	12	3	9					
TOTALS, I + II	100	37	63	19	20	34	22	5

\* N.A. - Not Available

**TABLE 3**  
**EFFECT OF TREATMENTS ON SEVERITY OF SYMPTOMS,**  
**BY DISEASE GROUPS (SEE TABLE 1)**

Distribution of Patients Before and After Treatment, by Severity of Symptom  
(Disease Groups: I = 88 Multiple Sclerosis Diseases; II = 12 Other Neuromuscular Diseases)

<u>Severity of Symptom:</u>		0 (No problem)	1 (Slight problem)	2 (Moderate problem)	3 (Serious problem)	4 (Maximum problem)	<u>N.A.*</u>
<b>A. PROBLEMS OF THE LOWER EXTREMITIES:</b>							
<b>GAIT</b>							
I	before	3	11	36	18	19	1
	after	5	31	23	18	10	1
I + II	before	5	11	39	22	22	1
	after	8	33	29	18	11	1
<b>STATION</b>							
I	before	21	15	16	17	13	6
	after	35	16	17	9	6	5
I + II	before	24	16	19	19	15	7
	after	41	17	20	9	7	6
<b>WEAKNESS</b>							
I	before	3	1	54	20	8	2
	after	17	34	24	8	3	2
I + II	before	6	2	59	21	9	3
	after	23	38	25	8	4	2
<b>SPASTICITY</b>							
I	before	24	13	19	22	4	6
	after	33	24	19	6	0	6
I + II	before	27	13	23	25	5	7
	after	37	27	23	6	0	7
<b>ATAXIA</b>							
I	before	8	6	46	12	3	13
	after	15	35	20	4	2	12
I + II	before	10	7	51	14	3	15
	after	18	40	22	4	2	14
<b>B. PROBLEMS OF THE UPPER EXTREMITIES:</b>							
<b>MOTION CONTROL</b>							
I	before	14	18	42	11	0	3
	after	29	37	15	4	0	3
I + II	before	17	21	46	12	1	3
	after	33	42	17	4	1	3
<b>MANUAL DEXTERITY</b>							
I	before	11	15	46	13	0	3
	after	18	44	17	5	0	4
I + II	before	15	17	50	14	0	4
	after	22	49	19	5	0	5

TABLE 2

## DATA RE PATIENTS BY DISEASE GROUPS

Disease Groups: I = 88 Multiple Sclerosis Diseases

II = 12 Other Neuromuscular Diseases

	I (88 Patients)	I + II (100 Patients)
<b>TIME LAPSE BET. 1ST SYMPTOMS AND 1ST CRF TREATMENT</b>		
Up to 5 years	25	29
6-18 years	43	48
19-30 years	18	20
N.A.*	2	3
<b>BY WHOM TREATED</b>		
By CRF (direct)	63	69
By own doctor (indirect)	9	13
By both (direct and indirect)	9	9
Outside U.S.A.	7	9
<b>OFFICE VISIT FREQUENCY</b>		
0-49 (infrequent)	58	66
50-149 (average)	25	29
150 and over (frequent)	5	5
<b>INTRAMUSCULAR INJECTIONS (ADMINISTERED AT HOME)</b>		
2,000 c.c. and over	8	10
1,000-1,999 c.c.	18	20
500-999 c.c.	17	18
499 or less c.c.	45	52
<b>ORAL DROP TREATMENTS (ADMINISTERED AT HOME)</b>		
2,000 c.c. or over	2	3
1,000-1,999 c.c.	15	16
500-999 c.c.	12	14
499 or less c.c.	59	67
<b>GENERAL RESPONSE</b>		
Excellent	20	23
Good	42	50
Fair	22	22
Slight	1	1
Questionable	1	1
None	2	3

\*N.A. - Not Available

TABLE 3 -- Cont.

Severity of Symptom:		0 (No problem)	1 (Slight problem)	2 (Moderate problem)	3 (Serious problem)	4 (Maximum problem)	N.A.*
<b>B. PROBLEMS OF THE UPPER EXTREMITIES: -- Cont.</b>							
<b>WEAKNESS</b>							
I	before	16	10	50	8	0	4
	after	31	41	11	2	0	3
I + II	before	21	11	54	9	0	5
	after	38	44	12	2	0	4
<b>SPASTICITY</b>							
I	before	46	11	23	2	0	6
	after	54	19	9	0	0	6
I + II	before	52	13	26	2	0	7
	after	63	20	10	0	0	7
<b>ATAXIA</b>							
I	before	22	17	33	9	0	7
	after	32	36	11	2	0	7
I + II	before	28	18	37	9	0	8
	after	38	41	11	2	0	8
<b>MOBILITY</b>							
I	before	6	5	28	33	16	0
	after	20	19	27	15	7	0
I + II	before	8	5	30	39	18	0
	after	23	21	33	15	8	0
<b>C. PROBLEMS OF VISION:</b>							
<b>NYSTAGMUS</b>							
I	before	38	9	30	1	0	10
	after	45	21	8	0	0	14
I + II	before	46	11	31	1	0	11
	after	55	21	8	0	0	16
<b>DIPLOPLIA (double vision)</b>							
I	before	32	4	41	2	0	9
	after	51	22	5	0	0	10
I + II	before	38	4	46	2	0	10
	after	60	22	7	0	0	11
<b>D. HEADACHE:</b>							
I	before	39	2	28	13	0	6
	after	51	17	13	1	0	6
I + II	before	49	2	30	13	0	6
	after	62	17	13	1	0	7
<b>E. URINARY FREQUENCY</b>							
I	before	43	0	26	15	0	4
	after	54	15	13	0	0	6
I + II	before	49	0	30	16	0	5
	after	60	20	13	0	0	7

\*N.A. -- Not Available

CONSTRUCTIVE RESEARCH FOUNDATION, INC.

CONTRIBUTIONS AND EXPENDITURES†

(for years ending December 31)

	<u>1961-64</u>	<u>1965</u>	<u>1966</u>	<u>1967*</u>
INCOME — Contributions	<u>\$182,104.86</u>	<u>\$21,737.26</u>	<u>\$33,811.35</u>	<u>\$30,337.37</u>
EXPENDITURES:				
Laboratory — Equipment, space, facilities, use of equipment, cost of processing biologicals, serums and pharmaceuticals, chemicals, drugs and supplies	\$ 74,448.14	18,374.38	16,463.18	16,548.40
Research Fees, Services, Advances & Expenses	24,562.78	6,505.40	19,057.00	1,125.00
Salaries	3,345.50	—	—	—
Insurance	9,160.57	3,245.89	3,164.86	1,845.00
Social Security and other Taxes	212.08	—	—	—
Fund Raising	5,673.68	—	—	1,769.20
Legal and Accounting	550.00	200.00	550.00	350.00
Stationery, Printing, Postage and Miscellaneous	1,830.04	346.24	—	—
Travel Expense	—	1,314.08	644.50	—
Investments & Investment Transactions	<u>62,322.07</u>	<u>(8,248.73)</u>	<u>(6,068.19)</u>	<u>8,699.77</u>
TOTAL EXPENDITURES	<u>\$182,104.86</u>	<u>\$21,737.26</u>	<u>\$33,811.35</u>	<u>\$30,337.37</u>

\* for 9 months to September 30, 1967

† This condensed Statement of Receipts and Disbursements should be read in conjunction with that of October, 1961, published in the previous brochure of the Foundation.